SECTION –2C

400KV Transmission Scheme for evacuation of power from Srisailam Left Bank Hydroelectric Power Station relating to Transmission Corporation of Andhra Pradesh Limited

Highlights

The 400 KV transmission scheme designed to evacuate power from the proposed Srisailam Left Bank Hydroelectric Power Station to major load centres and to draw surplus thermal power from other thermal stations during night hours was taken up by the erstwhile Andhra Pradesh State Electricity Board (APSEB) at a cost of Rs.465.06 crore.

(Paragraphs 2C.1 and 2C.5)

Erstwhile APSEB did not prepare detailed cost estimates for the transmission lines and sub-stations of the Scheme. PGCIL who constructed 400 KV transmission lines in the State were also not consulted for technical data and guidance. Consequently, there were huge variations in quantities ranging between 27 and 2119 *per cent*.

(Paragraph 2C.7 and 2C7.2)

Due to delay in compliance of import formalities, the Company incurred an avoidable expenditure of Rs.5.71 crore on account of increase in customs duty, demurrages, etc.

{Paragraph 2C 8.1(a)}

Non-adherence of the scheduled dates of delivery by foreign suppliers resulted in drawal of an extra loan of Rs.3.31 crore.

{Paragraph 2C 8.1(c)}

Non-adherence of the JBIC guidelines regarding price adjustment resulted in an additional expenditure of Rs.4.60 crore.

{Paragraph 2C.11(a) (i)}

Non-observance of uniformity in inclusion of suitable term in the agreement for price adjustment resulted in avoidable payment of Rs.1.98 crore.

{Paragraph 2C.11 (a) (ii) and (b)}

The Scheme, scheduled for completion by June 1996, was actually completed by June 2001. Neither the final bills nor completion reports in respect of all works prepared. The expenditure incurred up to March 2001 was Rs.510.26 crore.

(Paragraph 2C.12 and 2C.13)

2C.1 Introduction

Consequent upon introduction of power sector reforms, Andhra Pradesh State Electricity Board (APSEB) was restructured with effect from 1 February 1999, into Andhra Pradesh Power Generation Corporation Limited (APGENCO) and Transmission Corporation of Andhra Pradesh Limited (APTRANSCO) to look after the aspects of generation and transmission respectively. Subsequently, from 1 April 2000 four distribution companies (DISCOMS) were formed.

As at the end of March 1990, the State had a well laid out 220 KV network of 5416 circuit kilometres for transmission of power to major load centres and 132 KV lines network of 7901 circuit kilometres for further transmission to various load centres. The APSEB's 220 KV and 132 KV network had a strong overlay of 400 KV network of National Thermal Power Corporation (NTPC). The Andhra Pradesh Power System is connected to the central sector 400 KV system at four points viz., Ramagundam, Hyderabad, Nagarjuna Sagar and Cuddapah at 132 KV and 220 KV systems. The proposed 400 KV systems would be further connected at Vijayawada, Visakhapatnam and Gooty at 220 KV systems. Andhra Pradesh Power System was also inter-connected with the Power Systems of neighbouring States at 132 KV and 220 KV.

400 KV transmission Scheme was proposed both for evacuation of power from the power station and to draw surplus power from other stations

The erstwhile APSEB (presently APTRANSCO) proposed (April 1990) to commission a Hydroelectric Power Station at Srisailam on the left bank of the River Krishna with a capacity of 900 MW (6 X 150 MW). These were reversible units and the Power House was designed as a pumped storage station. A 400 KV transmission system (Scheme) was proposed to evacuate power from the proposed Power Station to major load centres and also to connect this Power Station to major thermal generating stations in and outside the region to draw surplus thermal power during night hours to operate the units in pumping mode.

2C.2 Scheme profile

The Scheme envisaged construction of the following transmission lines and sub stations for evacuation of power from the proposed Srisailam Left Bank Hydroelectric Power Station (SLBHPS).

(in Kilometres)

		Original (January 1991)	**Revised** (September 1995)	**Actual**
(A)	400 KV Double Circuit (DC) line from SLBHPS to Hyderabad	160	147	146.354
(B)	400 KV Single Circuit (SC) Line inter connecting the existing 400/220 KV sub station at NTPC, Ghanapur and the proposed 400/220 KV sub station at Hyderabad (Mamidipalli)	70	46	46.000
(C)	400 KV DC line from SLBHPS to Vijayawada (Nunna)	250	217	221.993
(D)	400 KV SC. Line from SLBHPS to Kurnool	130	104	102.974
(E)	400/220 KV sub station at Hyderabad (Mamidipalli)			2 x 315 MVA
(F)	400/220 KV sub station at Kurnool (Narnoor)			2 x 315 MVA
(G)	400 KV bay extensions at Vijayawada and Ghanapur			3 Bays

The Scheme envisaged construction of four 400 KV DC/SC Lines, two 400/220 KV sub stations and three bay extensions

The Scheme was intended to achieve the following benefits:

1) 400 KV DC line from SLBHPS to Hyderabad and 400 KV SC line from Hyderabad to Ghanapur and connected sub-station were aimed at meeting the growing demand (which was expected to increase to 1600 MW by 1999-2000) of Hyderabad and surrounding identified areas.

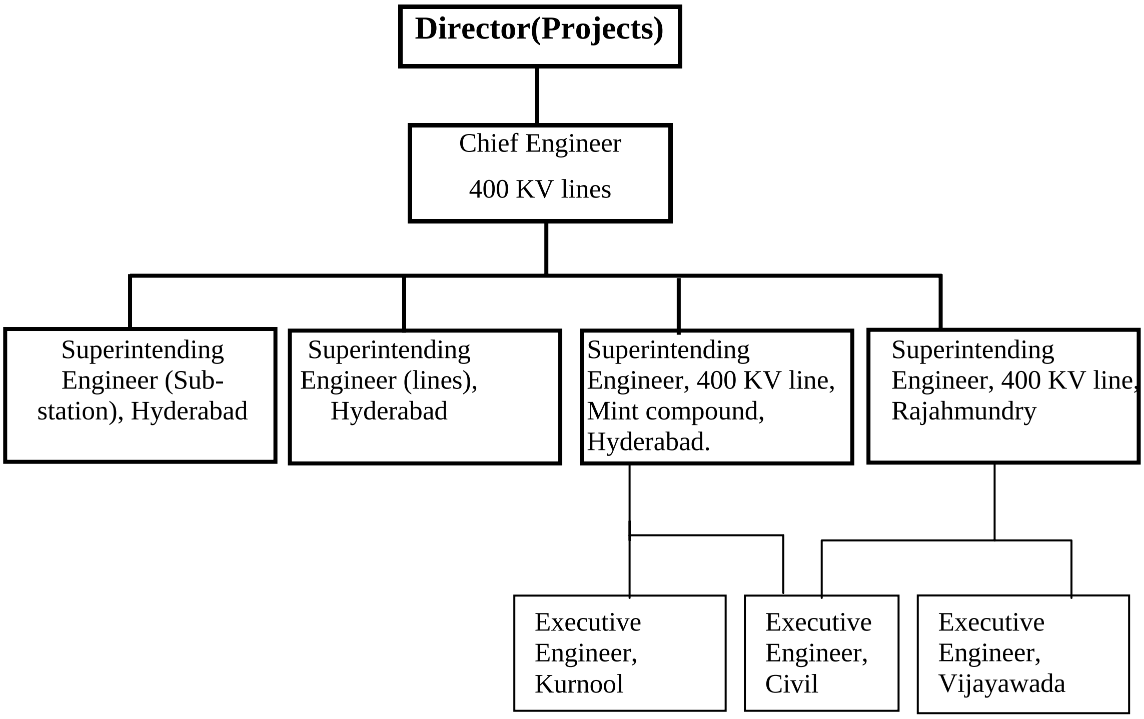
2) 400 KV DC line from SLBHPS to Vijayawada was aimed at drawing surplus thermal power during night hours from Vijayawada – Visakhapatnam thermal complex to run the units of SLBHPS in pumping mode.

3) 400 KV DC line and sub-station at Narnoor (Kurnool) were aimed at reducing the line losses by 299181 units per day and to stabilise the power system by achieving improvement in voltage on 220 KV side.

The length of each line was reduced after conducting detailed survey by outside agencies during August 1991 to October 1993. Reduction in the length of all lines was due to the fact that the original lengths were arrived at tentatively based on drawing route on topo sheet.

2C.3 Organisational set-up

The execution of the Scheme was carried out by a Chief Engineer, who was assisted by four Superintending Engineers (two at Head Office and two at field), who, in turn, were assisted by three Executive Engineers at field, under the overall guidance and supervision of Director (Projects).



2C.4 Scope of Audit

The review covers examination of various aspects relating to execution of the Scheme and achievement of objectives contemplated. The records maintained by offices of the Chief Engineer, 400 KV lines, Hyderabad, Superintending Engineers at Rajhmundry and Hyderabad, Executive Engineers, Vijayawada, Kurnool and Hyderabad and sub stations at Mamidipally and Narnoor were reviewed in Audit between December 2001 and May 2002 and the results included in forthcoming paragraphs.

2C.5 Techno-economic approval

The cost was revised downwards (Rs 404.15 crore) and again upwards (Rs 465.06 crore) unusually based on tenders received

The erstwhile APSEB prepared (January 1991) a Feasibility Report with an abstract cost estimate of Rs.282.53 crore and sought the Techno-economic approval of the Central Electricity Authority (CEA) which was accorded (March 1991) by the CEA for Rs.281.40 crore. The erstwhile APSEB approached the Planning Commission for investment approval and the same was accorded (March 1994) by the Planning Commission for execution of the Scheme during Eighth Five Year Plan (1992-1997) at the said abstract cost estimates (Rs 281.40 crore). During May 1994, Overseas Economic Cooperation Fund which was the funding agency for the Scheme {(now Japan Bank for International Cooperation (JBIC)} conducted a field survey and had detailed discussion with the officials of Government of India (GOI) and the erstwhile APSEB wherein the abstract cost estimates of the Scheme (mainly for the purpose of sanctioning a loan), were arrived at 15626 Million Yen (Rs 465.06 crore) excluding establishment charges and interest during construction (IDC) comprising of the following items:

ITEM	Million YEN	Rupees in crore
Material and Equipment	9727	289.50
Labour Cost	951	28.30
Transportation	460	13.69
Land Acquisition	312	9.29
Taxes and Duties	2342	69.70
Price Escalation	992	29.52
Contingencies	740	22.02
Consultancy Services	102	3.04
TOTAL	**15626**	**465.06**

After obtaining forest clearance from the GOI in September 1994, the erstwhile APSEB requested (September 1995 and February 1996) the CEA for according their approval for the revised abstract cost of Rs.404.15 crore, (which was based on tenders received) including contingencies (Rs 8.18 crore); establishment charges (Rs 30.17 crore) and interest during construction (IDC) (Rs 93.26 crore). CEA advised (January 1997) that since the Scheme was already approved by Planning Commission and there was no change in the scope of the Scheme, fresh approval was not required. However, the erstwhile APSEB again revised (September 1998) the abstract cost estimates to Rs.465.06 crore (excluding establishment charges and IDC) based on the tenders received. Due to absence of required information/data, Audit could not verify the reasonability or otherwise of these estimates.

2C.6 Funding arrangements

2C 6.1 Loans from Japan Bank for International Co-operation (JBIC)

Government of India and Japan Bank for International Co-operation (JBIC) concluded (December 1992) a bilateral agreement under which the latter agreed to fund the Scheme to the extent of 3806 Million Yen (Rs.113.27 crore) in the form of loans for the purchase of eligible goods and services from source countries including Japan, payments to contractors or consultants and interest during construction (IDC). As the loan agreed upon was meagre, another agreement was concluded (February 1995) with JBIC by GOI for a second loan of 9546 Million Yen (Rs 284.11 crore). The total loan of 13352 Million Yen (Rs 397.38 crore) was to be given by JBIC to GOI who passed it on to Government of Andhra Pradesh and who, in turn treated it as loan to APTRANSCO. The loan carried interest at the rate of 13.5 ***per cent*** per annum repayable (loan + interest) in 15 equal annual instalments from the year following the year of drawal. The loan funds were released/paid directly to the contractors/suppliers by JBIC after submission of relevant documents by APTRANSCO through GOI.

As per the terms and conditions of loan agreements, the proceeds of loans should be utilised for the purchase of eligible goods and services necessary for the implementation of the Scheme. The entire amount of loan was to be drawn before 31 March 2002. APTRANSCO had drawn 10121 Million Yen (75.8 ***per cent***) leaving 3231 Million Yen (24.2 ***per cent***) un-utilised.

2C.6.2 Loan from Power Finance Corporation

Power Finance Corporation (PFC) sanctioned (October 1999) a loan of Rs.40.10 crore at an interest of 13.5 ***per cent*** per annum to APTRANSCO to meet expenses towards payment of taxes and duties on goods and also part of cost of works contracts. An agreement for the above loan was concluded in January 2000. An amount of Rs.32.36 crore (80.7 ***per cent***) was utilised so far (May 2002).

2C.7 Scheme Planning and Execution

APSEB did not prepare detailed cost estimates before inviting bids

APSEB did not consult PGCIL on preparation of estimates, but depended on the values quoted by bidders

The erstwhile APSEB did not prepare any Detailed Project Report and/or line-wise/sub station-wise detailed cost estimates before obtaining approvals/clearances or before releasing bid documents which was the pre-requisite in normal practice for any work. It was replied (March 2002) that no detailed estimates were prepared as the construction of 400 KV lines was taken up by the erstwhile APSEB for the first time. This reply is not tenable inasmuch as the APSEB should have prepared the estimates with technical details available, taken expert advice, wherever ncecessary or they should have at least consulted Power Grid Corporation of India Limited (PGCIL) who had vast experience in that field. Ultimately, the erstwhile APSEB could not even verify the reasonableness of the rates quoted and had merely accepted the rates and quantities quoted by the bidders as discussed in forthcoming paragraphs.

2C.7.1 Acceptance of towers with less weight

APTRANSCO indicated the guaranteed weights for each type of tower (as furnished by the Contractor) in the Purchase Order issued in respect of SLBHPS-VZA Line. However, the Contractor erected 108 towers (out of 570 towers) with less weight, (fabricated value; Rs.3.76 crore) which ranged between 0.79 and 21.16 ***per cent*** of guaranteed weight. Though the payment was made only for the actual weight supplied, APTRANSCO did not verify as to whether the towers with less weight would withstand the normal as well as abnormal natural calamities and also would affect their strength and life especially in view of the fact that there were instances of tower collapses during heavy gale and cyclone periods.

2C.7.2 Defective survey of transmission lines

Check survey of Lines was done by the Contractors who executed line erection works

The preliminary and detailed survey including geographical details, drawing of ground profile, soil testing etc., of the four lines of the Scheme was got done between August 1991 and October 1993 through six different outside agencies at a total cost of Rs.6.21 lakh. The check survey of the lines (involving determination, checking and layout of accurate centre line and elevation of all the reference points, based on key map and plan and profile drawings furnished by the Board) was got done between November 1997 and March 1999 at a cost of Rs.40.24 lakh through the contractors who ultimately executed the line erection works. The details of contracts awarded (with price adjustment clause) and frequent revisions for the construction of four 400 KV lines are given in the **Annexure 21** . The contracts at serial number one to three of Annexure were awarded to M/s. Kalpataru Power Transmission Limited, Gujarat and serial number four was awarded to M/s KEC International Limited, Kolkata.

Revision in quantities was abnormal and ranged from 27 to 2119 *per cent* of original quantities

Due to various reasons like increase in the quantity of angle towers with consequential increase in the total weight of super structures, hill side extensions, increase in volume of foundation, increase in the volume of hard rock over the estimated quantity, procurement of spare towers, construction of revetments to certain towers, change of route line etc., the quantities were revised. The revision in quantities ranged from 27 to 2119 ***per cent*** of the original quantities. The preliminary and detailed surveys were defective inasmuch as there was abnormal variation in quantities of work resulting in frequent revision in value of contracts during execution.

2C.7.3 Construction of additional towers

Defective detailed/check survey resulted in erection of seven additional towers

As per the normal standards, the height between ground and the bottom wire (conductor) of the line should not be less than 8.86 metres (termed technically as "minimum ground clearance"). At certain places, this parameter was not satisfied because of valley followed by hilly areas. Hence, seven additional towers were erected by the Contractor with the concurrence of APTRANSCO. The erection of these additional towers was necessitated as both, the detailed survey conducted by outside agencies and the check survey conducted by the Contractor, were defective. Recovery to the extent of Rs.25 lakh was made (March 2002) on ad hoc basis from the bills of the Contractor towards cost of conductor/other material supplied by APTRANSCO for these additional towers. Final decision regarding the amount to be recovered had not been taken (September 2002).

2C.8 Procurement of material

In addition to towers, tower parts and accessories purchased (Rs 43.44 crore) from the suppliers/contractors who executed the transmission line works, APTRANSCO purchased material/equipment costing Rs.265.36 crore (provisional) from various suppliers. These include import of Aluminium Covered Steel Reinforcement (ACSR) moose conductor, Optical Fibre Ground Wire (OPGW) and Optical Line Terminal Equipment (OLTE) costing Rs.78.69 crore and indigenous material/equipment costing Rs.186.67 crore. Points noticed in Audit during scrutiny of the records are discussed in the following sub-paragraphs.

2C.8.1 Delay in compliance of import formalities

(a) Avoidable payment of customs duty

An order was placed (May 1997) on M/s. SHENZHEN BAOFENG (HUBEI) International Trade Company, China, for supply of 2645 Kms of ACSR moose conductor at a total CIF value of 113.95 Million Yen (Rs 33.91 crore) to be shipped during November 1997 to September 1998. It was observed that neither APTRANSCO nor the Consultants were aware of the minimum requirements and normal procedures in obtaining customs registration and opening of letter of credit (LC). APTRANSCO made futile efforts to obtain Industrial Licence when it was not required as the conductor comes under Open General Licence (OGL). Further, APTRANSCO was not aware of as to who should open the LC and what were the minimum details required to be included in the LC and also probable amount of customs duty payable on supplies.

Delay in completion of import formalities and also in arranging funds resulted in additional expenditure of Rs.5.71 crore

Necessary import formalities viz., opening of letter of credit and registration with customs authorities for obtaining concessional customs duty under project imports were completed only by April/May 1998. APTRANSCO, in spite of having Consultants and Advisers in all fields, took one year to complete the import formalities. The entire quantity of conductor provisionally valued at Rs.57.98 crore (CIF-Rs 38.71 crore, customs duty-Rs 17.65 crore, demurrages and interest-Rs 0.50 crore, Indian agents commission, port handling charges, inland transportation-Rs 1.12 crore) was shipped in 5 lots and reached Indian ports between June 1998 and May 1999. Meanwhile the rates of customs duty were increased from 34.5 to 40 ***per cent*** with effect from 1 June 1998 and further increased to 54.6 ***per cent*** with effect from 1 March 1999. Consequently APTRANSCO had to pay Rs.5.21 crore towards enhanced customs duty. There were also delays ranging from 14 to 57 days in arranging funds for payment of customs duty which also resulted in payment of Rs.0.50 crore towards demurrages (Rs 0.43 crore) and interest (Rs 0.07 crore).

The additional expenditure of Rs.5.71 crore was not justified as APTRANSCO could have obtained assistance from clearing agents for compliance of import formalities and arranged funds well in advance for payment of customs duty.

(b) Change of date of deliveries

For the above-mentioned ACSR conductor, price adjustment claims have to be worked out considering indices applicable 60 days prior to the date of delivery. The date of delivery for this purpose, would be taken out of the following, which should be most advantageous to the purchaser.

(i) The date on which the ACSR conductor was actually ready for inspection as notified by the supplier;

(ii) The contract date including any extension agreed to;

(iii) The actual date of receipt of goods at the destination stores.

Acceptance of modification to price adjustment clause resulted in extra expenditure of Rs.0.67 crore

As per the above conditions 36.006 Million Yen was recoverable from the supplier considering point number (iii) mentioned above. However, at the request (May 1999) of supplier, the actual date of delivery was considered as 60 days from the date on which the material was offered for inspection, in which case the amount recoverable worked out to be 19.123 Million Yen. APTRANSCO accepted (December 1999) the request of supplier and recovered 19.123 Million Yen as against 36.006 Million Yen resulting in an extra expenditure of 16.883 Million Yen (Rs 0.67 crore).

(c) Excess utilisation of loan

Non-adherence to delivery schedules resulted in drawal of extra loan of Rs.3.31 crore

The loan utilisation would have been 1139.92 Million Yen (Rs 35.40 crore) at the then exchange rate of 3.22 yen per rupee in case the supplies been completed as per schedule (September 1998). But the actual loan utilisation as per actual supplies made after September 1998 and up to May 1999 was 1120.798 Million Yen (provisional Rs.38.71 crore) resulting in drawal of an extra loan of Rs.3.31 crore. This resulted in an additional interest burden of Rs.44.66 lakh per annum at the rate of 13.5 ***per cent*** on Rs.3.31 crore. Ultimately, the import of ACSR moose conductor resulted in an extra burden of Rs.9.69 crore on APTRANSCO on account of (a) enhanced customs duty-Rs.5.21 crore (b) demurrages and interest-Rs 0.50 crore (c) change of date of deliveries – Rs.0.67 crore and (d) drawal of extra loan –Rs 3.31 crore.

2C.8.2 Delay in opening of Letter of Credit

The erstwhile Board placed (April 1998) an order on M/s. Pirelli Cavie Sistems SPA, Italy for supply of Optical Fibre Ground Wire (OPGW), Optical Fibre Approach Cable etc., for 359,067,414 Spanish Pesetas (Rs.10.04 crore) and the same was acknowledged by the supplier on 26 June 1998. As per the delivery schedule, supplies were to be commenced from fifth month from the date of acknowledgement of the order and all the material except 238 Kms. of OPGW and 3109 sets of 4R Stock Bridge Librator Damper should be completed before 01 March 1999. Even though APTRANSCO was aware of the fact that the supplies were to commence after 25 November 1998, action to establish LC was initiated only in December 1998 and the L.C was established only in March 1999 i.e., after delay of four months due to certain clerical errors like not sending payment terms along with LC application; mistakes in mentioning the name of the originating country, etc., which could have been avoided if proper care was taken. The material was received during April 1999, June 1999 and September 1999. Thus, inaction on the part of APTRANSCO up to November 1998 for opening of LC coupled with four months' delay thereafter resulted in delayed commencement of supplies. Meanwhile, from 1 March 1999 rates of customs duty were revised upwards and APTRANSCO incurred an additional expenditure of Rs.0.93 crore towards enhanced customs duty. Further, though shipment of consignments was known, provision of funds for payment of customs duty was delayed by over 3 months resulting in payment of Rs.5.18 lakh (Rs 3.68 lakh towards container detention charges and Rs.1.50 lakh towards demurrages). The Company, thus, incurred avoidable expenditure of Rs.0.98 crore (Rs.0.93 crore + Rs.0.05 crore).

Delay in opening letter of credit resulted in additional expenditure of Rs.0.98 crore

2C 8.3 Un-necessary purchases

(a) The erstwhile Board placed (July 1997) an order on M/s. TAG Corporation, Chennai for supply of 44340 numbers of spacer damper at the rate of Rs.403 (ex-works) each. Even though the detailed and check surveys were in initial stages, a probable additional requirement of 4467 numbers of spacer damper was assessed (October 1998) for SLBHPS-VZA line (1680); SLBHPS-HYD (2267) and SLBHPS-KNL (520). Accordingly, an extension order was placed (November 1998) at the same rates on the ground of avoiding any inconvenience to the works due to shortage of accessories. This additional quantity was received during January and February 1999 and the landed cost was Rs.18.09 lakh at the rate of Rs.405 each including freight and insurance.

During the scrutiny of records, it was noticed that out of 48807- numbers of spacer damper procured, 6651 numbers (SLBHPS-VZA-2406, SLBHPS-HYD-2873 and SLBHPS-KNL-1372) were held in stock unutilised as on 31 March 2002. Hence, purchase of entire additional quantity of 4467 numbers in November 1998 was not at all warranted and resulted in locking up of loan funds to an extent of Rs.18.09 lakh with consequential interest burden of Rs.2.44 lakh per annum.

Procurement of cranes not envisaged in technical sanction resulted in excess utilisation of loan of Rs.2.66 crore

(b) The technical sanction or administrative approval of the Scheme did not contemplate procurement of cranes. However, APTRANSCO procured (February/March 1998) two numbers of 18 tonne capacity mobile cranes at a total cost of Rs.0.96 crore. In May 2001, two numbers 150/40 T electrically operated travelling cranes were further procured at a total cost of Rs.1.70

crore. All these four cranes were procured for use in 400 KV sub stations at Mamidipalli and Narnoor. Thus the procurement of four cranes, which were not contemplated in the administrative approval or technical sanction, had resulted in excess utilisation of loan to an extent of Rs.2.66 crore.

2C.9 System failures

2C 9.1 Non-accounting of foreign currency payments

As per the accounting procedure for recording loan utilisation in the books, APTRANSCO head office on receipt of payment particulars from JBIC had to intimate the field officers, the actual amount of loan utilised. The loan account was to be operated by Head office of APTRANSCO and valuation of material received was to be done by the field officers after receipt of payment particulars from head office. While the loan utilisation particulars in respect of payments made in Indian currency were being communicated to the field officers, the said particulars in respect of payments made by JBIC to the foreign suppliers in foreign currency were not being intimated to the field officers. Hence, the field officers valued the materials without any relation to the actual payments. Out of an amount of Rs.51.80 crore paid to the three foreign suppliers for import of ACSR moose conductor, OPGW and OLTE, only Rs.18.13 crore was accounted for under material and no amount was accounted for against loan account by APTRANSCO. The consultancy fee of Rs.3.16 crore paid to EPDCI before March 2002 was also not accounted for. Thus, an amount of Rs.36.83 crore, which was paid by JBIC to the foreign suppliers in foreign currency, was kept out of books of APTRANSCO. APTRANSCO did not maintain any consolidated record to show the extent of actual rupee equivalent of loan utilised.

2C.9.2 Non-scrutiny of rates quoted

Two Purchase Orders were placed on M/s. Jaipur Metals and Electrical Limited, Jaipur (JMEL) and on M/s. Oswal Cables Private Ltd., Jaipur (OCPL) in April and June 1997, for supply of 2070 Kms and 635 Kms of ACSR Moose Conductor respectively. Extension Order was placed (December 1998) on OCPL for supply of 158 Kms of conductor. While the destination for JMEL supplies was Hyderabad, the destination for OCPL supplies was Kurnool. It was observed that freight and Insurance charges payable per Km of conductor were Rs.2000 and Rs.5220 in respect of JMEL and OCPL respectively. Since both the supplies were from Jaipur and the additional distance to be covered by OCPL up to Kurnool was only 200 Kms beyond Hyderabad, allowing an extra rate of Rs.3220 per KM of conductor towards freight and insurance was unreasonable and unjustifiable. The additional freight and insurance payable beyond Hyderabad and up to Kurnool would be around Rs.220 per Km of conductor (as ascertained from a Transport Company). This also indicated that due financial prudence was not exercised before accepting the rates. The acceptance of higher rate of transportation, without ascertaining reasonability of the same, resulted in an extra payment of Rs.23.79 lakh (793 Kms X Rs.3000) to OCPL.

2C.10 Civil works

2C 10.1 Construction of Quarters

72 staff quarters constructed at a cost of Rs.3.99 crore were kept vacant

As per the provisions of the Scheme, 72 quarters for different categories of officers of Mamidipally sub station (37 Nos.) and Narnoor sub station (35 Nos.) were constructed at a total cost of Rs.3.99 crore (Mamidipally –Rs 1.64 crore and Narnoor –Rs 2.35 crore). The construction was completed and the quarters were ready for occupation by December 2001 (Mamidipalli) and January 2002 (Narnoor) respectively. The Company could not allot any quarter till September 2002 to the eligible officials though certain posts were being operated. Thus, all the quarters constructed at a total cost of Rs.3.99 crore were kept idle resulting in locked up investment and interest burden of Rs.35.90 lakh at the rate of 13.5 ***per cent*** up to September 2002.

2C 10.2 Irregularities in execution of tower foundations

Tower foundation measurements recorded in measurement books were 90 to 150 *per cent* more than the actual work done

SLBHPS-VZA line consisted of 570 towers of different specifications. Based on newspaper reports regarding certain irregularities in the erection of seven towers, the Vigilance/Quality Control Wing of APTRANSCO conducted investigations but did not give any report. The foundations in respect of four locations were opened (February 1999) by the officials of the said wings and it was found that measurements recorded in measurement books did not match with the actual work done and variations ranged between 90 and 150 ***per cent*** of the actual work done. These four towers were re-erected by the Contractor free of cost. It was replied (June 2002) by the field officers that the remaining three towers might not require any re-erection as there were no adverse reports. This reply was not susceptible of verification by audit as the lines were neither utilised for the intended purpose nor for any other purposes. Though the Contractor was penalised by a recovery of Rs.10 lakh, no departmental action was initiated by APTRANSCO against the erring officials except transferring them to other places.

2C.11 Price adjustment payments

(a) On materials

A scrutiny of price adjustment payments made to the suppliers in respect of supply of material revealed the following inadmissible payments:

(i) As per JBIC guidelines, no price adjustment was to be allowed in respect of goods to be delivered within one year. However, no such clause was included in the purchase orders issued to four suppliers for supply of tower parts and ACSR moose conductor required for this Scheme. As a result, APTRANSCO had to incur an additional expenditure of Rs.4.60 crore as indicated in the table given below:

APTRANSCO paid Rs.4.60 crore towards price adjustment for supplies to be made within one year disregarding JBIC guidelines

Sl. No.	Name of the supplier	Quantity to be supplied within one year for which price adjustment was not payable	Price adjustment amount paid
(1)	(2)	(3)	(4)
			(Rupees in crore)
1.	M/s Kalpataru	639 towers	1.94
2.	M/s KEC	237 towers	0.42
3.	M/s Jaipur Metals and Electricals Limited, Jaipur	1200 Kms	1.49
4.	M/s Oswal Cable Private Limited	635 Kms	0.75
		Total	4.60

Differential treatment regarding price adjustment payment resulted in extra payment of Rs.14.04 lakh

(ii) As per the terms and conditions of the order placed on M/s Kalpataru and M/s. KEC for supply of towers and tower accessories, price adjustment was to be restricted to the increase in prices up to the scheduled date of delivery. In spite of the fact that this condition was followed in respect of price adjustment amounts paid to M/s. KEC, the same was not followed in respect of M/s. Kalpataru resulting in excess payment of Rs.14.04 lakh to M/s. Kalpataru.

Continued payment of adhoc amount even after determination of final amount resulted in extra payment of Rs.26.56 lakh

(iii) In respect of SLBHPS –VZA line, APTRANSCO worked out (October/November 1998) provisional amounts (per tonne) payable to the supplier in respect of price adjustment for supply portion, pending submission of detailed calculations. Accordingly, Rs.2.25 crore was paid between March 1999 and June 2000. The final amount payable was determined in December 1999 at Rs.1.99 crore. In spite of this APTRANSCO continued to pay ad hoc amount from January to June 2000. This resulted in excess payment to the extent of Rs.26.56 lakh, which was yet (September 2002) to be recovered/adjusted.

(b) On erection Works

Differential treatment given for two erection works resulted in extra payment of Rs.1.84 crore

A clause indicating a ceiling of 20 *per cent* of ex-works price/ agreement price in respect of price adjustment payments related to supply as well as erection portion was included in the order placed on M/s. KEC Limited. However, similar clause, though incorporated under supply portion, was not incorporated under erection portion of the orders placed on M/s. Kalpataru. As a result, APTRANSCO, paid price adjustment beyond 20 ***per cent*** of erection portion also. Thus, the differential treatment given (regarding restriction of price adjustment payments) to the two suppliers had resulted in an extra payment of Rs.1.84 crore to M/s.Kalpataru. (SLBHPS- VZA line Rs.1.19 crore and SLBHPS – HYD – Ghanapur line Rs.0.65 crore).

2C.12 Time over run

The Scheme, scheduled for completion by June 1996, was actually completed by June 2001

The work on the Scheme was to commence in July 1992 and was to be completed by June 1996. APTRANSCO did not process the implementation of the Scheme up to November 1994 since the forest clearance was received only in September 1994. The Bid opening date (January 1995 against tenders called for in November 1994) was extended up to August 1995 so as to enable the prospective bidders to re-submit their bids in accordance with the changes made in the specifications as suggested by the CEA. APTRANSCO approved (January 1996) the award of contracts and sent (February 1996) to the CEA for their scrutiny and onward transmission to JBIC for their approval. Thereafter series of discussions/correspondence took place up to October 1996 between the CEA, APTRANSCO and the prospective bidders on technical as well as financial issues. State Government directed (November 1996) to stop further processing of tenders and not to enter into any contractual obligations on the Scheme till a final view was taken by Government on the Srisailam Left Bank Power House. However, in January 1997 State Government directed to go ahead with the Scheme subject to the condition that the materials could be diverted to other transmission scheme if Srisailam Left Bank Power House Scheme was deferred on economic consideration. JBIC's approval was received in March 1997 and Letters of Intent were issued in March 1997 itself. Thus Scheme works, scheduled for completion by June 1996, were actually completed by June 2001.

2C.13 Cost over run

Though the Scheme works were completed by June 2001, neither the final bills nor the completion reports in respect of all the works were prepared (September 2002). However, the amount booked in the accounts up to March 2001 was Rs.510.26 crore. In the absence of details of actual expenditure incurred and due to non-finalisation of completion reports, extent of and reasons for, the cost overrun, if any could not be analysed in audit.

2C.14 Non-achievement of objectives

The main objective of the Scheme is to evacuate power generated from Srisailam Left Bank Power House (SLBPH) to major load centers (Hyderabad & Kurnool) and also to connect SLBPH to major thermal generating stations to draw surplus thermal power during the night hours to operate the units in pumping mode.

Intended objective of scheme had not been achieved due to non-commissioning of three units of SLBPH

Six units (150 MW each) of SLBPH were to be completed by January 1999. However, only three units were commissioned during April 2001 to April 2002 and the power generated during that period was 384.720 MU only. Thus, due to non-commissioning of all the six generating units, the transmission Scheme implemented had not achieved the intended objective.

Conclusion

The erstwhile Board did not prepare detailed estimates before taking up implementation of the Scheme. The preliminary survey and detailed survey conducted by outside agencies and the check survey conducted by the Contractors were all defective inasmuch as there were huge variations in the volume of work and value of the contract.

The clearing agents/consultants who were appointed to advise the Company regarding import formalities, failed to guide the Company properly as the Company had to make avoidable payments towards customs duty. It also resulted in excess drawal of loan from JBIC due to foreign exchange variation. The Company did not ascertain the reasonableness of the rates quoted by the bidders.

Though the works on all the lines and substations were completed by June 2001 neither the final bills nor the completion reports were finalised so far (September 2002).

Due to non-commissioning of Srisailam Left Bank Power House, the transmission Scheme implemented did not achieve the intended objective.