THIRTEENTH KERALA LEGISLATIVE ASSEMBLY

COMMITTEE
ON
PUBLIC UNDERTAKINGS
(2014-2016)

HUNDRED AND EIGHTH REPORT

(Presented on 18th February, 2016)

SECRETARIAT OF THE KERALA LEGISLATURE
THIRUVANANTHAPURAM
2016

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HUNDRED AND EIGHTH REPORT

On

Kerala State Electricity Board based on the Report of the Comptroller and Auditor General of India for the years ended on 31st March, 2010 and 2011 (Commercial)

380/2016.

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INTRODUCTION

I, the Chairman, Committee on Public Undertakings 2014-2016 having been authorised by the Committee to present the Report on their behalf, present this Hundred and Eighth Report on Kerala State Electricity Board based on the Reports of the Comptroller and Auditor General of India for the years ended 31st March 2010 and 2011 (Commercial) relating to the Government of Kerala.

The Reports of the Comptroller and Auditor General of India for the years ended on 31st March 2010 and 2011 were laid on the Table of the House on 28-6-2011 and 23-3-2012 respectively. The consideration of the audit paragraphs included in this Report and the examination of the departmental witness in connection thereto was made by the Committee on Public Undertakings constituted for the period 2014-2016.

This Report was considered and approved by the Committee at the meeting held on 17-2-2016.

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

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

K. N. A. KHADER,
Chairman,
Committee on Public Undertakings.

Thiruvananthapuram,
18th February, 2016.

REPORT

ON

KERALA STATE ELECTRICITY BOARD

AUDIT PARAGRAPH

Avoidable loss of revenue

Based on a petition filed (July 2008) by the Board to overcome the critical power situation prevailing in the State, Kerala State Electricity Regulatory Commission (KSERC) sanctioned (July 2008) restriction of power consumption of HT/EHT consumers with effect from 25th July, 2008 to 75 per cent on monthly basis, calculated reckoning average monthly consumption from 1st April, 2007 to 31st March, 2008. Any consumption over and above the quota so fixed shall be charged at the actual cost of additional purchase required, calculated on a monthly basis and rates for additional usage of preceding month should be got approved by the Commission before 5th of each month. It was further clarified (August 2008) by the Commission that cost of power for excess consumption shall be calculated by taking weighted average rate of all stations which provide power in merit order operation [including Unscheduled Interchange (UI) and power purchased from traders]. Subsequently, the Commission approved (October 2008) introduction of power restriction to LT consumers also with effect from 15-10-2008 and the restriction on power for both LT and HT/EHT was reduced to 20 per cent. The restriction was withdrawn with effect from 1st May, 2009.

As the tariff rate for additional consumption was worked out based on weighted average cost of supplies from all thermal power stations received on merit order operation, the more the figure of actual consumption given by the Board lesser would be the rate approved by the KSERC and vice versa.

We observed that even though actual figures of consumption by EHT/HT consumers were available, the Board while submitting proposals to KSERC for fixation of rates for consumption in excess of quota adopted estimated consumption by EHT/HT consumers (July 2008-September 2008) which were on the higher side which resulted in revenue loss of ₹ 2.52 crore (Annexure 28).

Board stated (May 2010) that the actual status of excess consumption was known only after raising the invoices for excess consumption. Therefore, the Board proposed to fix the rate for excess consumption based on the estimated figures. It was further stated that rates as per actual figures compiled subsequently, for the period October 2008 to April 2009 were less than the estimates and therefore, Board made excess collection of ₹ 10.15 crore.

The reply will not hold good, as the actual figures of consumption of EHT/HT consumers was available with the Board at the time of giving monthly proposals to KSERC and estimated figures of monthly excess consumption given to KSERC during the period October 2008 to April 2009, when quota system was applicable to LT consumption, were lesser than actuals, ranging from 4.71 per cent to 52.43 per cent (excluding April 2009). This resulted in fixation of higher rates than actually required under merit order system, leading to excess collection from EHT/HT (₹ 5.09 crore) and LT (₹ 7.58 crore) consumers, amounting to ₹ 12.67 crore (Annexure 28 and 29). The fact remained that adoption of incorrect estimated figures which were lesser to the actual consumption provided to KSERC for EHT/HT/LT consumers (October 2008-March 2009) resulted in unintended revenue of ₹ 12.67 crore to Board. Thus, the Board made overall net additional revenue of ₹ 10.15 crore.

The matter was reported to Government in April 2010; their reply is awaited (September 2010).

[Audit Paragraph 4.9 contained in the Report of Comptroller and Auditor General of India for the year ended 31st March, 2010.]

ANUEXURE 28

Statement showing additional revenue foregone by Kerala State Electricity Board from excess consumption
(Referred to in paragraph 4.9)

	Rates for excess consumption approved by KSERC	Rates as per actuals	Difference	Units sold* EHT/ HT and LT	Additional revenue based on approved rates	Actual unit sold LT	Additional revenue based on actuals	Gross revenue
		(in ₹)		(MU)	(in ₹ crore)	(MU)	(in ₹ crore)	
(1)	(2)	(3)	(4)=(2) – (3)	(5)	(6)=(4 x 5)	(7)	(8)=(4 x 7)	(9)=(6+ 8)
July 2008	11.19	12.11	(-)0.92	8.27	(-)0.76	-	-	(-)0.76
August 2008	10.16	10.66	(-)0.50	35.13	(-)1.76	-	-	(-)1.76
September 2008	8.83	8.83	-	35.93		-	-	-
Total	-	-	-	-	**(-) 2.52**	-	-	**(-) 2.52**
October 2008	7.85	7.86	(-)0.01	43.05	(-)0.04	31.79	(-)0.03	(-)0.07
November 2008	7.85	7.81	0.04	34.73	0.14	56.10	0.22	0.36
December 2008	6.74	6.68	0.06	37.67	0.23	57.97	0.35	0.58
January 2009	5.45	4.92	0.53	39.49	2.09	57.97	3.07	5.16
February 2009	5.50	5.04	0.46	28.67	1.32	52.36	2.41	3.73
March 2009	5.59	5.32	0.27	49.84	1.35	57.97	1.56	2.91
April 2009	5.38	5.38	-	42.05	-	56.10	-	-
Total					**5.09**		**7.58**	**12.67**
Net revenue								**10.15**

Statement showing comparison of EHT / HT and LT estimated vs. actual consumption in Kerala State Electricity Board
(Referred to in paragraph 4.9)

Month	Estimated excess consumption of EHT/HT/LT consumers (MU)	Actual excess consumption of consumers			Percentage of variation of estimates from actuals
		EHT/HT in (MU)	LT* (in MU)	Total (MU)	
(1)	(2)	(3)	(4)	(5)=(3)+(4)	(6)=(2)/(5)*100-100
July 2008 (25.7.2008 to 31.7.2008)	36.15	8.27	-	8.27	(+)337.12
August 2008	60.33	35.13	-	35.13	(+)71.73
September 2008	36.02	35.93	-	35.93	(+)0.25
October 2008	87.35	43.05	31.79	74.84	(+)16.72
November 2008	86.55	34.73	56.10	90.83	(-)4.71
December 2008	82.47	37.67	57.97	95.64	(-)13.77
January 2009	57.90	39.49	57.97	97.46	(-)40.59
February 2009	38.55	28.67	52.36	81.03	(-)52.43
March 2009	75.77	49.84	57.97	107.81	(-)29.72
April 2009	99.98	42.05	56.10	98.15	(+)1.86

Notes furnished by Government on Audit Paragraph is given in Appendix II.

1. After conveying dissatisfaction with the reply furnished by Government, the Committee sought explanation from the Board for not submitting the actual charges of excess consumption of electricity to the Regulatory Commission before 5th of every month. The witness replied that it was for the first time that Kerala State Electricity Regulatory Commission which is empowered to fix the tariff for all consumers in the State imposed such a methodology to fix the tariff according to the exact consumption of each consumer. In the case of HT/EHT consumers actual consumption could be available in the next month itself whereas, the actual consumption of LT consumers would be available only after two months. Even then, KSERC ordered to impose power restriction to all LT consumers during October 2008 to April 2009. While informing about the practical difficulties KSERC decided to calculate the tariff according to the estimated cost from 2009-10 onwards and approved charges of excess consumption during the year 2009-10 @ ₹ 7.25 per unit and the same for the year 2011-12 @ ₹ 10 per unit.

2. The witness also informed that even though there was revenue gap for the year 2008-09 which was approved by KSERC considering the total revenue that could be collected from consumers including the charges of excess consumption, KSERC decided for further tariff revision. Consequently the Board was forced to give more cost for the purchase of extra unit which resulted in a loss of ₹ 2.52 crore. Meanwhile the consumers reduced the consumption due to the hike in the cost, the Board also get a benefit of ₹ 12 crore during 2008-09.

Conclusions/Recommendations

3. **The Committee is not satisfied with the method followed by the Board in submitting inaccurate estimated figures to KSERC, while actual figures of consumption by EHT/HT consumers were available. The committee disagrees with the statement made by the witness that the Board gained a benefit of ₹ 12 crore during 2008-09 and there was a loss of ₹ 2.52 crore when the Board was forced to spend extra cost for the purchase of additional unit. The Committee**

is of the opinion that the Board could not claim that it gained a benefit of ₹ 12 crore. However it can only be considered as an inadvertent revenue gained by collecting excess amount from EHT/HT/LT consumers by adopting erroneous estimated figures for the fixation of tariff. Therefore, the Committee recommends that for tariff calculation, actual figures of consumption should only be adopted.

Loss of Savings

The terms and conditions of purchase orders for procurement of substation equipments, line material, spares, etc. issued by the Board contained a stipulation that supplier should provide an additional quantity of 25 per cent in excess of quantity ordered, at the same rates, terms and conditions if called upon to do so. Purchase Orders issued for such additional quantity, stipulated that prices will be refixed if fall in prices occur in the next tender during the delivery schedule fixed for the additional quantities. The intention of the Board in including such a clause was that, in the event of reduction in prices during the scheduled delivery period, the savings should accrue to the Board's account. During test check, we noticed (April 2010) that the Board did not ensure that fresh tenders are invited during the delivery period of additional quantity to avail the benefit of falling prices.

The Board issued 11 purchase orders for additional quantities during 2007-09. In six cases, there was an increase in prices and the same was paid as per the conditions on price specified in the original purchase order. Out of the remaining five cases, where there was reduction in prices the Board could not avail the reduced prices in two cases because the tenders were invited immediately after the period of supply of additional quantities. In three cases although the tenders had been invited during the currency of the delivery period, these were opened only after the delivery period thereby impeding the possibility of refixation of price as indicated in Annexure I.

Sl No	Purchase order No, date and name of supplier	Material	Date of completion of supply	Date of next tender	Date of opening of tender	Saving forgone (₹ in lakh)
1	TCM/49/2008-09/1371 dated 4.7.07 Traco Cable Company Ltd, Kochi	ACSR Dog conductor	13 August 2007	20 August 2007	25 January 2008	10.97
2	TCM/69/2008-09/1801 dated 18.7.08 SBEE, Cables India Limited, Bangalore	1100 V Grade control cables of different sizes	1 September 2008	31 October 2008	20 March 2009	39.82
3	TCM/108/2008-09/2570 dated 29.08.2008 Megwin Switchgear (P) Limited, Salem	11 KV 10 panel (4 sets) with spares	27 October 2008	23 September 2008	02 February 2009	18.66
4	TCM/78/2008.09/25750 dated 28.07.08 Areva T&D India Limited, Chennai	110KV, SF6 Circuit Breakers excluding erection &commissioning	3 October 2008	17 September 2008	30 January 2009	28.53
5	TCM 127/2008-09/2863 dated: 15.09.2008 G.R Power Switchgear Limited, Hyderabad	110 KV Insulator with structure	4 January 2009	4 December 2008	15 April 2009	11.59
	Total					**109.57**

The schedule of tendering for next purchase was not synchronised with the delivery of quantity as per the additional order for 25 per cent so as to ascertain the prices and invoke the refixation clause; thereby the opportunity for savings amounting to ₹ 1.10 crore was lost.

Management stated (July 2010) that according to purchase procedure, purchase plan is prepared for a year based on requirements, by preparing a priority list for inviting tenders based on the availability of materials, taking into consideration stock, pipeline quantity, tenders under process and 25 per cent additional quantity to be given etc., with the approval of purchase committee. Hence it is practically very difficult to arrange a fresh tender within the delivery schedule of additional quantity in order to make use of the provision for refixation. Government endorsed (August 2010) the views of Management.

The reply will not hold good as the Board had included the provision for refixation of prices, with the intention of making the savings due to reduction in prices, during the intervening period, knowing very well the purchase procedure hitherto followed. In the instant cases, the date of next tender was within seven and 60 days of delivery date in serial numbers 1 and 2 and serial numbers 3 to 5 was within the delivery period. The Board was very well in a position to synchronise the timing of fresh tender with the delivery period of additional quantity in these cases and lost an opportunity for savings amounting to ₹ 1.10 crore.

We suggest that Board should synchronise their procedure for purchase of additional quantity in such a manner that the benefit of reduction in prices could be reaped.

[Audit Paragraph 4.10 contained in the Report of Comptroller and Auditor General of India for the year ended 31st March, 2010.]

Notes furnished by Government on audit paragraph is given in Appendix II.

4. The Committee enquired the reason for not utilising the opportunity for savings amounting to ₹ 1.10 crore and also sought explanation for not availing the

benefit of reduction in prices by inviting fresh tenders during the delivery period of additional quantity according to the terms and conditions of purchase order. The witness replied that purchase plan was prepared annually based on the requirement of materials for the next years. However in order to overcome the exigencies caused when unforeseen work happens, provision was incorporated in the tender regulations itself for supplying 25% in excess of quantity ordered. Hence the materials additionally required could be purchased from the existing tender without any change in price during the course of contract.

5. The witness further informed that even though the work could not be done during the rainy season, materials had to be purchased for one year and therefore the situation for inviting tender during the supply period of additional quantity would not arise. Since the tender for the purchase of materials for the next year was usually invited either in July or August and 25% of excess materials were also supplied, price could not be adjusted by the Board during the finalisation of fresh tenders. The witness further stated that in every year, materials for a total amount of ₹ 1300 crore had to be purchased by the Board and to this a loss of ₹ 1.9 crore was quite natural.

Conclusions/Recommendations

6. **The Committee is aggrieved to note that the Board did not invite fresh tenders during the delivery period of additional quantity to avail the benefit of falling prices which resulted in a loss of ₹ 1.10 crore. Disagreeing with the statement made by the witness the Committee remarks that very purpose of the clause provided in the purchase order for refixation of prices is misused by the Board. Therefore, the Committee recommends that in order to avail the benefit of fall in prices and to make savings to the Board's accounts, the Board should synchronise their procedure for the purchase of additional quantity.**

Short realisation of electricity charges

The Kerala State Electricity Board (Board) engaged in the generation/ purchase and distribution of power, had to obtain prior approval of the Kerala State Electricity Regulatory Commission (KSERC) for implementing tariff revision in terms of section 61 of The Electricity Act, 2003. The revised tariff shall be applicable to all its consumers superceding all previous tariff regulations/ rules and agreements entered into with them by the Board/Government in this respect. Based on the proposal of the Board, KSERC approved (November 2007) tariff revision to all its consumers with effect from 1st December, 2007.

As per the tariff notification, the billing demand for High Tension (HT) or Extra High Tension (EHT) consumers shall be the recorded maximum demand for the month or 75 per cent of contract demand (as per the agreement) whichever is higher. When the actual maximum demand in a month exceeds the contract demand as per the agreement, the excess demand shall be charged at a rate of 150 per cent of the demand charges applicable.

We observed (June 2009) that, there was no provision in the schedule of tariff and conditions for bulk supply to licensees who avail energy through HT or EHT systems at their terminal for charging penal rate for consumption in excess of contract demand. According to the monthly invoices of Board, the power consumption by three licensees viz., Thrissur Municipality (contract demand 8000 KVA), Electricity Department, Pondicherry (contract demand 3300 KVA up to May 2009 and 5500 KVA from June 2009) and Karnataka Electricity Board, Madikery (contract demand 100 KVA) was in excess of their contract demand. The excess consumption of power ranged between 38 KVA and 12626 KVA (Thrissur Municipality) 80 KVA and 2553 KVA (Electricity Department, Pondicherry) and 6 KVA and 139 KVA (Karnataka Electricity Board, Madikery) during December 2007 to September 2009 but was invoiced at normal tariff rates only.

This resulted in short collection of electricity charges from two licensees operated from outside the State (Electricity Department, Pondicherry and Karnataka Electricity Board, Madikery) amounting to ₹ 0.48 crore for the period December 2007 to July 2010 (Annexure 30).

Board, in interim reply, stated (June 2009) that penalty will be charged if such a condition is incorporated in the agreement executed between the licensees and the Board. Since the copies of the agreement executed between the licensees and the Board was not available with them as these licensees were old ones, they were not in a position to charge penalty for the demand in excess of contract demand.

The Board has been working on loss and the deficit is treated as Revenue gap/Regulatory asset in its accounts since 2006-07, which should be recovered in a time bound manner. Despite this, the Board did not consider charging penalty for excess consumption by licensees while furnishing tariff revision proposal to KSERC foregoing opportunity to improve its financial position. Further, the preferential treatment of licensees would ultimately result in putting burden on other consumers while implementing tariff revision. KSERC also could not consider this vital issue like in the case of other HT/EHT consumers due to the flawed tariff proposal of the Board.

We suggest that the Government/Board should take necessary action to enter into fresh agreement to abide by the schedule of tariff and terms and conditions for retail supply by KSEB.

The matter was reported to Government/Board (May 2010); their replies are awaited (October 2010).

[Audit Paragraph 4.11 contained in the Report of Comptroller and Auditor General of India for the year ended 31st March, 2010.]

Statement showing short realisation of electricity charges by Kerala State Electricity Board due to excess drawal of power over contract demand by two licensees during December 2007-July 2010

(Referred to in paragraph 4.11)

Sl.No	Licensee	Excess drawn (KVA)	Normal rate (₹)	Short realisation (₹ in lakh)
(A)	(B)	(C)	(D)	(E) = (C*D*0.5)
1	Electricity Department, Pondicherry	37187	245	45.55
2	Karnataka Electricity Board, Madikery	1669	270	2.25
	Total			**47.80**

Notes furnished by Government on Audit Paragraph is given in Appendix II.

7. To the query of the Committee regarding short realisation of electricity charges from the licensees operated from outside the state, the witness replied that licensees mentioned in the audit para could not be considered as HT/EHT consumers alone. Like KSEB, licensees caters all types of consumers including domestic consumers and the only difference is in the area of distribution which was limited to the specific geographical areas assigned to them.

8. The witness also informed that the Board levied penalty or excess amount only from HT/EHT consumers when there was excess consumption than the contract demand. To the licensees having excess domestic consumers penalty could not be levied so because if penalty was charged, it would normally affect each domestic consumer.

9. When the Committee sought explanation for not incorporating any penal provision in the agreement executed between the licensee and the Board for consumption in excess of contract demand, the witness stated that since no agreement was executed between the licensees and the Board, penalty could not be charged. Meanwhile the Committee pointed out the contradiction between the above statement and the interim reply from Government which stated that as the licensees were old ones, the copies of the agreement executed between the licensees and the Board was not available with them and therefore the Board was not in a position to charge penalty. The Committee directed the Government to verify the records properly and to inform it whether an agreement was executed or not. The witness agreed to do so. The Committee also opined that the preferential treatment of licensees would ultimately affect other consumers by putting burden upon them in the way of tariff revision and if penal provision was included in the agreement the higher rate of tariff could have been levied only from the individual consumers.

Conclusions/Recommendations

10. **The Committee observes that by not imposing penalty for excess consumption, the Board lost an amount of ₹ 0.48 crore during the period from December 2007 to July 2010. The Committee is not at all convinced with the statement made by the witness**

regarding the inclusion of penal provision in the agreement, as it was contradictory to the reply furnished by the Government. The Committee directs that the department should verify the records properly and inform the Committee whether any agreement was signed between the licensees and the Board.

11. The Committee suspects that the practice of not charging penal rate for consumption in excess of contract demand by licensees might result in putting burden on other consumers while implementing tariff revision. Therefore, the Committee recommends that for improving the financial position of the Board, they should enter into fresh agreement by incorporating penal provision for excess consumption to abide by the schedule of tariff and terms and conditions for retail supply by the Board.

AUDIT PARAGRAPH

Canons of Financial Propriety—Advertisement

Adopting the canons of financial propriety as the benchmark we undertook scrutiny of expenditure incurred by Kerala State Electricity Board (KSEB) and State PSUs on advertisements during 2008-09 to 2010-11. Canons of financial propriety required that public money should not be utilised for the benefit of a particular person or section of the community. The conclusion about compliance with this requirement can be arrived at only by looking at the contents of the advertisement. If the advertisement is publication of tender notices, Statutory notifications, etc., then this item of expenditure is in conformity with this requirement, but to the contrary if the advertisement is in the nature of extolling the achievements of the Government or of a section of society such surrogate advertisements are indirectly burdening the PSU and are violative of canons of financial propriety. We observed that expenditure of ₹ 3.68 crore on advertisement was violative as detailed below:

Kerala State Electricity Board

A total of 29 display advertisements made (2008-09 to 2010-11) at a cost of ₹ 3.19 crore by the KSEB were in the nature of extolling the accomplishments of the Government. While the KSEB issued tender advertisements in maximum of three newspapers, all the display advertisements were made in nine to eleven newspapers. Included in it were advertisements published in February and May 2009 in 11 newspapers spending ₹ 90 lakh with no benefit to itself or to the consumers.

Similarly, all the 18 display advertisements published at a cost of ₹ 1.95 crore running up to May 2011 related to publicising the achievements of the Government were surrogate in nature and also did not add to the benefits of the KSEB. In all the above cases no benefit directly or indirectly accrued to the KSEB or the consumers.

State PSUs

Government also directed (April 2009/July2010), 21 State PSUs to release an amount of ₹ 52.59 lakh to Public Sector Restructuring and Internal Audit Board (RIAB) in connection with advertisements. An amount of ₹ 48.85 lakh was paid by17 PSUs to RIAB.

KSEB stated (August 2011) that messages pertaining to developmental activities had to reach public. Considering this, wide publicity was given to certain projects/programmes unlike tender advertisements focused on certain target groups. Further, the advertisements released (February-May 2009/2010-11) were not aimed for publicising the achievements of Government. Managements (eight companies) stated (October 2011) that the payments were made as per the directions of Government of Kerala.

Their replies were not acceptable. The advertisements were not issued in the context of advertising the product of the KSEB/PSUs to increase their market share. They were violative of canons of financial propriety.

We recommend Government to clearly lay down guidelines with regard to advertisements issuable by PSUs. The matter was reported to Government (June/September 2011); their reply was awaited (November 2011).

[Audit Paragraph 4.10 contained in the Report of Comptroller and Auditor General of India for the year ended 31st March, 2011.]

Notes furnished by Government on Audit Paragraph is given in Appendix II.

12. The Committee enquired whether the expenditure of the advertisement made by the Board were imposed by way of tariff revision upon the consumers and further enquired whether the Board had violated norms of financial propriety. The witness replied that Board had made display advertisements at a cost of ₹ 3.19 crore during period from 2008-09 to 2010-11 and had not violated canons of financial propriety. For the effective and fruitful implementation of programmes conducted by the Board and for conveying the public about various consumer friendly developmental activities Board was forced to release advertisements.

Conclusions/Recommendations

13. **The Committee remarks that the Board violated norms of financial propriety hence most of their advertisements were surrogate in nature for displaying the achievements of the Government rather than benefiting the Board or the consumers. The expenditure of the advertisement made by the Board might be imposed upon the consumers by way of tariff revision. Therefore, the Committee recommends that proper guidelines with regard to advertisements should be issued by Government to public sector undertakings to avoid financial loss.**

AUDIT PARAGRAPH

Power Purchase

For short-term purchase of power tender notice was issued to the traders through fax. The quotes from traders were called for through fax or e-mail to the Office of Chief Engineer (Commercial & Tariff). During the period 2010-11, the Kerala State Electricity Board (KSEB) purchased 1077.37 MU of power at a total cost of ₹ 490.78 crore.

We observed (July 2011):

KSEB invited tenders (31st December, 2010) for purchase of power (quantum 150 MW and not less than 10 MW in any time block) for February to May 2011. The closing date of tender was 5th January, 2011 (3 p.m.) JSW Power

Trading Company Limited (JSWPTCL) offered (5th January, 2011) to supply 100 MW during February 2011 (0.00 hours to 24.00 hours) at ₹ 3.86 per unit. Another bidder, GMR Energy Trading Limited (GMRETL) offered (5th January, 2011) to supply 100 MW at ₹ 4.10 for the period from 1st February to 14th February, 2011 (5.00 hours to 23.00 hours) and 75 MW at ₹ 4.80 for the period 15th February to 28th February, 2011 (18.00 hours to 23.00 hours) to be accepted by 7th January, 2011.

Given the KSEB's requirement of 150 MW and JSWPTCL was willing to supply only 100 MW there was compelling urgency to place order on GMRETL before expiry of validity period. KSEB placed Letter of Intent (LoI) on JSWPTCL and GMRETL only on 13th January, 2011. GMRETL refused to supply. JSWPTCL offered (14th January, 2011) to supply additional 50 MW, not at the original rate of ₹ 3.86 but at higher rate of ₹ 4.24 per unit. Non-placement of the LoI on GMRETL within its validity period led to KSEB incurring extra expenditure of ₹ 11.98 lakh.

KSEB invited (3rd February, 2011) another tender for purchase of 100 MW to 300 MW of power for the months of March to May 2011 (quantity not less than 10 MW in any time block). Bids were to be submitted by 2 PM on 4th February, 2011.

JSWPTCL quoted rate of ₹ 5.76 per unit on 3rd February, 2011 with validity of offer till 11 AM on 4th February, 2011. Reliance Energy Trading Limited quoted a rate of ₹ 6.07 per unit on 3rd February, 2011. JSWPTCL on expiry of original offer again quoted (4th February, 2011) at increased rate of ₹ 5.96 per unit but retained its L1 status. KSEB placed (10th February, 2011) orders on JSWPTCL at ₹ 5.92 per unit as reduced from its second offer of ₹ 5.96 per unit. The difference in price paid to JSWPTCL on account of the 50 MW power purchased from first and second offer was ₹ 51.93 lakh at KSEB periphery.

Hydel generation capacity of KSEB was adequate to meet off-peak hour requirements. Average generation cost from the hydel stations is very low compared to the average purchase cost from traders. Taking into account these factors it would have been appropriate for KSEB to restrict purchases from Independent Power Producers/Traders to the peak hour periods only.

KSEB had a policy of keeping minimum hydro reserve on the last day of water year (31st May) at 525 MU. There was failure to full utilise the available water subject to the requirement mentioned above. It was observed that the hydro reserve carried forward on 31st May, 2011 was 839.27 MU far higher than the limit of 525 MU resulting in short generation of an additional 314 MU. KSEB purchased 27.06 MU from Adani Enterprises Limited and 5.04 MU from JSWPTCL (under a separate contract than above) in February 2011. We are of the opinion that this purchase was entirely avoidable if the existing hydel capacity was optimally utilised. Failure to do so resulted in additional expenditure of ₹ 13.88 crore on purchase of 32.10 MU of electricity.

In a swap/bank arrangement, energy was supplied to a trader with the stipulation for receipt of the energy in a future-period. KSEB decided (May 2010) to swap/bank surplus power available during monsoon period for getting receipt during the power deficient summer months. Based on offers received, KSEB entered into a tripartite agreement (12th August, 2010) with GMRETL and North Delhi Power Limited (NDPL) for banking of 54.00 MU of power during 1st to 15th October, 2010 (0.00 hours to 24.00 hours) for getting 105 per cent quantum in return during March 2011.

We observed lacuna in the Agreement. As no money was received for the energy initially supplied, there was a risk that the trader may not fully discharge the obligation in future. The natural control for this risk was to have a Bank Guarantee (BG) for quick realisation of compensation equal to the value of power to be received computed at the settlement rate; the value of which would workout to ₹ 56.70 crore. As against this, KSEB did not collect any BG from the party. This lacuna was exploited by the trader who short supplied 1.43 MU during return period. KSEB thus instead of imposing damages on GMRETL of ₹ 1.43 crore, as per settlement rate, chose to accept supply during power surplus period and favoured the trader.

The matters were reported (July 2011) to Management/Government: their replies were awaited (November 2011).

[Audit paragraph 4.14 contained in the Report of Comptroller and Auditor General of India for the year ended 31st March, 2011.]

Notes furnished by Government on Audit Paragraph is given in Appendix II.

14. To the queries regarding audit objections the witness replied that tender was invited by the Board on 31-10-2010 for 150 MW power for the month of February to May 2011 with cut off date as on 5-1-2011 with an objective to finalise bids before 19-1-2011. In response to the tender JSWPTCL submitted offer on 5-1-2011 to supply 100 MW during February 2011 @ ₹ 3.86 per unit and GMRETL also submitted offer on the same day to supply 100 MW @₹ 4.10 for the period for 1st February to 14th February, 2011 and 75 MW @ ₹ 4.80 for the period 15th February to 28th February, 2011 with the condition that the offer was valid only up to 7-1-2011. Hence, the Board had to examine whether all the bidders were technically qualified or not as per the procedure, they could not place the order before the expiry of validity of offer. After completing all the procedures, Board gave LoI on 13-1-2011. At that time GMRETL refused to supply, but JSWPTCL offered to supply additional 50 MW at a higher rate of ₹ 4.24 per unit and Board was forced to purchase extra power for higher rate.

15. To a query of the Committee about the delay occurred in the verification of tenders to examine the technical qualification of the bidders, the witness replied that as per the detailed guideline published recently by Government of India, the time fixed for the tender verification is 45 days.

16. When the Committee enquired the reason for accepting the bid of GMRETL, the witness replied that if it was rejected, power had to be purchased for further higher rates than the rates offered by GMRETL and if retendered, power would be lost for that period. To the queries of the Committee about the utilisation of hydro reservoir during off-peak periods and the tripartite agreement with GMRETL and NDPL without collecting a bank guarantee, the witness informed that the power had to be purchased in the off-peak periods also and there was no need of Bank Guarantee for swapping.

Conclusions/Recommendations

17. **The Committee remarks that average generation cost from hydel projects are more profitable than the average purchase cost from traders and hydel generation capacity of the Board is sufficient enough to meet off-peak hour requirements. Therefore, the**

Committee recommends that maximum utilisation of hydel power should be encouraged to minimise the purchase of power at high cost from Independent Power Producers or traders during off-peak hours.

AUDIT PARAGRAPH

Delay in repair of pumps

Sabarigiri and Kakkad power stations generate additional power from water pumped into Pamba reservoir from Kochupampa weir. Every unit of generation had a revenue implication of ₹ 3.53 (2009-10) for KSEB. The pumping of water into Pamba reservoir was critically dependant on four 315 HP turbine pumps. It was therefore, absolutely necessary to keep the down time of these pumps to minimum by carrying out repairs and maintenance in a timely manner as had been taken note of (November 2008) by Electrical Inspectorate (EI) of the Government.

The pumping scheme was designed for simultaneous operation of three pumps keeping one as standby and the pumping operations were to be carried out only during rainy season (June to December) with the aim to provide time to undertake the repairs and maintenance without affecting the operations.

We noticed (March 2011):

Two pumps out of the four in the station were non-functional since January 2006. The Research and Dam Safety Division, Seethathode (RDSD), continued (May 2007) pumping operations with the other two pumps without undertaking repairs of the two defective pumps. As a result when the two remaining pumps also broke down in October 2008, there were no pumps to put into operation.

RDSD initiated steps for rectification of the pumps belatedly in May/August 2009. While the estimate for repairing of pump at a cost of ₹ 7.98 lakh was sanctioned by the Chief Engineer in November 2009, the estimate of ₹ 15.15 lakh for rectification of defects pointed out by EI was sanctioned only in December 2010. Two pumps were repaired in February 2011 while the balance pumps were repaired in May 2011. Considering the fact that any shortfall in generation has to be met through costly purchase from external sources, the disruption in pumping operations during the years 2009 and 2010 resulted in negative financial impact of

₹ 7.37 crore while the cost of repairs of the pumps was merely ₹ 23.13 lakh. The situation is indicative of lack of proper planning and monitoring by the Management. We recommend a close top level monitoring of the matters to overcome such operational problems.

The matter was reported (July 2011) to Management/Government; their replies were awaited (November 2011).

[Audit paragraph 4.15 contained in the Report of Comptroller and Auditor General of India for the year ended 31st March, 2011.]

Notes furnished by Government on Audit paragraph is given in Appendix II.

18. The Committee commented that an unjustifiable delay of two to four years was occurred from responsible officers' end to prepare an estimate for the rectification of defects in the pumps which were non operational since 2006 and 2008. As the pumps were repaired only on 2011, the pumping operation was disrupted for two years which resulted a negative financial impact of ₹ 7.37 crore through purchasing costly power from external sources while the cost of repair of pumps were merely ₹ 23.13 lakh. The Committee enquired the reason for not taking timely action for the repair of pumps and about the officers who were responsible for the delayed preparation of estimates. The witness responded that thirty year old pumps were mainly used to maintain the water level at Sabarimala season. Since, monsoon was started in time for past few years, the importance of pumping had declined accordingly.

19. Expressing dissatisfaction over the statement made by the witness and on failure in furnishing reply even after two and half years, the Committee pointed out that the Boards' officers were not vigilant in carrying out repairs and maintenance in timely manner to avoid any disruption in the pumping operation and stated that the unreasonable delay happened in the repairing of pumps clearly shows the irresponsibility of the concerned officers and the Board had not taken any action against them for their indefensible delay which led to the purchase of costly power engaging ₹ 7.37 crore. Therefore, the Committee wanted to fix liability against the responsible officers who have not taken timely action to repair the pumps.

Conclusions/Recommendations

20. **The Committee is surprised to note that the officials of the Board did nothing when the four pumps become non functional from January 2006 and August 2008 onwards and the officials took steps only after three years by ignoring the fact that all the four pumps were essential for pumping operations.**

21. **The Committee is grieved to note that while the cost for repairing pumps was merely ₹ 23.13 lakh negligence of the officials to repair them in time forced the Board to purchase power from external sources at high cost which resulted in a loss of ₹ 7.37 crore. Hence, the Committee recommends that liability should be fixed against the responsible officers who did not take any action to repair the pumps in time.**

K. N. A. KHADER,
Chairman,
Committee on Public Undertakings.

Thiruvananthapuram,
18th February, 2016.

APPENDIX I

SUMMARY OF MAIN CONCLUSIONS/RECOMMENDATIONS

Sl. No.	Para. No.	Department concerned	Conclusions/Recommendations
1	2	3	4
1	3	Power	The Committee is not satisfied with the method followed by the Board in submitting inaccurate estimated figures to KSERC, while actual figures of consumption by EHT/HT consumers were available. The committee disagrees with the statement made by the witness that the Board gained a benefit of ₹ 12 crore during 2008-09 and there was a loss of ₹ 2.52 crore when the Board was forced to spend extra cost for the purchase of additional unit. The Committee is of the opinion that the Board could not claim that it gained a benefit of ₹ 12 crore. However it can only be considered as an inadvertent revenue gained by collecting excess amount from EHT/HT/LT consumers by adopting erroneous estimated figures for the fixation of tariff. Therefore, the Committee recommends that for tariff calculation, actual figures of consumption should only be adopted.
2	6	"	The Committee is aggrieved to note that the Board did not invite fresh tenders during the delivery period of additional quantity to avail the benefit of falling prices which resulted in a loss of ₹ 1.10 crore. Disagreeing with the statement made by the witness the Committee remarks that very purpose of the clause provided in the purchase order for refixation of prices is misused by the Board. Therefore, the Committee recommends that in order to avail the benefit of fall in prices and to make savings to the Board's accounts, the Board should synchronise their procedure for the purchase of additional quantity.

1	2	3	4
3	10	Power	The Committee observes that by not imposing penalty for excess consumption, the Board lost an amount of ₹ 0.48 crore during the period from December 2007 to July 2010. The Committee is not at all convinced with the statement made by the witness regarding the inclusion of penal provision in the agreement, as it was contradictory to the reply furnished by the Government. The Committee directs that the department should verify the records properly and inform the Committee whether any agreement was signed between the licensees and the Board.
4	11	"	The Committee suspects that the practice of not charging penal rate for consumption in excess of contract demand by licensees might result in putting burden on other consumers while implementing tariff revision. Therefore, the Committee recommends that for improving the financial position of the Board, they should enter into fresh agreement by incorporating penal provision for excess consumption to abide by the schedule of tariff and terms and conditions for retail supply by the Board.
5	13	"	The Committee remarks that the Board violated norms of financial propriety hence most of their advertisements were surrogate in nature for displaying the achievements of the Government rather than benefiting the Board or the consumers. The expenditure of the advertisement made by the Board might be imposed upon the consumers by way of tariff revision. Therefore, the Committee recommends that proper guidelines with regard to advertisements should be issued by Government to public sector undertakings to avoid financial loss.

1	2	3	4
6	17	Power	The Committee remarks that average generation cost from hydel projects are more profitable than the average purchase cost from traders and hydel generation capacity of the Board is sufficient enough to meet off-peak hour requirements. Therefore, the Committee recommends that maximum utilisation of hydel power should be encouraged to minimise the purchase of power at high cost from Independent Power Producers or traders during off-peak hours.
7	20	"	The Committee is surprised to note that the officials of the Board did nothing when the four pumps become non functional from January 2006 and August 2008 onwards and the officials took steps only after three years by ignoring the fact that all the four pumps were essential for pumping operations.
8	21	"	The Committee is grieved to note that while the cost for repairing pumps was merely ₹ 23.13 lakh negligence of the officials to repair them in time forced the Board to purchase power from external sources at high cost which resulted in a loss of ₹ 7.37 crore. Hence, the Committee recommends that liability should be fixed against the responsible officers who did not take any action to repair the pumps in time.

APPENDIX II

NOTES FURNISHED BY GOVERNMENT ON THE AUDIT PARAGRAPHS

Sl. No.	Audit Paragraph	Reply furnished by Government
1	2	3
1	4.9 (2009-10)	(1) As per the provision of the Electricity Act, 2003, Kerala State Electricity Regulatory Commission is the statutory body empowered to fix the tariff for all consumers in the State. (2) As a distribution licensee, KSEB has to file the petition on Aggregate Revenue Requirement and Expected Revenue from Charges to the Kerala State Electricity Regulatory Commission every year. Further, at the end of the financial year KSEB has to file the Truing UP of accounts based on the C&AG audited accounts with all the relevant facts. KSERC may allow to bridge the revenue gap as per the truing up of accounts through tariff in the subsequent years. (3) The C&AG had already audited and certified the accounts of KSEB for the year 2008-09. The C&AG audited accounts recognized all the expenses and revenue accrued during the year 2008-09 including the revenue accrued from charging the excess usage at the rate approved by the KSERC. Even after accounting all the revenue including the revenue for the excess consumption, KSEB has a revenue gap of ₹ 749.17 crore during the year 2008-09. (4) KSEB had filed the truing of account for the year 2008-09 based on the C&AG audited accounts before the KSERC on 6-9-2010. KSERC vide the order dated

1	2	3
		10th June, 2011 had approved the revenue gap for the year 2008-09 as ₹ 429.62 crore as against the revenue gap of ₹ 749.17 crore for the year 2008-09. Though KSERC has disallowed various expenses including the cost of purchase, interest and finance charges, depreciation, etc., KSERC has fully recognized the revenue from sale of power for the year 2008-09, which includes the revenue accrued by charging the excess consumption from July 2008 to April 2009 at the rate approved by the KSERC. (5) KSERC has ordered to adjust the approved, revenue gap against the past surpluses. A copy of the C&AG audited accounts and orders on truing up of accounts for the year 2008-09 is marked as Annexure-2 & Annexure -3. (6) As detailed above, the C&AG has already accounted the revenue demanded for the excess consumption during the period from July 2008 to April 2009 while certifying the accounts for the year 2008-09. Further, while approving the truing up of accounts, the Kerala State Electricity Regulatory Commission (KSERC) has also accounted the same for the year 2008-09. (7) As observed in the audit remarks, if KSEB fully adjusted the under revenue recovery amounts to ₹ 2.52 crore from July 2008 to September 2008 and excess revenue recovery of ₹ 12.67 crore [total excess recovery (-) 2.52 +12.67 = ₹ 10.15 crore], the revenue gap is per the C&AG audited accounts may be increased to ₹ 759.32 crore from ₹ 749.17 crore. Further, the revenue gap as per the KSERC regulatory accounts shall be

1	2	3
		increased to ₹ 439.77 crore from ₹ 429.62 crore as per the order dated 10th June, 2011. (8) However, as it is not practicable to compile the exact consumption of each consumer category on monthly basis and revise the tariff applicable to each category. Considering the practical difficulty in doing so, the Kerala State Electricity Regulatory Commission (KSERC), who is empowered to fix the tariff applicable to the consumers of the State of Kerala has also never directed KSEB to revise the demand of excess usage based on actual consumption. (9) It may be noted that, with the approval of the KSERC, KSEB has imposed similar restriction during the year 2009-10 from April to May 2010 and during the year 2011-12 from April 2012 to May 2012. Considering the practical difficulty in estimating the charges for excess consumption on monthly basis, based on the actual usage, KSERC has approved the charges for excess consumption during the year 2009-10 as ₹ 7.25 per unit and the same for the year 2011-12 at ₹ 10.00 per unit. The audit has observed that, the actual consumption of the HT & EHT consumers are available. However, as recognized by the audit itself, the KSERC has ordered to impose power restrictions to all the LT consumers also during the period from October 2008 to April 2009. Further, as stated in the earlier reply, more than 57% of the excess consumption is by the LT consumers during the said period. Hence there is no logic in the remarks of the audit that, the charges for the excess consumption can be revised subsequently based on the actual consumption of the HT & EHT consumers alone.

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		KSEB has about 90 lakh of LT consumers with the state Grid during the year 2008-09 and to revise the Charges for excess consumption every month, will be a very tedious process. Further, the HT & EHT consumers also not raised any complaints on the methodology and the rate approved by the KSERC for charging the excess consumption during the said period. It may please be noted that, the total revenue mobilized through charging the excess consumption based on the estimated rate was about ₹ 471 crore. The excess recovery reported by the audit by adopting the estimated figure was only ₹ 10.15 crore, i.e. 2.15% of the amount demanded from consumers. As stated earlier, since KSEB has accounted the amount demanded from consumers and further C & AG and KSERC has recognized the same subsequently while auditing the accounts and also while issuing the Orders on truing up. Further, KSERC had approved the revenue gap for the year 2008-09 duly considering the total revenue demanded from consumers including the charges for excess consumption, and the revenue gap so arrived is the basis for the further tariff revision. Hence the argument of the audit that, KSEB had incurred the avoidable loss of revenue of ₹ 2.52 crore during July 2008 to September 2008 and also earned unintended revenue of ₹ 12.67 crore during October 2008 to April 2009 may be dropped.

1	2	3
2	4.10 (2009-10)	The purchase procedure prevailing in KSEB is to prepare the purchase plan for an year based on the requirement. After getting purchase plan approved by the purchase committee, a priority list will be prepared for inviting tenders based on the availability of the materials i.e., taking into consideration of stock, pipeline quantity, tender under process and 25 additional quantity to be given etc. Hence it is practically very difficult to arrange a fresh tender within the delivery schedule of the additional quantity in order to make use of the provision for refixation of prices. Since the material requirement is consolidated annually, urgent works and unforeseen works may come up afterwards. The provision for 25% additional quantity in the tender regulations is intended to meet these type of urgent requirement of material arising during the course of a contract. The open competitive bidding is considered as the most proven method for obtaining the lowest range for materials procurement in the Government and Public Sector. The Board follows the Government approved rules and regulations regarding the procurement of materials hitherto. And the Board is always ready to adopt, if the Government or other such regulatory bodies evolve or adopt any method for declaring the market price of the product. A tender cannot be invited merely for knowing the "marketing price" of a product. The quote price may vary depending upon the quantum of requirement, period of delivery, the nature of price variation allowed and also on the market competition at the time of tendering, it may kindly be noted that the materials purchased by the Board are specifically made for the exclusive use of

1	2	3
		power sector, the market price of the same may not be available through medias or any other means except inviting tenders. *Sl. No.1: ACSR Dog Conductor* Purchase Order had been placed with M/s Traco Cable Company, Cochin on 29-10-2005 for supplying 600 Kms. of ACSR Dog on fixed price basis and the firm had completed the supply by 27-4-2006. Meanwhile, next requirement arose during 7-4-2006 based on the Purchase Plan 2006-07 for the procurement of 900 Km. ACSR Dog Conductor and had decided to issue, additional quantity purchase order for 150 Km. to M/s Traco Cable Company, Cochin and to tender the balance quantity of 750 Km. after watching the stock position. Due to sufficient stock (i.e., 415.74 Km.) 25% additional quantity order for 150 Km. was not placed at that time and tender was not invited for the balance quantity of 750 Km. ACSR Dog. Afterwards the requirement for the year 2007-08 obtained on 22-5-2007 for purchasing 1253 Km. ACSR Dog. In the meantime an urgent requirement of 250 Km. ACSR Dog arose for the work of Pallom-Mavelikkara 66 KV line. Hence the Purchase Committee meeting held on 26-6-2007 decided to place Additional Purchase Order with M/s Traco Cable Company, Cochin for 150 Km. Dog Conductor and to invite fresh tender for the quantity of 700 Km. for meeting the requirement for the year 2007-08. Hence Purchase Order for 150 Km. ACSR Dog was placed with M/s Traco Cable Company, Cochin on 4-7-2007 as 25% additional quantity. The Delivery Schedule fixed for this additional quantity was to complete the supply within 45 days from the date of

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		purchase order i.e., within 17-8-2007. Here, the firm had completed the supply by 13-8-2007. As per the original purchase order condition the additional order should be placed at the same rate terms and conditions of the original order and refix the price in the additional quantity if a fall in price occurs in the next tender during the delivery schedule fixed for the additional quantity. The rate as per additional quantity Purchase Order is shown below:

Additional Quantity Purchase	Basic Price/ Km. (₹)	All inclusive Rate/Km. (₹)
Order dated 4-7-2007	48,910.00	59,447.79

Meanwhile, another tender was floated on 13-8-2007 for the procurement of 700 Km. conductor based on the Purchase Committee decision dated 26-6-2007. The pre-qualification bid for the same was opened on 28-9-2007 and purchase order was placed with the firm, M/s Gupta Power on 25-3-2008. The rate is shown below:

Purchase Order with M/s Gupta Power	Basic Price/Km. (₹)	All inclusive Rate/Km. (₹)
	41,600.00	50,800.69

Here the audit finding is "if Board had opened the new tender within the delivery schedule fixed for the additional quantity order, refixation could have been made applicable for the additional quantity purchase order".

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		In this context, the following points may kindly be noted: As per Purchase Committee decision dated 26-6-2007, additional quantity order was placed with the firm M/s Traco Cable Company, Cochin on 4-7-2007. The contractual delivery period for the supply was up to 17-8-2007. In this case, the actual quantity to be ordered was known to this office. Also this quantity was very urgent to meet the requirement. The normal period required to open the pre-qualification bid is 6 weeks from the date of tender which includes the processing time of tender (1 week minimum) + tender for advertisement and sale of tender (3 weeks minimum) + receipt of tender from the participants (2 weeks minimum) including opening of tender. Here the new tender was invited on 13-8-2007 based on the Purchase Committee decision dated 26-6-2007 and the tender was opened on 28-9-2007. Also the actual quantity to be tendered was known to this office after conveying the Purchase Committee Minutes only. Hence the co-ordination of inviting a fresh tender during the delivery schedule fixed in the additional quantity purchase order is difficult and is not generally practical. Also, it may noted that the 25% additional quantity order was placed much earlier in order to avoid delay in getting material, to meet the urgent requirement in the field. Also it is pertinent to state that M/s Gupta Power has not supplied the item due to hike in raw material price at that time. As the firm M/s Gupta Power backed out from supplying the item, it was decided to make alternate

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<tr><td></td><td></td><td>purchase from L2 firm, M/s Traco Cable Company, Cochin. The additional financial burden caused due to this alternate purchase was arrived from M/s Gupta Power and there was no financial loss incurred. It may also be noted that since M/s Gupta Power had not supplied the material and purchase order placed with them was terminated and the rate quoted by them had become a fictitious one and cannot be considered for refixation for additional order placed. Also the rate quoted by M/s Gupta Power could not be considered for refixation as the firm had not supplied the material due to hike in raw material price. Hence the quality performance of the material with the quoted price could not be identified. The rate quoted by M/s Gupta Power need not be considered for refixation of the additional quantity supplied by M/s Traco Cable Company, Cochin, especially in a situation where the quality of the item could not be ensured.
Also the new purchase order rate as per alternate purchase is shown below:
<table>
<tr><th>Purchase Order rate as per alternate purchase</th><th>Basic Price/ Km. (₹)</th><th>All inclusive Rate/Km. (₹)</th></tr>
<tr><td></td><td>49,213.76</td><td>58,562.78</td></tr>
</table>
In the above circumstances, the co-ordination of inviting a fresh tender and additional order during the delivery schedule of the additional quantity and refixation with a non-supplied item is difficult and not practical.</td></tr>
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		Sl. No. 2: 1100 V Grade control cable of various sizes Purchase Plan for the procurement of transmission materials for the year 2008-09 was approved on 5-8-2008. After getting approval of the Purchase Plan, a priority list was prepared for inviting tenders based on the availability of the materials. At that time supply of Control Cables was going on. It may also be noted that first preference will be given in placing 25% additional quantity order since finalisation of a new tender may take more time than expected due to various reasons beyond Board's control. Hence purchase order for 25% additional quantity was placed with M/s SBEE Cables vide Order No. TCM/69/2008-09/18-7-2008. The supply against this additional quantity order was completed on 3-10-2008 only. Since this quantity was on pipeline, priority of the new tender was less and unnecessary purchase of a huge quantity of materials will result into blockage of Board's funds. Moreover, board cannot predict that price in the new tender will be high or less. Hence synchronization of inviting new tender during the delivery schedule of additional quantity purchase order is not practical in all cases. Hence the tender was invited on 31-10-2008. *Sl. No. 3: 11 KV 10 panel set with spares* New tender was invited on 8-8-2008 and the bids were opened on 23-9-2008 which was within the delivery schedule of the additional quantity order. Since price in the new tender was less, price refixation was applicable. So direction was already given to the Deputy Chief Engineer, Transmission Circle, Kalamassery on 28-1-2010 to deduct the amount of ₹ 25,14,466 from M/s Megawin

1	2	3
		Switchgear (P) Ltd. against their invoices for the supply of 11 KV 10 panel sets against the purchase Order No. TCM 252/08-09 dated 19-3-2009 which was placed against the new tender. Accordingly the recovery was made by the Deputy Chief Engineer, Transmission Circle, Kalamassery vide SBPR No. 16 of 02/2010 for ₹ 25,14,466. *Sl. No. 4: 110 KV SF6 Circuit Breaker* Purchase plan for the procurement of Transmission materials was approved by the Board on 5-8-2008. As per the Purchase plan, the requirement of 110 KV SF6 Circuit Breakers was 170 Nos. After taking into consideration of stock, pipeline quantity, tender under process, 25% additional quantity that can be given, etc. the balance quantity to be tendered was 90 Nos. It may be noted that supply of 110 KV SF6 Circuit Breakers against the original purchase order was completed during 1st week of July 2008. It may also be noted that first preference will be given in placing 25% additional quantity order since further drawing approval for the material is not required. Besides, finalisation of a new tender may take more time than expected due to various reasons beyond Board's control. Hence purchase order for 30 Nos. of 110 KV SF6 Circuit Breakers (25% additional quantity) was placed with M/s Areva vide Order No. TCM/78/08-09/28-7-2008. Since this quantity was on pipeline, priority of the new tender was less as the price of the material comes to ₹ 7.66 lakh and unnecessary purchase of a huge quantity of materials will result into blockage of Board's funds. Moreover, Board cannot predict that price in the new tender will be high or less. Hence synchronization of inviting new tender during the delivery schedule of additional quantity purchase order is not practical in all cases.

1	2	3

M/s Areva had completed the supply on 3-10-2008. New tender was floated on 17-9-2008. The last date of sale of tender forms was on 6-10-2008, by that time the supply was over. Hence the rate quoted in the new tender cannot be considered for price refixation. Moreover, KSEB had a clear order at the time, that for refixation of price, the rate as per the new tender since the market price can be made available at that time only. In this case, the last date of receipt of tender and date of opening of the tender were one and the same i.e., on 24-10-2008. Hence refixation was not applicable in this case.

Sl. No. 5: 110 KV Isolator with structure

Purchase Order for the supply of 153 sets of 110 KV Bus Isolator was placed with M/s GR Power Switchgear Ltd., Hyderabad as per Order No. TCM91/2007-08/2624 dated 22-9-2007. The firm completed the supply by 4/2008. The next requirement of the same item arised on 1-7-2008 based on the Purchase plan for 2008-09 for a quantity of 242 sets and decided that purchase order for an additional quantity of 38 sets had to be issued to M/s GR Power Switchgear Ltd., Hyderabad on 5-9-2008 as per the purchase committee decision dated 19-8-2008. The rate in the Purchase Order for additional quantity dated 15-9-2008 was under:

Item	Ex.Works Rate (₹)	All inclusive Rate (₹)	ED 14% Cess on ED 3%, CST 2%
Metalics	47,580	57,659.86	
Insulator	67,500	68,940.00	
Structure	37,380	45,755.6	

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As per delivery schedule, the supply of this additional quantity was to complete within 2 months form the date of purchase order i.e., within 15-11-2008. Hence, the firm completed the supply by 3-1-2009 only.
As per the original purchase order condition, the additional order should be placed at the same rate and terms & conditions of the original order and also price in the additional quantity order had to be refixed if a fall in price occurs in the next tender during the delivery schedule fixed for the additional quantity.
The balance quantity of 75 sets had to be tendered after watching the stock position & availability of the materials. In the meantime, an urgent requirement of 20 sets of said item arised for the work of new extension work at 220 KV S/S Pothencode. Completing all the technical clarifications, fresh tender was invited for 95 sets vide tender No. 75/2008-09 dated 28-11-2008 with PQ bid opening date as 5-1-2009. Price Bid was opened on 15-4-2009. After completing all the formalities, P. O. was placed with the same firm on 17-6-2009.
The rate in the new Purchase Order dated 17-6-2009 was as under: It may noted that the rates in this P. O. was lesser than that of additional order rate given in pre-page.
<table>
<tr><th>Item</th><th>Ex.Works Rate (₹)</th><th>All inclusive Rate (₹)</th><td rowspan="4">ED 14% Cess on ED 3%, CST 2%</td></tr>
<tr><td>Metalics</td><td>39,750</td><td>46,270.91</td></tr>
<tr><td>Insulator</td><td>54,900</td><td>56,500</td></tr>
<tr><td>Structure</td><td>33,540</td><td>39,074.77</td></tr>
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<tr><th>1</th><th>2</th><th>3</th></tr>
<tr><td></td><td></td><td>However, it may be noted that M/s GR Power had not supplied the items during the scheduled delivery period. They supplied the items belatedly on 3-1-2009. Hence as per Clause 27 of the original order dated 22-9-2007, 'the materials if any supplied after the scheduled delivery period noted in the order will be accepted only on condition that price of such materials will be refixed taking into consideration of the market value of such materials on the date of actual supply or at the price as per this order whichever is lower'. Since the rate in new P. O. was much less, the price of materials as per additional order was refixed with the new P. O. rate as shown below:
<table>
<tr><th>Item</th><th>Ex.Works Rate (₹)</th></tr>
<tr><td>Metalics</td><td>39,750</td></tr>
<tr><td>Insulator</td><td>54,900</td></tr>
<tr><td>Structure</td><td>33,540</td></tr>
</table>
This had been intimated to the consignee vide this office Letter No. TCM/SS/143/2007-08/GR/2598 dated 13-8-2009. Hence the rate in additional order is same that of new tender rate. So, there was no financial loss to the Board in placing additional P. O. Based on the facts cited, the Audit Para may kindly be dropped.</td></tr>
<tr><td>3</td><td>4.11 (2009-10)</td><td>The three distribution licensees like Pondichery, Thrissur Municipal Corporation and Karnataka Electricity Board, Madikery purchase electricity from KSEB and distribute it among large spectrum of consumers belonging to all classes like in the consumer cross section prevailing in KSEB. Majority of them</td></tr>
</table>

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		do not come under maximum demand based billing also. So any demand restriction cannot be enforced by such licensees upon such consumers as it creates a vide disparity among identical consumers under different licensees operating in the State which will be violation of the clause 8.4(2) of the tariff policy notified vide No. 23-2-2005-R&R (Vol. III) in the Gazette of India (Extraordinary) dated 6th January, 2006 in compliance with section 3 of the Electricity Act-2003. The system demand of KSEB itself undergoes rapid variation not only on weekly basis but on daily basis as well. Example to cite upon the uncontrollable variance in the system demand beyond the control of the licensees is that the evertime highest demand so far recorded in Kerala Grid is 2998 MW and further varies 2000 MW to 3000 MW. Compared to week days, demand drops by 300 to 500 MW on week ends and holidays. Again within a day the demand varies from 200 to 600 MW ranges during peak and off-peak hours. It is obvious from the above that, a distribution utility that caters a wider spectrum of consumers has no control on the demand contributed by its consumers unless specified restrictions are imposed. Licensees mentioned in the draft para are catering all class of consumers exactly like the KSEB and to distribute electricity within the State of Kerala. The only difference is that their area of distribution of electricity is limited to the specific geographical areas assigned to them. Obviously because of such reasons unlike other HT and EHT consumers who have full control upon the load and can restrict their demand, the distribution licensees that distribute electricity to general public

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		cannot be brought under maximum demand based billing. Because of that reasons, penalty for excess demand on licensees such as Pondichery, Thrissur Municipal Corporation and Madikery have not been included in the tariff revision proposal put forth to KSERC. Moreover, it is not justifiable in the wake of clause 8.4(2) of the tariff policy notified vide No. 23-2-2005-R & R (Vol. III) in the Gazettee of India (Extraordinary) dated 6th January, 2006, in compliance with Section 3 of the Electricity Act, 2003. **Present Status** These Licensees were not penalised when their recorded maximum demand exceeded in the contract demand owing to the following reasons: (1) No. PPAs with penal provisions are available. (2) Lack of penal provisions in the tariff notifications in force in respect of Licensees. In order to overcome the above difficulties, steps are being taken by the Board to submit proposal before the KSERC to include penal provisions to levy 50% extra from the Licensees, when the billing demand exceeds the contract demand. The Penal provision can be made applicable to the Licensees only after getting the approval of the Commission.
4	4.10 (2010-11)	It was observed by the audit wing of AG that 29 display advertisements made at a cost of ₹ 3.68 crore during the period 2008-09 to 2010-11 and all display advertisements were released in 9 to 11 newspapers while the tender advertisements were made in maximum of 3 newspapers. KSEB had released certain advertisements especially during the time of launching

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		of a new scheme or programme, dedication of a new project of the Nation, commencement of a new project, total electrification of constituencies or district as a whole etc., as the ultimate beneficiary of all projects were the public. The state-wide advertisements were released only on commencement or completion of projects which deserves nation-wide importance. In other cases only district level advertisements were published. Moreover KSEB had not released advertisements on all occasions of completion or commencement of projects. For example even though KSEB had attained Total Electrification of 85 Assembly Constituencies and four districts during 2008-2011. In this case, KSEB had released advertisements when more than one function came on the same day and on the occasions of function like Total Electrification of the first constituency in the district, etc. Accordingly only 14 numbers of display advertisements were released in this respect. The true beneficiaries of certain popular programmes like various type of Adalaths, distribution of CFL lamps to BPL consumers free of cost and at discounted rate to all consumers, one-time settlement of arrears, shifting of office building, commencement of new Electrical Section Offices, Division Offices, Electrical Sub stations, scheme for regularising unauthorised load etc., are for the benefit of common public. Hence for the effective and fruitful implementation of these programmes the active participation of public is very essential. Therefore, KSEB is forced to release advertisements, through which the whole public is made aware of these programmes.

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		The advertisements released in connection with the declaration of total electrification of Palakkad, Thrissur, Ernakulam and Alappuzha districts were included in the advertisements released during 2008-09 to 2010-11. Palakkad is the first District in India to become totally electrified. The function was arranged for the declaration of Palakkad as the first-ever electrified District in India and for the proclamation of the action plan for making the whole State totally electrified. The declaration was made by the Hon'ble Union Minister for Power Shri Sushil Kumar Sinde, who opined that this event is a remarkable achievement of our Country and so it has to be projected universally. These kinds of advertisements are mainly aimed for giving more information to the common public. KSEB gives other advertisements as per statutory regulations, this include publication of tender advertisements, Statutory notifications, disciplinary proceedings, public notices, etc., and are focused on certain target groups like suppliers, contractors, residents in a particular area, individuals, Board employees, etc., and hence these types of advertisements are published in limited number of dailies as per the norms and specifications issued by Board from time to time. And also this is for curtailing financial burden of the Board. The target group which fulfils our requirement will watch the particular Newspaper and the concerned pages. They are vigilant for their need and hence number of Newspapers are limited according to the PAC value of Tenders. These are done according to the

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		professional requirement and for the benefit of the Board. While the Display Advertisements aims at the society as a whole and hence Board has to give wide publicity through all the Newspapers available within panel. As clarified above, it may please be noted that KSEB had not violated canons of financial propriety and hence it is requested that the expense of ₹ 3.68 crore incurred by KSEB during 2008-09 and 2010-11 on advertisements may please be treated as an unavoidable expense for conveying the public about various consumer friendly and developmental activities undertaken by KSEB.
5	4.14 (2010-11)	The power Market in the Country is still in nascent stage with only 5-6 years of operationalisation. As of now standard bid process in line with conventional bidding procedures are followed in the long-term and medium-term segment of the market only. KSEB followed these procedures in this segment. Due to lack of depth in short-term market, the rates usually swing very widely in a speculative manner due to a variety of reasons. When rates in the market swing upwards rapidly, often the offers given by sellers/ traders become invalid during the bid evaluation process itself. Similarly, in cases where the price show a downward trend in the market, KSEB as buyer may cancel an already initiated bid process and invite fresh offers. Similarly, when availability of power in Kerala falls due to unexpected outages in generating stations of KSEB or the Central Generating Stations, power need to be arranged at very short notices to maintain system

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		stability without imposing load shedding. These kind of situations often emerges and the conventional bid process, which invariably requires a longer lead time, is found to be unsuitable. Thus acceptance of offers through fax and e-mail at short notices are accepted based on industrial standards as of now and has been approved by the Board after considering all related aspects. Once the short-term market in the Country mature and stabilise, the bid process could be appropriately improved. At the same time KSEB takes utmost care and due diligence to ensure integrity of the bid process as well as in maintaining secrecy of the bids up to the evaluation stage thereby eliminating any chance for market collusion. As per provisions in the Electricity Act, 2003, the entire power procurement process of KSEB is regulated by the State Electricity Regulatory Commission and the Commission has approved all the transactions undertaken by KSEB so far. The procedure followed by KSEB has ensured that power from short-term market is procured at very competitive rates thereby reducing the overall power procurement cost considerably. Traders often quote for supply of power *suo-moto* anticipating requirement of buyers as well as against the bids invited. It is also noted that traders usually offer the same power to several potential traders/buyers. Thus receipt of an offer in itself may not be an adequate indication of assured availability of Power. In February 2011, the market witnessed a huge upward swing in view of major southern states entering

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		the market of procurement of large quantities of power. The offer of M/s JSWPTC for 50 MW power @ ₹ 5.76 per unit received on 3-2-2011 with validity up to 11 a.m. of 4-2-2011 for March 2011 only was not based on the tender invited by KSEB. It is not prudent to accept such offers as suggested by audit. The tender was invited by KSEB on 3-2-2011 for purchase of 100-300 MW power on RTC basis/05-23 hrs. for the months of March, April and May 11 with cut off date on 4-2-2011, 2 p.m. In response to this tender the offer of M/s JSWPTC for 50MW power @5.92 per unit for the month of March 2011. The offer of two other traders for ₹ 6.07 was received after receipt of the offer from M/s JSWPTC. Thus the presumption of breach of secrecy is not correct. Also, in case conventional bid procedures were followed in the instant case, when power rates were suddenly increasing, tie-up even at this rate would have been difficult due to higher lead time available to traders. As the closing date of the tender was up to 2 p.m. on 4-2-2011, without closing the tender, confirmation cannot be given to any trader as per the tender procedure. Hence the loss of ₹ 51.93 lakh pointed out by audit is quite hypothetical. In fact KSEB could sell power from costly sources in Kerala, which become surplus due to tie-ups through traders as above, to other States at a profit during the period. Tender was invited on 31-12-2010 for 150 MW RTC/05-23 hrs. power from February to May 2011 with cut off date as 5-1-2011 3 p.m. Subsequently, due to shut down of Kakkad and Sabarigiri hydro electric projects, the anticipated shortage increased to 500 MW for February 2011 and

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		considering drawal constraints it was decided in the power position meeting held on 4-1-2011 to arrange 300 MW power through short-term power purchase. M/s GMRETL had submitted offer on 5-1-2011, 2.36 p.m. for 100 MW power @ ₹ 4.10 per unit for 1-2-2011 to 14-2-2011 for the time period 05 to 23hrs. and for 75 MW power @ ₹ 4.80 per unit for the time period 18 to 23 hrs. The offer was valid only up to 7-1-2011. It may please be noted that the validity of offer given by the trader was only for 2 days against a normal validity of 7 days in such offers. The Open Acess has to be booked only by 19th of January 2011 to SRLDC by the trader, for allocation of corridor for scheduling power for the month of February 2011, KSEB cannot go by the time limit prescribed by a single bidder and hence all the offers were processed simultaneously. As per the tender procedure rock bottom rates were sought from the traders on 12-1-2011. M/s GMRETL has not intimated even at that time that the power is not available. Only after issuance of LoI on 13-1-2011, the trader has intimated that the power is not available. It may be noted that issue of LoI or even scheduling on STOA does not guarantee physical delivery of power exactly as planned. Breakdown of generators, transmission constraints, intervention by State Government, etc., could affect supply of power already agreed in addition to market intervention for better opportunities by the traders. For instance, there had been curtailment of approved transaction by the trader even after paying penalty to KSEB as per the agreement. It may be noted that KSEB was also subjected to such issues during March 2010. It may kindly be noted that rates in the

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		power exchanges was in the range of ₹ 12 to 17 per unit during Feb. 14th -16th, 2011 and the rates in second half of February was enormously high. Thus it appears that the trader M/s GMRETL must have offered the power to different buyers and has utilised the upward trend in the market to enhance revenue. In the prevailing market conditions KSEB has very little avenues to prevent such unethical practices driven by speculative behaviours of certain traders. As the depth of the short-term market increases in due course effective mechanisms to deal with such instances could be introduced. Board has not made only any inordinate delay in placing the LoI, as bids were invited on 31-12-2010, with an objective to finalise bids before 19-1-2011. Bids were received on 5-1-2011 and rock bottom rates sought on 12-1-2011 after processing all the bids and LoI was issued on 13-1-2011 itself. During this period, NTPC intimated that RGCCPP GT2 at Kayamkulam will be taken out for major overhauling works from 4-2-2011 for 31 days reducing the availability further. The shortfalls due to additional outages were met by arranging additional 50 MW RTC power through M/s JSWPTC and 50 MW RTC power through M/s Adani from a source in Western Region. Hence the extra expenditure of ₹ 24.88 lakh arrived by audit for purchasing power from M/s JSWPTC is hypothetical. In fact arranging adequate power in advance has helped KSEB in tieing up power at a lower rate in comparison with the rates discovered in power exchanges in February 2011. It may also be noted that Kerala State Electricity Regulatory Commission having examined the facts in detail have approved the

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		short-term power purchase for February 2011. It may be noted that the decision on carry forward storages as on 31st May when the water year ends depends on several factors and is revised periodically. The carry over was 350 MU earlier, increased to 525 MU, later to 550 MU and now to 700 MU w.e.f. 2010-11. The major reasons for increasing the carry forward from 550 MU to 700 MU are commissioning of Kuttiadi Additional Extension Scheme (100 MW) thereby increasing the depletion capacity. Increase in the demand, by which the base load in June got increased. The demand to be met in June from hydel sources, in case of delayed monsoon has increased over the years and the depletion capability of one major hydro station has increased, in case monsoon arrives early. Also the rate of power in short-term market usually remains high during June, in view of summer in North India and hence the dependence on purchase of power is to be minimised in June. Considering all these factors KSEB decided to increase the carry forward storage as on 31st May to 700 MU. Further the meteorological predications on South-West Monsoon for 2011 has suggested a below normal rainfall. A higher carrry forward storage than above could be disadvantageous only if the same is lost in the subsequent monsoon as spill. It may be noted that the carry forward storage this year was mainly maintained in group 1 reservoirs of KSEB which does not spill during the South-West Monsoon period. The total storage in the group 1 reservoirs was 765 MU as on 31-5-2011. The storage in group 3 reservoirs, which has spill threat, was only 6.5 MU, which accounts for less

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		than one days generation from the associated generators. The storage in group 2 reservoirs having a moderate spill threat was only 67 MU, which accounts for about 20 days generation from the associated generators. Thus the better carry-over storage aids KSEB in managing the power situation better in the subsequent financial year without any spill threat. The procurement of power in February 2011 was necessitated due to unexpected fall in power availability consequent to unexpected fall in generation in Talcher Plant in NTPC due to flash strike in Orissa from 18-2-2011, unplanned outage of Kayamkulam Plant of NTPC and planned shutdown of Kakkad and Sabarigiri Stations of KSEB. The shortfall due to sudden and unexpected fall in generation from Talcher alone was to the tune of 350 MW (8-9 MU per day). The shortfall due to all these outages could not be met by increasing internal generation utilising hydro storage, since the generation capacity is limited to the installed capacity of the machines. Thus KSEB could manage the demand in February 2011 even after severe shortfall in availability from various stations only due to the procurement from short-term market. Considering these facts the expenditure on power procurement in February 2011 cannot be attributed as an additional expenditure in any manner. By arranging power through traders KSEB could reduce the power procurement through power exchanges considerably, where the rates has increased abnormally in February 2011. In fact KSEB could utilise the storage water for leveraging sale to TNEB and through power exchanges at very high rates during the summer as a result of the

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		overall power procurement strategy followed in KSEB. The assessment of the audit that the hydel generating capacity of KSEB is adequate to meet off-peak hours requirement is wrong. The availability of power from hydel sources cannot be determined on the basis of the installed capacity alone. It depends on the water availability also. For eg., none of the installed capacity from run-off the river projects would be available during off-peak. The inflow in a day would be conserved for a few hours of operation, usually during the peak period. Even though the installed capacity of Lower Periyar Station is 180 MW, the entire Capacity would be available only during evening peak hours, due to low storage capacity of Pambla Dam, Even for storage projects like Idukki, the entire installed capacity cannot be used round the clock due to lower availability of inflow and storage. The entire water availability of Idukki would be depleted in about 125 days if the plant is used continuously a full capacity. Thus, the generation from hydro plants needs to be reduced during off-peak hours so as to ensure availability during peak hours as well as summer period. Also, it may be noted that the carry forward storage as on 31-5-2011 was almost the same as that in previous years, which underlies the fact that the entire inflow received during the year has been utilised during that year itself. The power procurement from short-term market was never intended to replace cheap hydro power but was to replace costly Naphtha and LSHS power as well as to meet the deficit due to delay in commissioning of several central sector stations like Koodamkulam, Simhadri, NLC II Expansion etc. The power to be

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		procured from Naphtha based BSES plant during 2010-11 as per the order of KSERC was 468 MU and that from Koodamkulam, Simhadri and NLC II expansion were 1446 MU (These stations are not commissioned even now). KSEB could overcome the entire shortfall and even reduce procurement from BSES as well as BDPP stations considerably by utilising the short-term market effectively, thereby considerably reducing power procurement cost, which was appreciated by the State Electricity Regulatory Commission in its order dated 1-6-2011. The works on Kakkad PH for rectifying the MIV leak require draining of power tunnel from Moozhiyar Dam and penstock. As Moozhiar Reservoir receives natural inflow during monsoon period the work could be arranged only after monsoon. Also total shutdown of Sabarigiri power house is required to avoid filling up of Moozhiyar Dam, which is situated in the tall race of the project. During annual maintenance of Sabarigiri power house, total shutdown is never taken. Only one out of the six units will be taken out for annual maintenance works and all the other units will be operational. Thus it is wrong to conclude that the penstock repair works could be clubbed along with annual maintenance works during monsoon period. Thus the work is to be planned after monsoon withdrawal (mid-December) when natural inflow comes down and before summer (March) when the entire generation capacity is to be made available in view of higher demand and higher market rates. Further, religious conventions in Pamba river bed (Maramon, Cherukolpuzha etc.) is during February which require reduction of generation from Kakkad and Sabarigiri to

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		reduce water flow into the river and to provide maximum river bed available for the mass converging at the convention. Taking all these factors into consideration, February beginning is the optimum period for draining the Moozhiar reservoir and to carry-out the rectification works. The overall power procurement cost in February 2011 was not much different from that in the monsoon months as the average UI import rate was only ₹ 2.96 per unit and the average rate of power arranged through traders was only ₹ 4.08 per unit. Thus the scheduling of total shutdown in February 2011 has not caused any additional expenditure on KSEB. The purchase from traders during the period of shutdown was unavoidable to adequately meet the demand in Kerala system and to ensure effective maintenance in the hydel stations. Banking of power was arranged through M/s GMRETL between KSEB and NDPL, and a tripartite agreement was executed between GMRETL, NDPL&KSEB. To ensure return of power the condition that, the format-2 (open access application) for booking corridor for returning power during March 2011 will be furnished 3 months in advance was incorporated in the agreement. The tripartite agreement involving the actual buyer and the condition for advance booking of open access was insisted by KSEB to reduce risk of failure in returning the power. Also a high settlement rate equivalent to costly naphtha power rate was included in the tripartite agreement to deter the seller from failing to return power. The agreement has ensured zero financial risk for KSEB. The energy to be returned as per the agreement with GMR against the supply of 54 MU in

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		October 2010 was 56.7 MU in March 2011 at NR-state periphery. But M/s GMRETL had short-supplied 6.51 MU of power in March 2011. The reason for shortfall was not attributable on the seller/trader but was due to curtailment of open access by regional load despatch centres due to transmission constraints. Out of the shortfall, 5.07 MU was supplied immediately in the first week of April and 1.43 MU on 1st and 2nd of May 2011. It is clear from the documents that all possible effort was taken to endure return of power during March 2011 itself. STOA application was preferred for the entire transaction to be completed in March 2011 as early as on 2-12-2010, much ahead of the deadline for advance corridor booking. The capacity scheduled was limited to 50.945 MU at seller's periphery by the regional load despatch centre due to transmission constraints, which was beyond the control of the seller, trader and buyer. In view of the corridor congestion and difficulty in scheduling during the high demand period in NR (during peak demand period starting normally by middle of April), effort was taken to schedule power during February. Open access application was moved immediately on receiving the curtailed approval by SRLDC on 5-1-2011 for the transaction in March 2011. The applications for STOA was preferred in advance category before the cut off date, but was not cleared again by the regional load despatch centre due to corridor congestion. Copies of the open access applications are enclosed as proof of non-availability of transmission corridor. Further effort was taken to schedule power on day-ahead basis with the opportunistic

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		margin availability, and accordingly, 0.1 MU was scheduled on 28-2-2011. Thus the seller/trader has taken all possible efforts to return the power in subsequent month. Effort was taken to schedule the balance power during the beginning of April and it may be noted that Transmission System (ISTS) prevented completion of the transaction as per the agreement. The balance was scheduled from 30-4-2011 to 2-5-2011. It may be noted that there was no surplus during this period in Kerala system and costly sources were being utilised to meet the demand. The power returned after March was utilised to reduce the thermal component to that ability of power during March 2011 was comfortable and the demand could be met fully. Thus there had been no loss to KSEB in accepting the power in the extended period and the failure of seller in returning power was due to reasons beyond his control. Also it may please be noted that, as per clause 19(C) of the tripartite agreement executed (copy is enclosed), any curtailment/suspension/non-availability of transmission capacity by intervening SLDCs and/or RLDC is to be treated as Force Majeure. This is a standard clause in all short-term transactions. It may be noted that the decision to carry forward storage as on 31st May, 2011 when the water year ends depends on several factors and is revised periodically. The carry-over was 350 MU earlier, increased to 525 MU, later to 550 MU and now to 700 MU with effect from 2010-11. Hence short generation of additional 314 MU pointed out by audit is not correct. The carry forward storage as on 31st May, 2011 was mainly maintained in group I reservoirs of KSEB which does

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		not spill during the south-west monsoon period. The total storage in the group I reservoirs was 765 MU as on 31-5-2011. The storage in group 3 reservoirs, which has spill threat, was only 6.5 MU which accounts for less than one days generation from the associated generators. The storage in group II reservoirs having a moderate spill threat was only 67 MU, which accounts for about 20 days generation from the associated generators. Thus the better carry-over storage aids KSEB in managing the power situation better in the subsequent year in case of delayed monsoon also. Further the meteorological predictions on south-west monsoon for 2011 has suggested a below normal rainfall. Also audit has pointed out that it would have been appropriate to KSEB to restrict purchase form IPPS/traders to peak hour periods only. In this connection it may be noted that the two main IPPs of KSEB are BSES Kerala Power Limited (BKPL) with capacity of 157 MW and Rajeev Gandhi Combined Power Cycle Project (RGCCPP) Kayamkulam with capacity of 360 MW. Both the power plants are Naphtha based stations and the plants are designed to run continuously and not for peak load operations only. The number of start and stop for the generators of these stations are limited to a maximum of two per month due to technical reasons. Arranging purchase of peak power through traders will be costlier and will not be financially advantageous. It may kindly be noted that rates in power exchanges was in the range of ₹ 12 to 17 per unit during February 14th-16th 2011 and the rates in second half of February was enormously high. The procurement of power in February 2011 through short-term

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		tenders was necessitated due to unexpected fall in power availability. This was consequent to unexpected fall in generation in Talcher plant of NTPC due to flash strike in Orissa from 18-2-2011, unplanned outage of Kayamkulam plant of NTPC and planned shutdown of Kakkad and Sabarigiri Stations of KSEB. The shortfall due to all these outages could not be met by increasing internal generation utilising hydro storage, since the generation capacity is limited to the installed capacity of the machines. Thus KSEB was able to manage the demand in February 2011 even after severe shortfall in availability from the above mentioned stations only due to the procurement from short-term market. Thus it is evident that the purchase through short-term traders in February 2011 was inevitable to manage the demand and the additional expenditure of ₹ 13.88 crore pointed out by audit is quite hypothetical.
6	4.15 (2010-11)	The Sabarigiri Augmentation Scheme was commissioned in 1980 to pump the water from Kochupamba weir to Pamba reservoir for additional power generation at Sabarigiri and Kakkad HEP. There are four pumps of capacity 315 HP each, of which one is kept as standby. It may be noted that more than 31 years have elapsed since commissioning and the life periods of the pumps were already over. Generally these types of pumps have life period of 20 years only. Also due to rapid change in technology, such machineries are becoming obsolete even before the life time and hence it will be very difficult to get the spare parts. That was the main reason that during 1998 the Electrical Inspectorate had noted so many objections viz. Switching arrangements etc. were to be updated to near standards and specifications.

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		The pumping is from Kochupamba reservoir of Swami Saranam Scheme. The Swami Saranam Scheme is a small check dam type storage of capacity 0.20 Mm^3 (200000 m^3). This storage is designed mainly for release of water to Thriveni Pamba during Pilgrimage seasons like Mandalapooja, Makaravilakku, Vishu, Onam etc. The flushing of the river is done using this water. The release of water made for the Swami Saranam Scheme from Kochupamba Weir for the past 10 years is furnished below: During the year 2003 — 2,13,603.00 m^3 During the year 2004 — 2,52,049.00 m^3 During the year 2005 — 1,75,704.00 m^3 During the year 2006 — 1,84,503.00 m^3 During the year 2007 — 2,89,669.00 m^3 During the year 2008 — 3,14,596.00 m^3 During the year 2009 — 7,06,838.00 m^3 During the year 2010 — 10,60,388.00 m^3 During the year 2011 — 5,14,607.00 m^3 During the year 2012 — 7,57,147.00 m^3 From the above it may be seen that the storage in this reservoir has to be released every year. In some years the storage was not sufficient and the Board had to release the water from other Dams such as Pampa, Kullar etc. The Board was leniently releasing this water to Thriveni from the year 2000 onwards. During 2000 itself the Board had to release more water than the storage

The release of water table (within column 3):

During the year 2003	2,13,603.00 m^3
During the year 2004	2,52,049.00 m^3
During the year 2005	1,75,704.00 m^3
During the year 2006	1,84,503.00 m^3
During the year 2007	2,89,669.00 m^3
During the year 2008	3,14,596.00 m^3
During the year 2009	7,06,838.00 m^3
During the year 2010	10,60,388.00 m^3
During the year 2011	5,14,607.00 m^3
During the year 2012	7,57,147.00 m^3

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		capacity and hence the Board had to meet the requirement from other dams too. Therefore even if the Board pump the water, the Board may have to release the pumped water which is stored for generation during pilgrimage season. So the fact remains that even if the Board stores water at Pamba reservoir of Sabarigiri Hydro Electric Project for power generation by pumping from the Kochupamba weir was not sufficient to meet the requirement at Thriveni, for Sabarimala, Board has to release additional water also from Pamba reservoir for flushing Pamba river. Earlier in 1980s when there were no requirements of water at Thriveni, pumping was resorted and stored at Pamba reservoir, for generation. Now the situation has changed and since every year Board has to release huge volume of water, there will not be any water left for pumping. So as shown in the table above, since the total volume of water released to Pamba river was many fold higher than the capacity of the Kochupamba reservoir requirement for pumping is not economically feasible now. As pointed out by audit, in May 2007, when the Sabarigiri Augmentation Pumping Station was taken over by Research and Dam Safety Division, Seethathode, only pump No. II & IV were in operating condition and the other two pumps (I & III) were in damaged condition. Due to scarcity of spares, parts of damaged pumps (2 nos.) were dismantled and used for running the other two pumps. Though the pumps were in scrap condition, pumping was continued with the available 2 numbers of pumps in the best interest of the Board. In the meantime priority was given to repair the

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		two damaged pumps. The original manufacturer of the pump M/s Jyothi Pumps were contacted but they were not in a position to offer any repair works. Many firms had been contacted to inspect and report the damages with the probable cost of repairs. But nobody had turned up and hence it caused considerable delay in assessing the damages and proposing rectification works. An estimate for rectification works of pump No. I was prepared and sanctioned first as a test case, since the pumps were very old and it was difficult to get the spares. Spares have to be obtained from the original equipment manufacturer or to be casted which is a time consuming process. On enquiry it was reported that the manufacturer had stopped the model and spares were not available with the OEM. Another issue with regard to the rectification work was that the Board was unable to get suitable agencies who can carry-out the work in an efficient manner. The Sabarigiri Augmentation Pumping Scheme is located near Pamba Dam which is deep in the forest and isolated. The pumps were to be taken to the contractor's workshop for repairs and after shop testing and trial operation, to be brought back to site and erected. But many times during trial operation, and initial running, because of wear and tear, many parts got damaged by breaking or burning causing pump/motor to be again detached and transported to the contractor's workshop for rectification. So that it was considered practical and effective to take up repairs/replacement of other pumps after studying the performance of pump No. I. Later the estimate for the balance three pumps were prepared and sanctioned during 11/2009 and tender

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		invited by the Division Officer during 4/2010. The estimate for rectification works as suggested by the Electrical Inspectorate were also sanctioned. The pumping station was then transferred from RDSD to Generation Division, Moozhiyar and now the repair works have been carried out by that office and two pumps were put in to service in 2011 and the remaining pumps were put back to service in 2013. All the above delays were due to the reason that the pumps were 30-35 years old and spares were not available with suppliers. No deliberate/purposeful delay was ever so made by the field office and delay if any occurred was due to unavoidable reasons, beyond the control of the Board. It may be kindly noted that the Audit while concluding the amount of loss incurred by the Board, has failed to consider the following facts: (1) Life of the pumps had already expired and therefore repairing the same is not feasible and new pumps have to be installed. (2) The water when released from Pamba Dam and Kullar Dam to Thriveni after storing by pumping from the Kochupamba reservoir would be costlier to Board to the extent of energy charges and other overheads incurred for pumping. (3) The scheme was designed for pumping during six months in a year (June to December). Pumping to Pamba reservoir would be made only if water is available in Kochupamba weir and would be economically viable only if the pumped water could be used for generation of power i.e., if there is spillage on Pamba Reservoir, during monsoon or the pumped water

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		has to be released to Pamba river for flushing during pilgrimage season, it will result in a loss to the Board. Moreover the following facts may also be considered while calculating revenue loss to Board, as stated below: Consequent to the fire mishap in Moozhiyar Power House in 5/2008, the station was under total/partial shutdown till 12/2009. The machines were repaired one by one and put in service on completion of the rectification works. For this reason, even if sufficient water were available for pumping and pumps were available, pumping need not to have to be done for two seasons as the draw to Power House was very low or nil. Since the draw to Power House was very low or nil, the water level came near Full Reservoir Level in these seasons and if the pumping was arranged, spill would have occurred thereby incurring loss on account of energy expended for pumping. From the above stated facts, it is clear that due to the delay in carrying out the repair works of the pumps installed at Pamba Dam, the amount of generation loss calculated by Audit is a hypothetical figure and the loss incurred to the Board would only be a much lower amount. Though the officials of the Board had taken all possible efforts for the repair of pumps in time it could not be materialized for reasons beyond the control of the Board as explained above. In the light of the facts and explanations submitted above the audit para may kindly be got dropped.

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