KERALA STATE ELECTRICITY REGULATORY COMMISSION

ORDER ON ARR AND ERC FOR 2004-05

PETITION TP-2/2003 OF KSEB

April, 2004

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Thiruvananthapuram

Petition No.TP-2 of 2003

April 16, 2004

Present	:	Shri M.K.G.Pillai, Chairman Shri C.Balakrishnan, Member
Kerala State Electricity Board	:	Petitioner

O R D E R

The Kerala State Electricity Regulatory Commission having scrutinized the petition on ARR & ERC for 2004-05 filed by the Kerala State Electricity Board vide letter No. KSEB/TRAC/TF-02/R2/2003/582 dated December 15, 2003, considered the written objections filed by the stake holders, consulted the State Advisory Committee on 12.02.2004, considered the subsequent written and oral submissions of the KSEB, heard the views of the stake holders in Commissions' proceedings on 5.3.2004 and 17.03.2004, and having considered other documents and materials on record passes the following order in exercise of the powers vested in it under the Electricity Act, 2003 in this behalf.

C.Balakrishnan **Member**	**M.K.G.Pillai** **Chairman**

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LIST OF ABBREVIATIONS

A&G	Administration and General
ABT	Availability Based Tariff
APS	Atomic Power Station
APDRP	Accelerated Power Development and Reform Programme
ARR	Aggregate Revenue Requirement
AT & C	Aggregate Technical & Commercial
BDPP	Brahmapuram Diesel Power Plant
BOARD	Kerala State Electricity Board
ED	Electricity Duty
EHT	Extra High Tension
ERC	Expected Revenue from Charges
FY	Financial Year
HT	High Tension
KDPP	Kozhikode Diesel Power Plant
KPCL	Kasargode Power Corporation Limited
KSEB	Kerala State Electricity Board
kV	Kilo Volt
LT	Low Tension
MU	Million Units
MW	Mega Watt
NFA	Net Fixed Asset
NLC	Neyveli Lignite Corporation
NPG	Non Paying Group
PLF	Plant Load Factor
PTC	Power Trading Corporation

RE	Rural Electrification
R&M	Repair and Maintenance
SAC	State Advisory Committee
T&D	Transmission & Distribution
UI	Unscheduled Interchange of power/energy

CHAPTER I

INTRODUCTION

1.1 PREAMBLE

The Commission has passed an order dated December 31, 2003 on the petition No.TP1/2003 filed by the Kerala State Electricity Board in respect of ARR & ERC of the Board for 2003-04. In this order, the Commission had approved an Annual Aggregate Revenue Requirement of Rs.3697.83 crores and total Expected Revenue from Charges of Rs.3141.37 crores for the year 2003-04 leaving a revenue gap of Rs.556.46 crores. This gap was proposed to be met from the concessions and subsidies from the Government of Kerala, which had since been agreed to by the Government. As the financial year 2003-04 has just come to a close, the Board could not get enough time to come up with truing up of cost and revenues based on actuals and for this reason, the Commission has not been in a position to undertake a review of the estimates approved for 2003-04.

The Commission, in its order on ARR&ERC for 2003-04 had issued certain directives to the KSEB. The feedback on these directives have also not been received from the Board except in the case of Borrowing and Debt Servicing, a white paper on which has been received from the Board on 5.3.2004. However, the Commission has not found the white paper satisfactory, and a copy of letter No.TP2/KERC/2003/84 dated 9.3.2004 addressed to the Chairman, KSEB, bringing out Commission's reservations on the subject, is enclosed as Annex I.

The financial position of the Board continues to be critical. The outstanding dues from the consumers as on 31st December, 2003 have increased to Rs.1043 crores. The total debt burden as on that date remained at Rs.5270 crores while the value of net fixed assets stood at Rs.6100/- crores.

The financial position of the KSEB has thus further deteriorated from the position indicated in the order of the Commission dated 31.12.2003.

1.2 PROCEDURAL HISTORY

The Kerala State Electricity Board filed a petition for ARR and ERC for the financial year 2004-05 on 15.12.2003. The petition for ARR and ERC was placed before the Commission after initial scrutiny for the procedural requirements and the petition was admitted and registered as TP 2 of 2003 on 16.12.2003. The Commission also approved a draft public notice for publication in the leading Malayalam and English dailies as listed below, informing the stakeholders and general public with brief details of the ARR & ERC filed by the KSEB and inviting response from them latest by 15.01.2004.

- The Hindu
- The New Indian Express
- Malayala Manorama
- Mathrubhoomi

The Commission simultaneously sought for the following additional information on the petition from the Board and directed the Board to furnish the reply latest by 15.01.2004.

1. Details of energy generated in KSEB's own Power stations and energy purchased from external sources during 2003-04 up to the end of November 2003.

2. Details of billing demand and collection during 2003-04 up to the end of November, 2003.

3. Details of actual energy billed under different categories of consumers during the current year up to the end of November, 2003.

4. Details of reservoir position including energy contents in MU as on November 30, 2003 and anticipated inflows during subsequent months.

5. Details of schedules for optimising KSEB's own generation and energy purchase from external sources.

6. Details of loans availed during the year 2003-04 up to the end of November, 2003 along with item wise details of utilisation.

7. Details of actual expenses towards employee cost including terminal benefits during the year 2003-04 up to November 30, 2003.

8. Details of actual expenditure incurred towards prior period charges and write off of bad debts during the year 2003-04 up to the end of November, 2003.

9. Details of outstanding dues as on 30th November 2003 with full details of action taken on each case.

10. Details of actual expenditure incurred under Repair and Maintenance charges during the year 2003-04 up to the end of November, 2003.

11. Details of capital works covering estimated cost, amount of expenditure prior to 31.3.2003, amount of expenditure and physical progress up to November 30, 2003 and the programme for completion.

12. Progress of APDRP schemes as on November 30, 2003 and the detailed programme for completing the remaining works.

13. The details of Investment Plan covering the capital works during the year 2004-05.

14. The details for arriving at the working capital requirement for the year 2004-05.

The copies of the petition on ARR & ERC for the year 2004-05 were made available for sale to the stakeholders and general public at a cost of Rs. 250/- per copy. The documents were also placed at the web site of the Commission. The Board was also directed to furnish supporting data relating to the petition, if requested for, by the stakeholders, as indicated in the public notice.

The Commission made a detailed scrutiny of the ARR&ERC. Based on this scrutiny, the Commission called for a meeting of the senior officers of KSEB on 12.01.2004 at the Commission's office to seek further clarifications on the ARR&ERC. The Board furnished the replies to most of the above queries raised by the Commission and those raised during the meeting, on 24th January 2004.

A special meeting of the State Advisory Committee (SAC) was held on 12.02.2004 to discuss the issues arising out of ARR&ERC filed by the KSEB. Prior to the meeting, all the members of the State Advisory Committee were provided with a copy of the ARR&ERC and also a detailed agenda note containing the various issues on which the advice of the Advisory Committee was sought. The minutes of the proceedings of the meeting is enclosed as Annex II.

Although the last date of submission of written response/objections by the stakeholders was fixed as 15.01.2003, some of the stakeholders requested for extension of the date and the Commission acceded to their request and extended the last date for submission of written objections to 31.01.2004. As in the case of the first ARR&ERC, the response on the present ARR&ERC was also not encouraging as only 24 of them filed written objections before the extended date. The list of objectors is furnished in Annex III. Even though it was indicated in the public notice that the responses should be accompanied by affidavits in the prescribed format, most of the objectors did not comply with the requirement. However, in view of the limited number of objectors, the Commission took a lenient view on such procedural inadequacies and decided to register all the objections. The objections were forwarded to the Board on 3.2.2004 asking it to furnish replies to the objections latest by 20.02.2004. The Board, however, requested for extension of the date, which was granted. The Board furnished the replies to the objections on 28.02.2004. The details of objections raised by each of the stakeholders and the replies filed by the Board are furnished in Annex IV.

The Kerala HT&EHT Industrial Electricity Consumers' Association vide their letter dated 20.1.2004 requested for detailed information regarding various categories of employees along with their location, salary, DA and other benefits. The Board furnished this information on 31.1.2004 which was forwarded to the Association.

The Commission carried out further scrutiny of the ARR & ERC and additional information furnished by the Board subsequently. The Commission also held proceedings exclusively for hearing the objections of the Kerala HT&EHT Industrial Electricity Consumers' Association on 5.03.2004 in the Commission's office. A copy of the record of the proceedings is enclosed as Annex V. Based on the scrutiny of the ARR&ERC by the Commission, the proceedings of the Advisory Committee meeting held on 12.2.2004 and the proceedings held on 5.3.2004 the Commission sought further clarifications and information from the KSEB. The clarifications and information were received from the KSEB on 11.3.2004.

As the next step in processing the petition, the Commission held proceedings for public hearing at Government Guest House, Thycaud on 17.3.2004. A press release regarding the public hearing was issued well before the date of hearing, besides making publicity through the website of the Commission and electronic media. Before the public hearing, the replies filed by the KSEB to the objections raised by the stakeholders were mailed to all the objectors.

The proceedings of the public hearing were conducted smoothly and received wide media coverage and public attention. The list of participants in the public hearing is enclosed as Annex VI. A summary of the views expressed by the participants during the public hearing is enclosed as Annex VII. The Commission subsequently called for a meeting of the Chairman and Members of the KSEB with the Commission for seeking further clarifications. This meeting was held on 7.4.2004.

The Commission has thus ensured that the due process contemplated under the governing Act and Regulations were followed and adequate opportunity was provided at every stage to all individuals and organisations concerned, to express their views.

In finalising the order on the ARR & ERC for the FY 2004-05, the Commission has taken into consideration the materials filed by the KSEB, the clarifications furnished by the KSEB in the meeting with the Commission, the objections filed by the Stakeholders, the deliberations in the meeting of the State Advisory Committee and further views expressed by the Stakeholders during the proceedings held for hearing their objections.

CHAPTER II

ENERGY REQUIREMENT PROJECTIONS FOR 2004-05

2.1 METHODOLOGY

In estimating the demand and energy requirement for 2004-05, the Board had adopted the same methodology as it had used for projecting the demand and energy requirement for the year 2003-04. The methodology was to project past trends into future and then make adjustment for the changes in the number of consumers in the various categories and consumption pattern. Projections for the year 2004-05 had been based on the actual/estimated demand and energy consumption during the year 2003-04. The procedure for achieving this is mentioned below:

Firstly, representative daily load curve for each month of 2003-04 has been developed based on actual/estimated data. The load at each hour of the representative daily load curve of a particular month is the average of the load in the corresponding hour of all the days of that particular month. From the representative load curve of 2003-04, the representative load curve of 2004-05 has been projected by making suitable adjustments for changes in the number of consumers and consumption pattern. The unrestricted load demand projections are then obtained after allowing for the demand not met due to load shedding. The Board has estimated that 53.7% of the quantum of load shedding might contribute to lost demand and therefore 53.7% of the quantum of load shedding during the hours of load shedding has been added to the restricted load during the corresponding hours to obtain the unrestricted demand. The energy requirements for each month and the whole year have been worked out from the representative daily load curves for the twelve months.

2.2 PROJECTIONS BY THE KSEB

The energy requirement projections for 2004-05 made by KSEB is summarized below:

Sl. No	Category	ARR 2004-05		
		No. of consumers	Consumption (MU)	Revenue (Rs. crores)
	LT			
1	Domestic	5805778	4143	711.00
2	Non Domestic/ Commercial	1073155	921	619.00
3	Industrial	107430	804	324.00
4	Agricultural	400546	223	20.00
5	Streetlights	2502	177	27.00
	Sub Total LT	7389411	6268	1701.00
	HT			
6	Industrial	987	1214	456.00
7	NonInd/Non Comm	189	132	55.00
8	Irrigation	51	10	3.00
9	Commercial	579	340	142.00
	Sub Total HT	1806	1696	656.00
	EHT			
10	66 kV	17	270	106.00
11	110 kV	17	857	300.00
	Sub Total EHT	34	1127	406.00
12	Railways	5	50	20.00
13	Bulk Supply	8	203	54.00
14	NPG	44540	8	-
	GRAND TOTAL	7435804	9352	2837.00

The Board has stated to have assumed a 6% growth in LT consumption from 2003-04 to 2004-05. As the consumption at HT & EHT levels has been reducing over the years, the consumption pattern for this level during 2004-05 is stated to have been assumed to be the same as that during 2003-04. A 3% growth rate is stated to have been assumed for the overall consumption from 2003-04 to 2004-05.

As the energy projection for 2004-05 made by the Board was based on the projection for 2003-04, the Commission called for actual data and consumption up to the end of December, 2003 from the KSEB. The KSEB furnished the actual categorywise consumption during April, 2003 to November, 2003, initially.

2.3 DELIBERATIONS IN THE STATE ADVISORY COMMITTEE

The matter was discussed in the State Advisory Committee Meeting held on 12.2.2004. The Committee called for adjustments in the projections for energy requirement during 2003-04 and 2004-05. It was felt that based on the data made available by the KSEB for the year 2003-04 up to November, 2003, the realistic projection for energy requirement during 2003-04 and 2004-05 would be 8900 MU and 9300 MU respectively. It was also felt that with the boost in commercial activities like tourism, the consumption in commercial category was likely to increase. The KSEB was requested to recast the projections on this basis and furnish categorywise break up accordingly.

The details of revised categorywise consumption for 2003-04 and 2004-05 were furnished by the KSEB. Subsequently, the details of actual billing under various categories of consumers for 2003-04 (up to December 31, 2003) were also furnished by the KSEB. Based on this information, the Commission carried out minor adjustments in the projections. The projections for energy requirements during 2003-04 and 2004-05 as adopted by the Commission are furnished below:

Sl. No	Category	2003-04		2004-05		% increase in consumption over 2003-04
		No.of consumers	Consumption (MU)	No.of consumers	Consumpti on (MU)	
	LT					
1	Domestic	5542926	3927	5805778	4125	5.0
2	Non Domestic/ Commercial	1017138	863	1073156	920	6.6
3	Industrial	105324	748	107430	795	6.3
4	Agricultural	393814	196	393900	196	-
5	Streetlights	2383	167	2502	177	6.0
	Sub Total LT	7061585	5901	7382766	6213	5.3
	HT					
6	Industrial	958	1185	958	1185	0.0
7	NonInd/Non	183	127	189	137	7.9
	Comm					0.0
8	Irrigation	50	8	51	8	18.5
9	Commercial	554	297	579	352	
	Sub Total HT	1745	1617	1777	1682	4.0
	EHT					
10	66 kV	17	290	17	291	0
11	110 kV	17	839	17	839	0
	Sub Total EHT	34	1129	34	1130	0
12	Railways	4	50	5	60	20.0
13	Bulk Supply	7	196	8	207	5.6
14	NPG	44540	8	44540	8	0
	GRAND TOTAL	7107915	8901	7429130	9300	4.5

The number of consumers is expected to grow from 71.1 lakhs during 2003-04 to 74.3 lakhs during 2004-05, which means that 3.2 lakhs consumers would be added during the year, which will contribute to an additional consumption of 400 million units, which averages to 104 units per month per consumer. The consumption by HT&EHT industries in 2004-05 is expected to remain at the same level as in 2003-04. While the consumption at LT level including domestic consumption is expected to grow at about 5.3%, the growth in other categories is expected at 2.9%. The overall growth rate for energy consumption from 2003-04 to 2004-05 on this basis would work out to 4.5%. This is against the originally projected growth rate of 4.3% for consumption from

2002-03 to 2003-04. This growth rate during 2003-04 would have been achieved but for the closure of Indal, a major EHT industrial consumer and the sustained half an hour load shedding throughout the year. The estimated energy consumption for 2003-04 and the projections for 2004-05 are based on manual computation and use of sample data in certain cases. In order to be more objective regarding the estimates for energy consumption, the Commission has requested the Board to undertake an exercise of fine tuning these estimates based on a segmented approach by developing individual load curves for each major category of consumers.

2.4 STAKEHOLDERS' RESPONSE

No Stakeholder has commented on the energy requirement projections for 2004-05 made by the KSEB. Stakeholders have also not questioned the methodology adopted by the KSEB for projecting the requirements. However, discrepancies have been pointed out in the data regarding number of consumers, *etc*. Sri.C.P.Thomas, former Chief Engineer, KSEB has pointed out that although there had been some improvement in the data furnished in respect of different categories of consumers, there was still scope for improvement in the case of higher slabs under domestic category. The Kerala HT & EHT Industrial Electricity Consumers' Association have pointed out discrepancies in the data regarding slab-wise consumption under domestic category.

2.5 COMMISSION'S OBSERVATIONS

As stated in the foregoing paras, the projections of energy requirements for 2004-05 have been made on the basis of the actual/estimated sales during the year 2003-04. This is the most simplistic approach in projecting the energy requirements. The Commission had recommended a more detailed analysis of the prevailing load demand and energy requirement before projecting the requirements for the ensuing years. A segmented approach by developing individual load curves of

each major category of consumers is required to address the issues regarding load management, reduction of losses and cost of service. The Commission would again press for inclusion of such detailed analysis in all future ARR and ERC exercises.

The figures assumed for projecting the energy requirement can be totally relied upon only in the event of cent percent computerisation of billing operations. This is especially so in respect of break up of slab wise and category wise consumption. Computerisation of billing is also a prerequisite for undertaking mid-term reviews regarding power and energy requirements during a year. The Commission would, therefore, once again urge upon the KSEB to take up and complete the computerisation of billing activity in the shortest possible time but not later than May, 2004 as recommended by the Advisory Committee.

The estimates of energy requirement for 2003-04 and the projections for 2004-05 indicate that the industrial activity in the State would be stagnant with reduction in HT&EHT industrial consumption whereas the domestic consumption along with other LT categories is expected to grow at the rate of 5.3%. Although the HT & EHT industrial consumption is on the decline, there is growth in industrial consumption at LT level. This is not a healthy trend from system consideration, as it would result in overloading of the already strained LT system thereby increasing the system losses. This would also defeat the goal of reducing the HT-LT ratio. Steps are therefore necessary to reverse the trend. The Commission would expect the Board to come up with necessary proposals to reduce the industrial load on LT side and with corresponding increase at the HT level. The increase in domestic and commercial consumption is likely to upset the efforts towards load management. The exercise on tariff rationalization will necessarily have to address these issues.

CHAPTER III

A T & C LOSSES

3.1 INTRODUCTION

In the ARR & ERC for 2003-04, the Board had estimated the energy consumption for the year 2002-03 at 8707 MU with an energy input of 12479 MU, which showed an aggregate loss of 3772 MU (30.23%). The energy requirement (sales to ultimate consumers) for 2003-04 had been projected at 9080 MU with an energy input of 12353 MU, thus showing a loss of 3273 MU (26.5%). However, in the ARR&ERC for 2004-05, the provisional consumption for 2002-03 was placed at 8873MU with an energy input of 12510 MU which involved a system loss of 3637MU (29.07%). For 2003-04, the estimate of energy consumption was maintained at the same level of 9080 MU with an energy input of 12439 MU, showing a system loss of 3359 MU which worked out to 27%. The energy consumption during 2004-05 was projected at 9352 MU with an energy input of 12429 MU, thus placing the system loss at 3077 MU, which works out to 24.77%. The ARR&ERC has thus envisaged a loss reduction of 2.23% from 2003-04 to 2004-05. However, the basis for assuming a loss reduction of 2.23% has not been furnished. In the energy balance statement provided in the ARR&ERC, the break-up of losses between EHT system and the Distribution system has only been furnished. The losses in the EHT system covering 220 kV, 110 kV & 66 kV during 2004-05 have been projected at 6.21% whereas the losses in the distribution system covering 11 kV and LT as percentage of the combined input into T&D system have been projected at 18.57%. Although the Commission had devised a format for energy balance to assess the losses occurring at various voltage levels, the KSEB was not in a position to furnish the information due to lack of facilities for measurement of energy at different voltage levels. With a view to assessing the present level of T&D loss in the system, the Commission had asked the KSEB to furnish the details of energy billing demand up to the end of December, 2003 and also the corresponding input into the KSEB system up to this period. This information has since been furnished by KSEB and by projecting this information for the whole year, the energy sales for 2003-04 would work out to 8900 MU and the corresponding energy input into the system would be 12268 MU. On this basis, the realistic Technical and Commercial loss in the KSEB system during 2003-04 would work out to 27.45%. Based on the discussions held in the State Advisory Committee meeting and also the discussions held by the Commission with the KSEB, it is reasonable to assume this figure as the base data for T&D loss in the KSEB system and further improvement in loss reduction should be based on the aggregate technical and commercial loss of 27.45% during 2003-04. As regards loss reduction for 2004-05, the consensus was for fixing a target of 3%. Therefore the ARR & ERC for 2004-05 should be based on an aggregate technical and commercial loss of 24.45%. On this basis, the requirement for energy input into the KSEB system during the year 2004-05 would work out to 12310 MU.

3.2 STAKEHOLDERS' RESPONSE

The stakeholders in general have called for the need to reduce the T&D losses in the KSEB system. Shri.Maryial Krishnan Nair has stated that the T&D losses in the KSEB system should be reduced below the level of national average, while Shri.Sasi.B Mattom has called for reduction of T&D losses to the level of 15% within 6 months. Asianet Satellite Communications have called for prevention of loss due to pilferage of energy and provision of adequate T&D system for reducing technical loss. A.P.Udayabhanu Endowment Trust has stated that losses should be reduced by bringing down HT-LT ratio to 1:1. The Public Affairs Forum has called for identifying and estimating T&D losses for each Division and arriving at the investment required for reducing the losses in each of them. The Kerala HT&EHT Industrial Electricity consumers' Association have called for effective steps by KSEB for assessing separately the loss taking place in the 11kV & LT systems so as to take appropriate measures for reducing the loss in the LT system. The Association have suggested for adhering to the target for loss reduction of 3% during 2004-05. The Confederation of Indian Industry have also stated that the target for loss reduction during 2004-05 should be 3%.

3.3 DELIBERATIONS IN THE STATE ADVISORY COMMITTEE

The State Advisory Committee discussed the matter in detail and recommended that during 2004-05, a loss reduction of 3% should be achieved from the level of that obtained during 2003-04. The Committee therefore recommended that the Board should take all possible steps for achieving a loss reduction of 3% and this should cover replacement of all faulty energy meters latest by 31.03.2004. The Committee also felt that the Board should furnish the details regarding the present position of faulty meters and the replacement programme to the Commission, immediately.

3.4 COMMISSION'S OBSERVATIONS

Since the last order of the Commission on 31.12.2003 there is significant improvement in the database regarding overall energy consumption and overall energy input into the KSEB system. However, as already stated, there is lack of data on energy input and output at different voltage levels. As this data is essential for taking effective steps towards loss reduction and identifying areas of pilferage and theft, it is absolutely essential for the Board to complete the prgoramme for installation of energy meters at various levels. As already directed in the last order, the Commission would urge upon the Board to install energy meters at different grid points so as to separately assess the losses in 220 kV, 110 kV & 66 kV systems, immediately. The installation of energy meters on distribution transformers was required to be completed by 31st March 2004. This would enable assessment of losses taking place in the LT system,

which will provide the much-needed input for reducing losses in the distribution system.

The accuracy of the database would improve only if the energy measurement process is totally computerized, as manual reading at different places at different times cannot be considered reliable. Therefore, appropriate action is required to be taken by the Board for computerization of data collection, data storage and retrieval in respect of energy calculations.

The Commission is of the view that as the losses have an important bearing on the financial health of the KSEB, it is necessary to achieve loss reduction at a fast pace. The Commission agrees with the views of the Stakeholders and the State Advisory Committee that a loss reduction of 3% from the level of 2003-04 should be achieved during 2004-05. In order to realize this, a well chalked out action plan covering various steps such as replacement of meters, theft detection, computerization of billing etc; should be implemented. Although the Board has been maintaining that the total computerization of billing in KSEB would be achieved by December, 2004, the Commission would strongly advocate for advancement of this date to May, 2004 as recommended by the State Advisory Committee. As regards replacement of faulty energy meters, the Board had indicated a target of March, 2004 for completing this work. In fact, the Commission is of the view that the work, to the extent required, should be carried out on a continuous basis, as this will be one of the major factors contributing to loss reduction in the KSEB system. The Board should furnish a report to the Commission regarding meter replacement work, immediately.

CHAPTER IV

AGGREGATE REVENUE REQUIREMENT FOR 2004-05

4.1 INTRODUCTION

The ARR& ERC submitted by the KSEB projected a total expenditure of Rs.3766.72 crores for 2004-05. The details in comparison to the provisions in respect of various items for 2002-03 and 2003-04 are furnished below:

Rs. Crores.

Sl. No.	Item	2002-03 (Provisional)	2003-04		2004-05 As per ARR of KSEB
			As per ARR of KSEB	As approved by the Commission	
1	Generation of power	166.23	153.32	153.32	148.99
2	Purchase of power	1872.08	1858.13	1775.13	1729.74
3	Interest	672.79	721.54	679.26	723.30
4	Depreciation	277.10	334.52	334.52	382.27
5	Employee cost	670.83	693.64	693.64	736.64
6	Repairs & Maintenance	60.64	66.70	66.70	85.25
7	Admn.&General Expenses	51.80	55.88	55.88	69.80
8	Other expenses	89.51	110.00	76.28	130.00
9	Less:Expenses capitalized	118.15	119.80	119.80	123.53
10	Less: Int.capitalised	101.09	115.45	108.93	115.73
	Total	**3641.74**	**3758.48**	**3606.00**	**3766.72**

In addition, the Board has also projected a provision of Rs.155.30 crores towards return on equity during the year 2004-05. The Stakeholders have offered comments/objections on the various items of Revenue Requirement. The State Advisory Committee also discussed the matter in detail. The Commission scrutinised the ARR and commented on the various items of expenditure and sought clarifications from the KSEB. The position in respect of various items of expenditure as emerging out of the above exercise is discussed below:

4.2 GENERATION OF POWER

4.2.1 The KSEB has based the ARR on a total requirement covering generation and purchase of 12677 MU of energy. The Board has assumed its own hydro generation during 2004-05 at 5500 MU. This is based on applying a 10% reduction over the last 10 years' average hydel generation. The Board has assumed a total of 474.5 MU generation from its diesel power plants at Brahmapuram and Kozhikode and a generation of 3 MU from its wind generation plant at Kanjikode. The total internal generation has thus been projected at 5977.5MU. The total cost of generation from Board's own hydro, thermal and wind generation has been projected at Rs.148.99 crores as per details below:

Source	As per ARR and ERC	
	Generation MU	Cost of Generation Rs.crores
Hydel	5500.00	17.33
Wind - Kanjikode	3.00	0.63
BDPP	219.00	62.67
KDPP	255.50	68.36
Total	**5977.50**	**148.99**

The Board has not included the fixed cost of hydro plants, BDPP, KDPP and wind generation as they have been included in other cost projections. The quantum of power from Diesel generating stations has been assumed based on a combination of factors covering the merit order of their variable cost linked to the average cost of fuel during 2003-04 and also the system considerations warranting the operation of these plants. The variable cost of generation as per the ARR works out to Rs.2.73 for KDPP and Rs.2.92 for BDPP.

4.2.2 STAKEHOLDER'S OBJECTIONS

Major objection regarding KSEB's own generation has been raised by the Kerala High Tension & Extra High Tension Industrial Electricity Consumers' Association. They have questioned the assumption regarding quantum of hydro generation and the variable cost of generation from BDPP and KDPP plants.

The objectors have stated that the KSEB has not provided the details regarding the manner of estimation of hydel energy for 2004-05. They have also questioned the rationale of a 10% reduction in the 10 years' average hydro generation. The Association felt that the hydro generation based on normal monsoon would work out to 6150 MU and therefore it would be reasonable to assume a figure of 6150 MU for the year 2004-05 as against the estimate of 5500 MU by the KSEB. They have also maintained that this would bring in a reduction of Rs.217.5 crores in the revenue requirement.

4.2.3 DELIBERATIONS IN THE STATE ADVISORY COMMITTEE

The matter was discussed in detail in the State Advisory Committee meeting and the Committee felt that the hydro generation during 2004-05 should be fixed at 6000MU. A suggestion was also made in the Committee that if the actual availability was lower than this figure, the Board could be compensated through a surcharge on tariff after assessing the extent of shortfall. The Committee also felt that the hydro generation should be put to optimal use through annual, monthly, fortnightly and daily schedules and their continuous updating as suggested by the Commission.

4.2.4 COMMISSION'S OBSERVATIONS

The Commission is of the view that the estimate for hydro generation of 5500 MU during 2004-05 projected by the Board is on the low side as there is no justification for effecting a reduction of 10% on the 10 year average figure. As the hydel availability during a normal monsoon year was around 6600 MU, it would be appropriate to project the hydro generation at least at 6000 MU.

The projections for generation of energy from KSEB's own thermal stations and the cost thereof have been reworked on the above basis. This exercise has brought down the quantum of generation of BDPP from 219 MU to 143 MU and the generation of KDPP from 256 MU to 167 MU. The variable cost of generation has been assumed at Rs.2.58 for KDPP and Rs.2.82 for BDPP, based on average cost of fuel during last year up to December, 2003. The cost of hydro generation has been increased from Rs.17.33 crores to Rs.18 crores. The Commission would place the provision for power generation during 2004-05 at Rs.100.53 crores, as per details below:

Source	Generation MU	Cost of Generation Rs.crores
Hydel	6000.00	18.00
Wind - Kanjikode	3.00	0.60
BDPP	143.40	39.63
KDPP	167.30	42.30
Total	**6313.70**	**100.53**

However, the KSEB should explore the possibility of effecting further reduction in the generation of BDPP and KDPP by availing less costly power from other sources.

The Commission would reiterate the view that the available hydro generation in the KSEB system should be utilized optimally and maximum commercial advantage derived thereof. Scheduling of hydro generation should be done on annual, quarterly, monthly, fortnightly and daily basis and should be subjected to daily and fortnightly review and revision continuously, based on the hydro availability at any point of time. The schedules for power purchase on merit order basis are required to be coordinated with the schedules of hydro generation as per system requirements. The schedules should also be formalized and reviewed at various levels in KSEB through appropriate management information system.

4.3 PURCHASE OF POWER

4.3.1 The ARR submitted by the Board projected an energy purchase requirement of 6700 MU during 2004-045. This is based on a total energy requirement of 12677 MU and internal generation of 5977 MU as stated in the foregoing section. The energy purchase cost for the year 2004-05 has been based on contractual obligations, wherever applicable, and allowing for an increase of 5% in the actual unit variable cost during 2003-04. The inter se priority for purchase has been decided on the basis of the merit order of variable cost of supply from each source. The total transmission losses in respect of external sources of supply has been estimated at 211MU which have also been taken into account in deciding the actual variable cost incident on KSEB. The total cost for power purchase during 2004-05 has thus been projected at Rs.1729.74 crores as per details furnished below:

Source	Energy Purchased (MU)	Fixed cost (Rs.Crores)	Incentive, tax, *etc.* (Rs.Crores)	Variable cost/unit (Rs.)	Total Variable cost (Rs.Crores)	Total cost (Rs.Crores)
Energy Purchase						
Thalcher II	1219.39	148.42	0.00	0.49	59.75	208.17
NLC-II Stage 1	444.26	27.20	18.34	0.81	35.99	81.53
NTPC – RSTPS	2298.58	72.66	25.45	0.94	216.75	314.86
ER	460.70	37.92	6.18	1.00	46.07	90.17
NLC-II Stage 2	438.93	57.42	0.00	1.06	46.53	103.95
UI	120.03	0.00	0.00	1.74	20.89	20.89
MAPS	360.56	0.00	0.00	2.23	80.41	80.41
NLC (Exp)	606.00		0.00	2.35	142.24	142.24
BSES	170.69	124.26	0.00	2.42	41.31	165.56
Kayamkulam	203.52	129.92	13.61	2.57	52.31	195.84
KPCL	51.12	18.24	0.00	3.00	15.34	33.58
Kaiga	325.70	0.00	0.00	3.65	118.88	118.88
PGCIL Charges						
(a) Eastern Region	0.00	6.19	0.28		0.00	6.48
(b)Southern Region	0.00	126.82	1.54	0.00	0.00	128.36
(c) Kayamkulam	0.00	38.86	0.00	0.00	0.00	38.86
Grand Total	**6699.48**	**787.91**	**65.40**		**876.43**	**1729.74**

4.3.2 STAKEHOLDERS' OBJECTIONS

Major objection came from the Kerala HT and EHT Industrial Electricity Consumers’ Association. They have pleaded for reducing power purchase to the extent of 650MU facilitated by assuming increased hydro generation of 6150MU. They have estimated a saving of Rs.217.5 crores on this account. They have also pleaded for maximum utilization of allocated quota of power from Central Sector Power Stations which are less costly than other sources. They felt that by assuming 80% PLF for all the stations, expensive power drawn from Kayamkulam, KPCL and BSES could be reduced and a saving of Rs.155.6 crores could be achieved. They called for close scrutiny of the merit order despatch followed by KSEB with a verification of SLDC data on a sampling basis by the Commission. They also suggested that power purchase agreements should also be made available for public scrutiny. A few more stakeholders also pleaded for reduction in power purchase cost.

4.3.3 COMMISSION'S OBSERVATIONS

The Board has projected the power purchase requirement of 6700 MU based on a total energy requirement of 12677 MU. However, the total requirement would get reduced to 12524 MU as explained in Chapter II on energy requirement projection for 2004-05. Based on an internal energy generation of 6314 MU as estimated in the foregoing section, the total energy purchase requirement for 2004-05 would work out to 6210MU. The Commission has asked the Board to carryout a detailed exercise in estimating the power purchase cost from the various sources purely on merit order basis. The Commission had also suggested to the Board that the variable cost should be assumed on the average of actuals during the last year. This was in view of the fact that as per the draft terms and conditions of tariff for central generating stations issued by the CERC, there was scope for reduction in fixed as well as variable cost in respect of these stations. The terms and conditions by the CERC have since been issued, which call for reduction in fixed as well as variable costs. However, the Commission did not have enough time to analyse the actual implications of the terms and conditions on the fixed and variable costs of purchase of energy from the Central Power Generating Stations. Pending this analysis, it is proposed to adopt the average of actual costs during last year. Savings on this account, if any, may become handy to neutralize the effect of any negative variation in hydro generation. Final adjustment will, however, be made at the time of truing up of costs.

The KSEB was also advised to limit availability from the various stations to the last year's actual subject to a maximum ceiling of 80% keeping in view the possibility of capital maintenance, etc; in some of the stations. The KSEB has re-worked the power purchase requirements on this basis as per details below:

Source	Energy purchase (MU)	Fixed cost (Rs.crores)	Incentive, Tax, *etc*. (Rs.crores)	Variable cost/unit (Rs.)	Total Variable cost (Rs.crores)	Total cost (Rs.crores)
Thalcher-II	1115.74	48.42	0.00	0.48	53.56	201.98
NLC-II Stage 1	444.71	27.20	18.34	0.77	34.24	79.78
NTPC – RSTPS	1979.48	72.66	25.45	0.90	178.15	276.26
ER	465.82	37.92	6.18	1.00	46.58	90.68
NLC-II Stage 2	629.04	57.42	0.00	1.05	66.05	123.47
UI	291.08	0.00	0.00	1.67	48.61	48.61
MAPS	66.48	0.00	0.00	2.19	14.56	14.56
NLC (Exp)	353.52		0.00	2.35	82.94	82.94
BSES	256.29	24.26	0.00	2.40	61.51	185.77
Kayamkulam	255.26	29.92	13.61	2.56	65.35	208.88
KPCL	14.64	18.24	0.00	2.80	4.10	22.34
Kaiga	338.22	0.00	0.00	3.48	117.70	117.70
PGCIL CHARGES						
Eastern Region		6.54	0.28		0.00	6.82
Southern Region	0.00	122.80	1.54	0.00	0.00	124.34
Kayamkulam	0.00	40.50		0.00	0.00	40.50
Total	**6210.28**	**785.88**	**65.40**		**773.35**	**1624.63**

The total revised projected power purchase cost would thus work out to Rs.1625 crores.

The above projections provide for a net unscheduled import of power to the extent of 291MU during 2004-05 at an average net import cost of Rs.1.67 per kWh. This provision is based on the experience gained during the year 2003-04. The Commission is of the view that the situation during 2004-05 would be significantly different from that during 2003-04. In view of the high hydro availability anticipated during 2004-05, there would be enhanced scope for taking advantage of the ABT regime, as the new terms and conditions of Tariff issued by CERC have increased the charges for overdrawals under low frequency conditions. KSEB should take maximum advantage of the ABT by utilizing the flexibility in its hydro generation to the maximum possible extent. The Commission has estimated that further savings in power purchase cost on account of this

during 2004-05 may work out to around Rs.20 crores. Taking this reduction into account, the Commission would place the net outflow on account of power purchase during 2004-05 at Rs.1605 crores.

4.4 INTEREST AND FINANCE CHARGES

4.4.1 The ARR has projected a total amount of Rs.723.3 crores towards interest and finance charges with the following break up.

A. Interest on Loans & Bonds	**Rs. Crores**
i) Existing loans	331.80
ii) Existing bonds	222.74
iii) Loans from GOK	35.76
iv) Borrowings for capital projects during 2004-05	38.00
v) Cash credit for working capital	20.00
Sub Total – A	**648.30**
B. Other Interest and Finance Charges	
i) Discount to consumers	1.50
ii) Interest on GPF	40.50
iii)Cost of Raising finance	6.00
iv)Other Charges	27.00
Sub Total-B	**75.00**
Grand Total	**723.30**

The outstanding balance amount towards loans and bonds at the beginning of 2003-04 has been shown as Rs.5056.25 crores in the ARR. The total amount of borrowings during 2003-04 is shown as Rs.1423.37 crores with repayment of an amount of Rs.1274.44 crores. Outstanding balance at the beginning of the year 2004-05 is thus worked out as Rs.5205.18 crores. The scheduled repayment during the year 2004-05 is assumed at Rs.839.82 crores with an amount of borrowing of Rs.800 crores for capital projects. The total outstanding debts at the end of the year 2004-05 is thus estimated at Rs.5165.36 crores. The total interest liability during the year 2004-05 on this amount is worked out as Rs.628.3 crores. By adding Rs.20 crores towards interest on cash credit for working capital, the total liability towards interest during 2004-05 is projected at Rs.648.3 crores. The other interest and finance charges have been projected at Rs.75 crores. However, out of this, the break-up of an amount of Rs.27 crores under 'other charges' has not been furnished. This presumably covers bank charges for remittances between Board's Offices, bank Commission for collection from consumers, other bank charges and guarantee charges payable to the Government of Kerala. The guarantee charges payable to the government of Kerala accounts for a major share of the provision for 'other charges', which may work out to about Rs.15 crores.

4.4.2 STAKEHOLDERS' OBJECTIONS

A few stakeholders have questioned the provision towards interest and finance charges covered in the ARR. Prominent among them are the Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association and Confederation of Indian Industry. The Confederation of Indian Industry has stated that there is no sign of any improvement in the efficiency of financial management by the Board as the interest and finance charges are on the increase, year after year. The Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association have stated that in the event the capital projects are not taken up as per the original investment plans, for no fault of the consumers, the interest cost and depreciation cost on account of assets that have not been created should be deducted from the ARR. The Association have stated that a total claw back of Rs.69 crores might be allowed on account of the shortfall in capital expenditure during 2002-03 and 2003-04. They have also stated that the KSEB would not be in a position to incur expenditure to the extent of Rs.698.27 crores projected for capital works during 2004-05 and the reduced expenditure may result in savings on interest to the extent of Rs.20 crores.

4.4.3 COMMISSION'S OBSERVATIONS

The Commission is not in a position to accept that the outstanding balance amount towards loans and Bonds at the beginning of 2004-05 would be Rs.5205.18 crores as this is based on a total borrowing of Rs.1423.37 crores during 2003-04 while the Commission's approval for borrowing during the year was only for an amount of Rs.472 crores. This borrowing was meant for financing base capital investment to the tune of Rs.350 crores. Although the Board has brought out a white paper on borrowings and debt servicing, the white paper has not furnished justification for borrowing an amount of Rs.1423.37 crores during 2003-04. However, the white paper has indicated that the Board has already made repayment of loans to the extent of Rs.1274.44 crores, which is the same amount as that projected for repayment during 2003-04, in the ARR for 2004-05. This is in excess of an amount of Rs.406 crores over the scheduled repayment of Rs. 868.68 crores projected for repayment during 2003-04 as per ARR for 2003-04. Adding this amount of Rs.406 crores to the amount of Rs.472 crores approved by the Commission, the total requirement for borrowing during 2003-04 would work out only to an amount of Rs.878 crores. Therefore, the Commission does not find any justification for projecting a borrowing of an amount of Rs.1423.37 crores during 2003-04. It would thus be seen that there is an excess amount of borrowing to the extent of Rs.545 crores shown in the ARR, on which interest liability at 11.5% has been projected during 2004-05. The interest on this account works out to Rs.63 crores. The Commission seeks to disallow this amount from the total provision of Rs.590.30 crores for interest on existing loans and bonds.

The Board has projected an interest liability of Rs.38 crores on account of borrowings to the extent of Rs.800 crores for capital projects during 2004-05. The Commission notes that the actual expenditure on

capital projects up to 29.02.2004 was only an amount of Rs.243 crores as against the amount of Rs.350 crores approved by the Commission for the year 2003-04. The information regarding the works completed during 2003-04, the progress on the remaining works, the actual expenditure incurred during the year 2003-04, etc; is yet to be received from the Board. Judging from the performance on implementation of capital projects during 2003-04, the Commission has no reason to believe that the Board would be in a position to incur an expenditure exceeding Rs.500 crores on capital projects during the year 2004-05. The Commission, therefore, seeks to disallow interest charges on the excess amount of Rs.300 crores projected on account of borrowings for capital projects during 2004-05 which works out to Rs.14 crores.

The Board has projected an expenditure of Rs.20 crores on account of interest on cash credit for working capital. The working capital requirement may reflect the current level of collection efficiencies, available security deposit, billing cycles, spare requirement, power purchase agreements, etc. Hence the working capital requirement should be based on lead-lag study by the Board incorporating the above factors which should aim towards further improvement in efficiency levels for the subsequent years. In the absence of a lead-lag time study, the Commission is not in a position to agree to the amount projected by the Board. A few objectors have also held the same view. Further, the provision for interest on cash credit for working capital during 2003-04 was Rs.12.95 crores. It is hoped that the position regarding cash flow is likely to improve during 2004-05 due to various measures expected to be taken by the Board in collecting outstanding dues, better management of finances, etc. Under the circumstances, it is not possible for the Commission to agree an amount in excess of Rs.10 crores on account of interest on cash credit for working capital.

As regards other interest and finance charges, the Commission has not received the details of expenditure towards cost of raising finances during 2003-04, for which a similar amount was approved. The Commission is not in a position to agree to the provision of Rs.6 crores towards cost of raising finance as this is considered quite high in view of the limited amount of borrowing agreed to by the Commission. The provision for cost of raising finance during 2004-05 is therefore reduced to Rs.3 crores as against Rs.6 crores projected by the Board.

As regards 'other charges', although a lump sum amount of Rs.27 crores has been provided, no break-up has been furnished. It is estimated that the guarantee charges payable to Government of Kerala may work out to Rs.15 crores based on a total loan amount of Rs.800 crores. As already communicated during discussions with the KSEB, the KSEB should take up with the Government of Kerala for waiver of guarantee charges especially when the amount of borrowing would get reduced. The Commission would therefore seek to remove guarantee charges payable to the Government of Kerala from the provision for interest and finance charges. The allowable interest and finance charges would therefore work out to Rs.618.30 crores as per details below:

Item	*(Rs. Crores)*
1 Interest on existing loans and bonds	*527.30*
2 Interest on loan for capital projects during 2004-05	*24.00*
3 Interest on cash credit for working capital	*10.00*
4 Discount to consumers	*1.50*
5 Interest on GPF	*40.50*
6 Cost of raising finance	*3.00*
7 Other charges	*12.00*
Total	*618.30*

The objectors have called for claw back on interest on capital works not completed during 2002-03 and 2003-04. The Commission is not in a position to agree to this suggestion as this issue could be considered at the time of truing up of costs by the Board. However, the Commission is very seriously concerned about the management of implementation of capital projects by the Board. It seems that there is no project construction organization worth its name in the KSEB and there seems to be no system for project planning, implementation, monitoring and budgetary control. There is also no management information system as a result of which there is no co-ordination in the implementation of projects. All these are leading to time and cost overruns, invariably, in all capital projects. As a result, the money borrowed at high interest rates for the capital projects does not bring in the projected benefits and returns and this aggravates the financial performance of the Board.

The Commission would undertake a review of the capital works during 2003-04, in May 2004. For this purpose, the Board should furnish the details of the work programme vis-à-vis continuing schemes and new works and the details of physical and financial progress in respect of each item of work along with reasons for slippages with reference to the targets. This information should be furnished to the Commission latest by 15th May, 2004.

The Commission would suggest that hereafter the Board may submit the investment plan for approval of the Commission well in advance of filing the ARR & ERC. This may cover the details of the projects completed /anticipated to be completed during the year and the balance work spilling over to the year of ARR and the details of the work programme and the financial requirement thereof. In addition, similar details of new projects that may be completed during the year of ARR and beyond may be

furnished. The investment plan for new projects should contain all relevant technical and commercial details including the benefits sought to be achieved from these projects.

The white paper on borrowings and debt servicing submitted by the Board does not address the problem of increasing debt liability. Although the total outstanding receivables, as on 31.12.2003, is indicated as Rs.1043 crores, the white paper has not come out with any concrete step by the Board in liquidating the receivables. What is most disappointing is that the Board has not even cared to carry out an ABC analysis of the receivables with the result that the Board is totally in dark regarding the prospects of recovery. Although a target of Rs.200 crores has been indicated for recovery during 2004-05, there does not seem to be any basis for this assumption. The utilization of borrowed money for paying the power purchase bills of NTPC and for discharging the pension liability during 2003-04, when adequate provisions have been made for these items separately, are instances which confirm the apprehension of the Commission that the Board is not maintaining the requisite discipline in financial management. The fact that high interest loans amounting to Rs.2376 crores still remain to be swapped, points to the lack of efforts by the Board in this direction.

The Commission would expect the Board to take appropriate steps to improve its performance on implementation of capital projects and financial management and report back to the Commission on the measures taken thereof latest by 31.5.2004.

4.5 DEPRECIATION

4.5.1 The Board has projected a provision of Rs.382.27 crores for depreciation during the year 2004-05 based on the following rates.

	Depreciation %	Amount Rs.Crores
Buildings	3.80	14.47
Hydraulic works	2.59	18.85
Other Civil Works	2.63	3.67
Plant & Machinery	6.71	182.24
Lines, Cables, Network, etc	6.89	160.59
Vehicles	2.05	0.24
Furniture & Fixtures	12.46	1.34
Office Equipments	10.08	0.87
Total		**382.27**

4.5.2 STAKEHOLDERS' OBJECTIONS

The main objector on this item was the Kerala HT & EHT industrial Electricity Consumers' Association. The Association have stated that for the financial year 2002-03, the short fall in capitalization from CWIP was Rs.212.6 crores [Rs.1014.01 crores (based on ARR filing for the financial year 2003-04)- Rs.801.37 crores (based on ARR filing for the financial year 2004-05)]. Similarly the short fall for capitalization for the financial year 2003-04 based on the percentage of opening balance and expenditure capitalized in financial year 2002-03(34.7 %) works out to Rs.213.2 crores [Rs.924.28 crores (based on ARR filing for 2003-04) – Rs.711.09 crores (34.7% of opening CWIP and total capital expenditure for the year)]. The Association has contented that based on this, the depreciation for claw-back for both years at an average rate of 7.7% depreciation would work out to Rs.49.16 crores.

4.5.3 COMMISSION'S OBSERVATIONS

The Commission has noted the objections in respect of the provision for depreciation. As regards claw-backs suggested by the Kerala HT & EHT industrial Electricity Consumers' Association, the Commission would expect the Board to take into account these objections while the exercise on truing up of cost during 2003-04 is taken up.

The Commission is of the view that the provision for depreciation is on the high side especially on items like Plant and Machinery, Lines, Cables, etc. However, considering the need for reduction of debt burden of the KSEB, the Commission seeks to retain the provision of Rs.382.27 crores for 2004-05 without any modification.

4.6 EMPLOYEE COST

4.6.1 The ARR submitted by the KSEB projects an amount of Rs.736.64 crores towards employee cost during 2004-05. The details in comparison with the provisions as approved by the Commission for 2003-04 are furnished below:

Rs.crores

Particulars	2003-04 As approved by KERC	2004-05 As per ARR
Salaries and wages	303.37	315.98
Holiday wages/overtime	0.13	0.14
EL encashment	25.00	23.00
Other allowances/Bonus/Benefits	21.34	22.19
Terminal Benefits	343.80	375.33
Total	**693.64**	**736.64**

The Board has argued that the increase in employee cost during 2004-05 as compared to the previous year is mainly on account of liability to pay DA (Rs.13 crores) and increase in retirement benefits (Rs.32 crores). The Board has stated that it has been curtailing and reducing expenses under categories like other allowances, surrender of leave salary, overtime, bonus, *etc*. The Board has also stated that it has made efforts to reduce employee cost through measures such as improving the productivity of employees, abolition of redundant post of staff and officers, redeployment of employees and limiting the increase in the officers' salary to the end of the pay scale, *etc.*

4.6.2 STAKEHOLDERS' OBJECTIONS

Many stakeholders have raised objections on the projections of employee cost. Prominent among them are A.P.Udayabhanu Endowment Trust, Seafood Exporters Association of India, Sri.Radhakantan Thirumulpad and Sri.C.P.Thomas and the Kerala HT&EHT Industrial Electricity Consumers' Association. A.P.Udayabhanu Endowment Trust has called for reducing expenditure on establishment while Sri.Radhakantan Thirumulpad has called for reducing salaries of the employees and freezing the vacancies. The Seafood Exporters Association of India and Sri.C.P.Thomas have pleaded that the liability of Rs.375/- crores towards terminal benefits should not be passed on to the consumers and be borne by the Government when the Board is reorganized into Government Companies. The Kerala HT&EHT Industrial Electricity Consumers' Association have stated that KSEB's statements regarding employee cost and the efforts made for cutting down the employee cost, are contradictory. They have specifically pointed out that the KSEB intended to add 1347 employees during 2004-05, which is contrary to the claim made by KSEB regarding reduction in the number of employees. They have pleaded that the employee cost should be retained at the same level as in the previous year.

4.6.3 DELIBERATIONS IN THE STATE ADVISORY COMMITTEE

The State Advisory Committee deliberated the matter in detail and the Committee felt that the KSEB should undertake a study on improving the productivity of employees and achieve manpower reduction. Another suggestion made was that attempt should be made for introduction of voluntary retirement scheme with the consent of employees.

4.6.4 COMMISSION'S OBSERVATIONS

As per the information available in data form 5 furnished in the ARR the working strength of the KSEB is projected to increase from 24769 to 26113 as per the following break-up:

		2003-04	*2004-05*
1	*At the level of Board of Directors*	*7*	*4*
2	*Officers*	*4229*	*4543*
3	*Other Staff*	*20533*	*21566*
	Total	*24769*	*26113*

However, as per the information furnished by the KSEB in January, 2004 regarding the details of employees, the actual number of employees working as on 1.1.2004 was given as 24303. Therefore, an increase of 1813 employees is envisaged during the year 2004-05. However, the Board has not furnished any justification for this increase. The Commission is also not able to find out any substantial increase in the workload of the Board to justify this increase. It is seen that as in the case of the previous year, the employee cost works out to about 20% of the ARR. However, while the employee cost per unit of sale worked out to over Ps.76 during 2003-04, the employee cost works out to over Ps.79 per unit of sale during 2004-05. This clearly shows that the employee productivity in the KSEB is on the decline.

The terminal benefits are projected to increase from Rs.343.80 crores in 2003-04 to Rs.375.33 crores during 2004-05. This would imply that more number of employees would be retiring in 2004-05 as compared to the previous years. However, there is no corresponding reduction in the number of existing employees and on the other hand, the number is on the increase. The Commission is not clear about the reason for steep increase in expenditure towards terminal benefits form the year 2002-03 to 2004-

05.There is an increase of about 20% in the expenditure towards terminal benefits over the last 2 years. Even though the details have been asked from the KSEB these are yet to be received. The white paper submitted by the KSEB on borrowings and debt servicing claims that the Board has paid Rs.20 crores towards pension liability pertaining to the previous years, during2003-04, using borrowed money. It is not clear whether this amount is over and above the approved provision of Rs.343.80 crores for 2003-04. The Commission is not in a position to agree to the increased provision towards salaries and wages, terminal benefits and other allowances/bonus/benefits as projected by the Board for 2004-05. While the Commission may agree to an increase of 3% towards salaries and wages and 5% towards terminal benefits, the provision for other allowances/bonus/benefits is proposed to be kept at the same level as in 2003-04. On the above basis the projection for employee cost for the year 2004-05 would work out as follows:

	2004-05 (Rs.crores)
Salaries and wages	***313.00***
Holiday wages/Overtime	***0.13***
Earned Leave Encashment	***23.00***
Other allowances/bonus/benefits	***21.34***
Terminal benefits	***361.00***
Total	***718.47***

4.7 REPAIR AND MAINTENANCE CHARGES

4.7.1 The ARR has projected a requirement of Rs.85.25 crores towards Repair and Maintenance charges during the year 2004-05. The Board has based the R&M expenses as a function of the assets of the Board. The R&M cost is calculated as a percentage of the opening gross block of assets for each of the asset classes. The variable cost of hydel, wind and diesel generation has been deducted from the projected R&M cost as they are separately accounted for.

4.7.2 STAKEHOLDERS' OBJECTIONS

The main objection on R&M expenses is from the Kerala HT&EHT Industrial Electricity Consumer's Association. They have stated that there is a phenomenal increase of 28% in the R&M cost over the previous year and accounted for about 2.2% of the ARR. The Association has objected to the rationale of linking of R&M expenses to GFA. The objector has also maintained that the R&M expenses of newly commissioned works should not be allowed.

4.7.3 COMMISSION'S OBSERVATIONS

The Commission has noted that the actual expenses on R&M during 2003-04 up to 31.01.2004 amounted to Rs.51.65 crores. In its order on the ARR for 2003-04, the Commission had directed the Board to furnish a report to the Commission covering the details of R&M works undertaken during 2003-04. However, the Board has not furnished this information so far. While the Commission would like the Board to pay adequate attention to the R&M works which is necessary for the up-keep of the installations under the KSEB, the Commission is not in a position to agree to the projections of KSEB for R&M works during 2004-05, since the expenditure during the first ten months of 2003-04 was only an amount of Rs.51.65 crores. The Commission would therefore seek to retain the same provision of Rs.66.7 crores as provided for 2003-04, for R&M works during 2004-05.

4.8 ADMINISTRATION & GENERAL EXPENSES

4.8.1 The Board has projected an amount of Rs.69.80 crores towards A&G expenses for 2004-05 as compared to Rs.55.8 crores for 2003-04. The A&G expenses consist of rent, taxes, insurance, legal charges, audit fees, electricity duty under Section 3(1) of the Kerala Electricity Duty (KED) Act and other charges such as travel expenses, freight, purchase related expenses, *etc.*

4.8.2 STAKE HOLDERS' OBJECTIONS

Many stakeholders have objected to the projection of A&G expenses. The Kerala HT & EHT Industrial Electricity Consumers' Association have stated that in spite of measures like shifting of offices from rented to own, cutting down of transportation and telephone expenses, controlling of advertisement expenses, travel expenses, *etc*; stated to have been taken by the KSEB, the A&G expenses per unit of energy sold were higher than that of most of the SEBs. While the A&G expenses in KSEB worked out Ps.7-8 per unit of energy sold, the A&G expenses in the case of Maharashtra, Gujarat & Tamilnadu SEBs were in the range of Ps.2-4 per unit. The objector has stated that the A&G expenses should be limited to Ps.4 per unit which would bring in a saving to the extent of Rs.32.1 crores.

4.8.3 COMMISSION'S OBSERVATIONS

The Commission had allowed an increase of 8% in the A&G expenses during 2003-04 over that during the previous year. The provision for A&G expenses during 2003-04 was kept at Rs.55.88 crores on this basis. While allowing this provision, the Commission had suggested that efforts should be made by the KSEB to limit the A&G expenses. The Commission is, therefore, not in a not in a position to allow any increase in the provision of A&G expenses from the level of that approved for 2003-04, except in the case of insurance and electricity duty. The provision for A&G expenses for 2004-05 would therefore work out as below:

Item	*2004-05 (Rs.crores)*
Rent, rates and taxes	*3.06*
Insurance	*2.61*
Legal charges	*3.73*
Audit fees	*1.43*
ED under U/S 3(i)of KED Act	*34.38*
Other A&G expenses	*23.47*
Total	***68.68***

4.9 OTHER EXPENSES

4.9.1 The Board has projected the provision for other expenses during 2004-05 at Rs.130crores. Out of this an amount of Rs.43.58 crores is for covering bad debts. The balance amount is presumably towards meeting the expenses in connection with prior period charges. However, the details in this regard have not been furnished in the ARR.

4.9.2 STAKE HOLDERS' OBJECTIONS

The Kerala HT & EHT Industrial Electricity Consumers' Association have raised objection regarding the provision for bad debts on the score that no details as to the constitution of the provision or its derivation has been provided. The Association have stated that although the MERC has adopted this procedure, it has ensured that MSEB had a system for agewise debt analysis and it followed a policy for recognizing only the debt that is time barred under the law of limitation, as the case of non-availability of legal remedies, *etc*. Other Commissions such as APERC and UERC have not adopted this practice since the licensees have no system of determining the extent and nature of the receivables under each category. The objector has therefore pleaded for not allowing the provision for bad debts.

4.9.3 COMMISSION'S OBSERVATIONS

While issuing the order on ARR & ERC for 2003-04, the Commission had directed the Board to take immediate steps to identify bad debts and furnish full information on the writeoffs in respect of this item. However, this information has not been furnished by the Board. The Commission is also not aware whether the provision of Rs.17.41 crores made towards bad debts during 2003-04 has been utilized by the Board. The Commission is inclined to agree to the views expressed by the objectors that the inefficiency of the Board in collecting the outstanding dues should not be passed on to the consumers, as it is not only inequitable but provides the Board with little incentive to improve upon its efficiency and might result in easing of efforts to bill and collect in an efficient manner. The Commission is of the view that there should not be any financial burden on genuine consumers due to inefficiency of the Board and undue advantage taken by the unauthorized or illegal consumers. Therefore, in the absence of a detailed analysis regarding bad debts, the Commission seeks to disallow the provision for bad debts during 2004-05.

The Commission would like the Board to undertake an immediate analysis of the receivables so as to identify bad debts and take necessary action to write them off. The Commission would direct the Board to furnish the details in this regard latest by 31.5.2004.

As regards prior period charges, although the ARR presumably incorporates a provision of Rs.87.42 crores towards this item, it is not possible for the Commission to agree to this figure in the absence of details in this regard in the ARR. However, the Commission would seek to make a provision of Rs.50 crores towards prior period charges during 2004-05.

4.10 STATUTORY SURPLUS/RETURN ON EQUITY

4.10.1 The ARR has made a provision of Rs.155.3 crores towards statutory surplus/return on equity. This has been arrived at based on a rate of 10% return on equity of Rs.1553 crores.

4.10.2 STAKE HOLDERS' OBJECTIONS

The Kerala HT & EHT Industrial Electricity Consumers' Association have stated that return on 3% of NFA would be in the region of Rs.130 crores and therefore there should be a reduction of Rs.25 crores in the return projected by KSEB.

4.10.3 COMMISSION'S OBSERVATIONS

The Commission has examined the provision for return on equity and is of the view that the Board has neither started functioning on commercial lines nor improved its efficiency in vital areas and even during the year 2003-04, the Board depended on subsidy to the extent of Rs.557.56 crores from the Government of Kerala. The Commission is therefore not in a position to agree to the provision of return on equity amounting to Rs.155.3 crores, worked out at a rate of 10% on the equity base, during 2004-05. The Commission seeks to approve only a statutory surplus of 3% of the capital base as at the beginning of the year. The provision for statutory surplus on this basis would work out to Rs.105 crores.

4.11 OVERALL POSITION REGARDING AGGREGATE REVENUE REQUIREMENT FOR 2004-05

Based on the above discussion, the overall position regarding the Aggregate Revenue Requirement for 2004-05 would be as below:

Rs. crores

Item	As per ARR of KSEB	As approved by KSERC
Return/Surplus (a)	**155.30**	**105.00**
Total expenditure (b)	**3766.72**	**3387.46**
Power generation	148.99	100.53
Power purchase	1729.74	1605.00
Interest charges	723.30	618.30
Depreciation	382.27	382.27
Employee Cost	736.64	718.47
Repair & Maintenance	85.25	66.70
Administration & General	69.80	68.68
Other Expenses	130.00	50.00
Less: Expenses capitalized	123.53	123.53
Less: Interest captialised	115.73	98.96
ARR (a+b)	**3922.02**	**3492.46**

CHAPTER V

REVENUE RECEIPTS DURING 2004-05

5.1 REVENUE FROM TARIFF INCOME

Revenue from Tariff Income for 2004-05 has stated to have been projected by the KSEB on the basis of the anticipated consumption by various categories of consumers under different slabs at the prevailing tariff rate under each slab and each category. Details in this connection have been furnished in Data Form 19 attached to the ARR & ERC for 2004-05 filed by the KSEB, which are summarised below.

Sl. No	Category	2004-05				
		No. of consumers	Consumption (MU)	Average monthly consumption (Units)	Average Rate per unit (Rs.)	Revenue (Rs. crores)
	LT					
1	Domestic	5805778	4143	59.5	1.72	711.00
2	Non Domestic/ Commercial	1073155	921	71.5	6.72	619.00
3	Industrial	107430	804	623.7	4.03	324.00
4	Agricultural	400546	223	46.4	0.86	20.00
5	Streetlights	2502	177	5895.3	1.53	27.00
	Sub Total LT	7389411	6268	70.7	2.71	1701.00
	HT					
6	Industrial	987	1214	102500.0	3.76	456.00
7	Non Ind/Non Comm	189	132	58201.0	4.17	55.00
8	Irrigation	51	10	16340.0	3.00	3.00
9	Commercial	579	340	48935.0	4.18	142.00
	Sub Total HT	1806	1696	78258.0	3.87	656.00
	EHT					
10	66 kV	17	270	1323529.0	3.93	106.00
11	110 kV	17	857	4200980.0	3.50	300.00
	Sub Total EHT	34	1127	2762255.0	3.60	406.00
12	Railways	5	50	-	4.00	20.00
13	Bulk Supply	8	203	-	2.66	54.00
14	NPG	44540	8	18.0	-	-
	GRAND TOTAL	7435804	9352	-	3.03	2837.00

The total revenue realisation from tariff is projected at Rs.2837 crores on a total energy consumption of 9352 MU. The revenue from domestic category which consumes 44.3% of the total energy is 25% of the total revenue from tariff where as the revenue from industrial category which consumes 33.6% of the total energy is 42%. While the industrial consumption is expected to come down from 37% to 33.6% over a year, the corresponding decline in revenue from tariff is from 46.3% to 42%.

5.2 REVENUE FROM NONTARIFF INCOME

The revenue from Non-Tariff income for 2004-05 has been projected at Rs.231.18 crores as compared to Rs.240.37 crores during 2003-04. While the revenue from meter rent/service rental is expected to increase to Rs.113.78 crores in 2004-05 from the estimate of Rs.108.76 crores for 2003-04, there would be a reduction in the other non-tariff income from Rs.131.61 crores to Rs.117.4 crores in 2004-05.

5.3 STAKEHOLDERS' RESPONSE

The main objection on revenue receipts came from the Kerala HT&EHT Industrial Electricity Consumers' Association. They have pointed out that the percentage share of domestic consumers in the 0-40 units and 41-80 units slabs are quite high (43% & 29%) and the share of consumers in 301-500 units and more than 500 units slabs are unbelievably low (0.4% and 0.1%). Further, the average unit consumption in all the groups except in more than 500 units category is just above the minimum consumption in that particular category. Out of the total sale of 9350 MU, 4138 MU which is around 44% of the total sale is from domestic consumers. The Association have felt that the revenue calculated from domestic category is much lower than the actual level of attainable revenue from this category. Sri.C.P.Thomas has also questioned the data regarding share of consumption in the upper slabs in domestic category.

5.4 DELIBERATIONS IN THE STATE ADVISORY COMMITTEE

As stated in Section 2.3, the energy requirement projection was discussed in detail by the State Advisory Committee and the Committee recommended that the energy consumption for 2004-05 should be projected at 9300 MU. The Committee also felt that there would be increase in the consumption in the commercial category from what has been projected by the KSEB. These recommendations have been accepted by the Commission.

The KSEB was accordingly asked to re-work the projection for revenue receipts during 2004-05 based on an anticipated total consumption of 9300 MU. These details have since been worked out by the KSEB and the information furnished by KSEB is summarised below:

Sl. No	Category	2004-05			
		No. of consumers	Consumption (MU)	Average Rate per unit (Rs.)	Revenue (Rs. crores)
	LT				
1	Domestic	5805778	4121	1.71	705.00
2	Non Domestic/ Commercial	1073156	920	6.73	619.00
3	Industrial	107430	795	4.03	321.00
4	Agricultural	400546	200	0.90	18.00
5	Streetlights	2502	177	1.53	27.00
	Sub Total LT	7389412	6213	2.72	1690.00
	HT				
6	Industrial	958	1185	3.77	447.00
7	Non Ind/Non Comm	189	137	4.16	57.00
8	Irrigation	51	8	3.30	3.00
9	Commercial	579	352	4.15	146.00
	Sub Total HT	1777	1682	3.88	653.00
	EHT				
10	66 kV	17	291	3.85	112.00
11	110 kV	17	839	3.52	295.00
	Sub Total EHT	34	1130	3.60	407.00
12	Railways	5	60	3.67	22.00
13	Bulk Supply	8	207	2.66	55.00
14	NPG	44540	8	-	-
	GRAND TOTAL	7435776	9300	3.04	2827.00

Based on the above, the revised revenue realisation from tariff is projected at Rs.2827 crores based on a total energy consumption of 9300 MU.

5.5 COMMISSION'S OBSERVATIONS

The low average consumption projected for domestic, LT commercial and LT industrial categories gives credence to the argument of the objectors that the revenue from LT consumers should be substantially higher than the projections made by the KSEB. The average rate per unit for domestic consumers has been worked out by the KSEB as Rs.1.71 and the overall average rate for LT consumers as Rs.2.72. This cannot be considered realistic. As directed in the order on the ARR & ERC for 2003-04, the Commission would suggest that the Board should carry out a thorough scrutiny of the consumption levels in the LT category and the expected revenue there of in order to arrive at the correct position regarding the number of LT consumers slab-wise and category-wise, their consumption and revenue realization. This exercise may also establish whether there is large scale pilferage of energy at LT level.

Discrepancies have also been noticed in the projection for revenue realization in respect of HT Industrial and HT Commercial categories where the average revenue realization per unit based on the prevailing tariff should be higher than that projected by KSEB.

The KSEB was asked to furnish the details of billed energy in respect of various categories of consumers for the previous year up to 31.12.2003 and also the billed demand in respect of each category of consumers. This information has since been furnished by the KSEB according to which the aggregate quantum of billed energy in respect of various category of consumers total to 6546MU with a corresponding billing demand of Rs.2152 crores. Projecting this for a total energy consumption of 9300 MU during the year 2004-05 on an overall basis, the total revenue realization for

2004-05 would work out to Rs.3057 crores. However, on a detailed analysis of the information furnished in respect of each category of consumers, it is found that the billing demand for the period up to 31.12.2003 included some outstanding dues and also meter rent in certain cases. Major problem in this regard was in the case of EHT Industrial consumers. After making adjustments for this anomaly and also correcting the discrepancies in respect of average rate of realization in respect of LT domestic, LT Commercial, HT Industrial & HT Commercial categories, the total projection for revenue receipt from tariff income at the prevailing tariff rates would work out to Rs.2965 crores. The details are furnished in the statement below:

Sl. No.	Category	No. of consumers	2004-05		
			Consumption (MU)	Average Rate Rs/Unit	Revenue (Rs. crores)
	LT				
1	Domestic	5805778	4125	1.84	758.00
2	Non Domestic/ Commercial	1073156	920	7.18	661.00
3	Industrial	107430	795	4.04	321.00
4	Agricultural	393900	196	0.87	17.00
5	Streetlights	2502	177	1.98	35.00
	Sub Total LT	7382766	6213	2.88	1792.00
	HT				
6	Industrial	958	1185	4.00	474.00
7	Non Ind/Non Comm	189	137	4.16	57.00
8	Irrigation	51	8	3.30	3.00
9	Commercial	579	352	4.26	150.00
	Sub Total HT	1777	1682	4.08	684.00
	EHT				
10	66 kV	17	291	3.85	112.00
11	110 kV	17	839	3.52	295.00
	Sub Total EHT	34	1130	3.60	407.00
12	Railways	5	60	3.67	22.00
13	Bulk Supply	8	207	2.90	60.00
14	NPG	44540	8	-	-
	GRAND TOTAL	7429130	9300	3.19	2965.00

As regards non-tariff income, the Commission would accept the projection of an amount of Rs.231.18 crores made by the Board, in this regard.

5.6 EXPECTED REVENUE FROM CHARGES

Based on the above discussion, the Commission would place the expected revenue from charges for 2004-05 at Rs.3196 crores as per the following break up.

		Rs.Crores
1	Income from Tariff	2965
2	Non- tariff Income	231
		3196

5.7 CONCESSIONS FROM THE GOVERNMENT OF KERALA

In the order on ARR&ERC for 2003-04, the Commission had recommended to the Government of Kerala for payment of subsidy to the extent of Rs.375 crores to the KSEB and also grant permission to the KSEB for retaining duty amounting to Rs.182.56 crores. Although the Govt. of Kerala had concurred with this proposal, the subsidy amounting to Rs.375 crores has not been released to the Board during the financial year 2003-04.

During the year 2004-05, the Board had not made any proposal regarding subsidy from the Government or other concessions. The Commission has noted that the electricity duty under Section 3(1) of KED Act payable by the Board to the Government during 2004-05 would work out to Rs.34.38 crores and the duty on the sale of energy under Section 4 of KED Act would work out to Rs.166 crores.

5.8 STAKE HOLDERS' RESPONSE

Many stakeholders have pleaded for honouring the commitment of the Government of Kerala by granting subsidy to the KSEB in cash. This included the Public Affairs Forum, Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association and Confederation of Indian Industry.

5.9 COMMISSION'S RECOMMENDATIONS ON CONCESSIONS FROM THE GOVERNMENT OF KERALA

The Commission would urge upon to the Government to release the subsidy of Rs.375 crores due to the Board, immediately, as non receipt of this amount by the Board may call for borrowing to the extent of Rs.375 crores at high interest rates which may widen the revenue gap during 2003-04.

As for 2004-05, the Commission would strongly recommend to the Government of Kerala to exempt the Board from payment of duty amounting to Rs.200 crores under Section 3(1) and Section 4 of the KED Act, as per the following break-up:

		Rs. crores.
1.	***Exemption from paying ED u/s 3(1) of KED Act***	***34.00***
2.	***Allowing duty collected u/s 4 as grant to the Board***	***166.00***
	Total	***200.00***

CHAPTER VI

TARIFF RATIONALISATION

6.1 INTRODUCTION

In the ARR and ERC for the year 2004-05, the KSEB has not proposed any revision in the present tariff rates to bridge the revenue gap. The categorywise consumption and revenue statement (Data form 19) gives the overall realization rate per unit of various categories of consumers. The KSEB has not provided any information on the method of costing or the cost of providing supply to various categories of consumers except the average cost of supply per unit. Comparing the realization rate with the average cost, it can be seen that the following category of consumers are charged more than the average cost.

1 LT Commercial
2 LT Industry
3 HT Non Industrial/Non Commercial
4 HT Industrial
5 HT Commercial
6 EHT Industry

A cost of service study only can reveal the exact cost of providing electricity to these categories of consumers and the extent of cross subsidy burden that each of these consumer groups is bearing at present.

6.2 COST OF SERVICE STUDY

6.2.1 Methodology

The design of retail tariff shall necessarily be based on the cost of service which is the cost of delivering a unit of electricity to a particular consumer category. The cost of service is also a benchmark against which cross subsidies are measured and the extent of external subsidies are calculated. The Electricity

Act, 2003 calls for elimination of cross subsidies in a phased manner which means that the tariff should reflect the cost of service through a tariff philosophy which would aim to move tariffs closer to class embeded cost.

In its order on ARR for 2003-04, the Commission had directed the KSEB to furnish the details regarding the cost of service to various categories of consumers. The Board has not furnished these details so far. The Board has also not submitted any cost to serve model to reflect the actual conditions regarding supply to various categories of consumers in the KSEB system.

Under the circumstances, the Commission has made an attempt to estimate the cost of service on embedded cost based allocation. The exercise is essentially based on the Aggregate Revenue Requirement as approved by the Commission which is allocated to various categories of consumers based on an analysis of the embedded (historic) cost of the Board. The steps involved are functionalisation, classification and allocation processes. Under functionalisation, value of assets and network costs are subdivided into functional divisions of generation, transmission and distribution. The next step is classification under which each functionalised asset and cost is classified and allocated into distinct components, namely, energy component, demand component and customer service component. Classification relies on the cost causation relationships and is based on the principle why the asset was added and what makes the costs change. Energy component comprises of the variable costs and the demand component comprises of the fixed costs and the network costs excluding the cost of metering, billing, customer servicing, *etc*. The customer service components covers the remaining part of the network cost covering, metering, billing, customer servicing, *etc.*

After fictionalization and classification, the costs are assigned to respective consumer classes. As already stated, both demand and energy requirements are considered for cost assignment to different classes of consumers. The cost arrived thus for each category is fully allocated cost for the category which when divided by the sales of that category gives the cost of service per unit for that category.

6.2.2 Input Data

The input data for the cost of service study are the Annual Statement of Accounts (Provisional) for the years 2000-01, 2001-02 and the ARR for 2004-05.The functionalization of the aggregate revenue requirement for the year 2004-05 into Generation, Transmission and Distribution was done based on the rate base functionalisation for the year 2000-01 as given in the Provisional Accounts. Classification of each of these into capacity related, energy related and consumer related components was done based on load factor, consumer energy and demand. The Feeder Metering Study of KSEB Research Section conducted during 1999 was taken as the basis for the estimation of coincident demand and non-coincident demand for each category of consumers. Cost allocation for each category of consumer was done based on coincident demand, non-coincident demand, number of consumers and energy sold.

Since the results of the study is dependent on the feeder metering data collected from KSEB, the extent of reliability of the results depends on the reliability of this data. Since the data was collected in 1999, the possibility that the consumer behavior and the pattern of subsequent input of various elements of costs have changed, cannot be ruled out. Further, there is arbitrariness to a certain extent in the selection of cost allocation factors. There are many possible allocation factors that can be used in allocating the overall costs to functions and individual consumer classes. Some are related to proportional share of each function or the class in the number of consumers, the measure of plant capacity utilization or the amount of energy used. These deviations could alter the structure of the revenue allocation and for this reason the tariff design might become beneficial to one group of consumers at the cost of others.

6.3 FINDINGS OF THE STUDY

Notwithstanding the above limitations, the study provides a clear indication regarding the cross subsidy element in the existing tariff structure. The study has revealed that the cross subsidies provided by the subsidizing categories vary from 118% to 159%.

6.4 TARIFF RATIONALISATION

Tariffs to subsidized consumer categories result in a high demand by these categories calling for increased capacity requirement and procurement of high cost energy. On the other hand, the subsidizing categories with high tariffs are forced to look for alternative sources of power and clamour for open access and setting up of captive generation. The loss of these consumers to the Board will result in revenue loss to the Board, ultimately leading to increase in tariff to the remaining consumer groups.

As already discussed in the preceding chapters, the industrial consumption at the HT and EHT levels in the State has been gradually coming down and there is a possibility that it may go down still further. The Commission is therefore faced with the formidable task of reducing the cross subsidy and also bridging the revenue gap, through an exercise of tariff rationalization. However, this cannot be undertaken without validating the results of the cost to serve study undertaken by the Commission. The first prerequisite in this connection is updating the feeder metering study by the KSEB along with a survey of the consumers who are connected to the respective feeders. The KSEB should also immediately furnish to the Commission all relevant information in this connection for which a communication will be issued to the Board, separately. It is also necessary for the KSEB to separately carry out a cost-to-serve study and furnish the results to the Commission along with the model used by the Board in the conduct of the study. This is absolutely essential for comparing the study results for appropriate corrections, wherever necessary.

The tariff rationalization involves refixation of cross subsidy. However, the policy of the Govt. of Kerala in the matter becomes crucial especially in the case of domestic consumers who are currently provided with cross subsidy to the tune of Rs.1000 crores per annum.

6.5 STAKEHOLDERS' VIEWS

many stakeholders have raised issues regarding meter rents, service connection charges, OYEC charges, interest on security deposit, penalty for delayed payment, *etc*. Some of the stakeholders have called for reclassification of the tariff categories, under which they are presently covered.

The Commission will appropriately deal with the former issues at the time of finalisation of the regulations on Electricity Supply Code for the KSEB. The issue regarding reclassification of tariff categories will be taken up at the time of tariff rationalization by the Commission.

CHAPTER VII

COMMISSION'S ORDER ON THE ARR & ERC FOR THE YEAR 2004-05

7.1 AGGREGATE REVENUE REQUIREMENT FOR THE YEAR 2004-05

As discussed in the Chapter IV on ARR for 2004-05, the Commission seeks to approve an Aggregate Revenue Requirement of Rs.3492.46 crores as against Rs.3922.02 crores proposed by the KSEB. The comparative details are furnished below:

Aggregate Revenue Requirement: Rs. Crores.

Item	2002-03 (Provisional)	2003-04 As approved by KSERC	2004-05	
			As per ARR of KSEB	As approved by KSERC
Return/Surplus (a)	**80.78**	**91.83**	**155.30**	**105.00**
Total expenditure (b)	**3641.74**	**3606.00**	**3766.72**	**3387.46**
Power generation	166.23	153.32	148.99	100.53
Power purchase	1872.08	1775.13	1729.74	1605.00
Interest charges	672.79	679.26	723.30	618.30
Depreciation	277.10	334.52	382.27	382.27
Employee Cost	670.83	693.64	736.64	718.47
Repair & Maintenance	60.64	66.70	85.25	66.70
Administration & General	51.80	55.88	69.80	68.68
Other Expenses	89.51	76.28	130.00	50.00
Less: Expenses capitalized	118.15	119.80	123.53	123.53
Less: Interest captialised	101.09	108.93	115.73	98.93
ARR (a+b)	**3722.52**	**3697.83**	**3922.02**	**3492.46**

7.2 EXPECTED REVENUE FROM CHARGES

As discussed in the Chapter V on Revenue Receipts, the Commission has projected the total expected revenue from charges at Rs.3196 crores as against Rs.3068 crores projected by the KSEB in the ARR for 2004-05. The comparative break-up is furnished below:

Expected Revenue from Charges: Rs. Crores

Sl. No	Particulars	2002-03 (Provisional)	2003-04 As approved by KSERC	2004-05	
				As per ARR&ERC of KSEB	As approved by KSERC
1	Non Tariff Income	226.27	240.37	231.18	231.00
2	Revenue from tariff	2480.69	2901.00	2837.00	2965.00
	Total Revenue	**2706.96**	**3141.37**	**3068.18**	**3196.00**

7.3 COMMISSION'S ORDER

On the above basis, the Commission hereby approves an Annual Aggregate Revenue Requirement of Rs.3492 crores and Total Expected Revenue from Charges of Rs.3196 crores for the year 2004-05 as against Rs.3922 crores and Rs.3068 crores projected respectively by the KSEB.

The revenue gap of Rs.296 crores arising out of the above estimates is proposed to be met from the concessions and subsidy from the Government of Kerala as per details below:

		Amount Rs. crores
1.	***Exemption to KSEB from payment of ED under Section 3 (1) of KED Act***	***34.00***
2.	***Allowing duty collected under Section 4 as Grant to the Board***	***166.00***
		200.00

The Commission would strongly recommend to the Government of Kerala to exempt the Board from payment of duty amounting to Rs.200 crores as indicated above. This leaves a gap of Rs.96 crores to be bridged during 2004-05.

As already pointed out in the chapter on Tariff Rationalization, most of the burden on tariff rationalisation is required to be borne by the subsidized category of consumers especially in the LT domestic category. It is seen that the cross subsidy currently provided to this category of consumers works out to Rs.1000 crores and in the normal course, a major share of the revenue gap amounting to Rs.96 crores is required to be adjusted against this cross subsidy. However, the policy of the Government is a guiding factor in adjusting the revenue gap in the cross subsidy especially in the case of domestic and agricultural consumers. The Commission would, therefore, look for the decision of the Govt. of Kerala in regard to bridging the revenue gap of Rs.96 crores during 2004-05. If the Govt. of Kerala agree to provide subsidy to the extent of Rs.96 crores to the KSEB, an immediate tariff revision can be avoided.

Pending a decision of the Government of Kerala on the provision of subsidy, the Commission approves the continuance of the existing tariffs and other charges by the KSEB.

In the meantime, the Commission would direct the KSEB to furnish the details as called for in Chapter VI for enabling the Commission in validating the results of the study related to cost of service to various category of consumers. The Board may also separately undertake a cost of service study and submit the details thereof to the Commission for comparing the results for appropriate corrections, wherever necessary.

The Board has proposed truing up of costs and revenues at the end of the financial year and sought permission to submit fuel and other cost adjustment as a separate application.

The Commission seeks to agree to the above proposal subject to the condition that truing up shall be carried out invariably on all items of expenditure and revenue receipts. For this purpose, full details in respect of each item along with supporting data as may be called for by the Commission from time to time should be promptly furnished by the Board.

CHAPTER VIII

COMMISSION'S DIRECTIVES

8.1 RECEIVABLES AND COLLECTION EFFICIENCY

In its order on 31.12.2003 in respect of ARR &ERC for 2003-04 the Commission had suggested creation of a Task Force for going into the details of each case of outstanding dues and take appropriate and urgent action in each case. The Commission had also recommended specific action on the part of the Board to improve the current level collection efficiency to the level of 98-99%. The Board does not seem to have taken any action in both the above areas.

As per the white paper on borrowings and debt servicing furnished by the Board in February, 2004, the outstanding dues as on 31.12.2003 stood at a staggering figure of Rs.1043 crores. Although the Commission had asked for consumerwise analysis and the efforts made by the KSEB in collecting the outstanding dues, the details in this regard are yet to be furnished by the Board.

Even in the case of current dues, the picture does not seem to be very clear as the billing demand and collection details furnished by the Board up to the period of 31.12.2003 do not present the correct position as some outstanding dues and meter rent in certain cases find a place in the furnished data. The Commission would urge upon the Board to take immediate action to correct the discrepancies in the accounts and provide a correct picture regarding the current level demand and collection. In the meeting held with the KSEB on 7.4.2004, it was revealed that the current level collection efficiency stood at 90-92% and the gap is mainly due to non-payment of dues by the Government Departments including the Kerala Water Authority. The Commission would urge upon the Board to take up the matter appropriately with the Government of Kerala for releasing all outstanding and current dues by the Government Departments without fail. The Commission would also call for immediate action by the Board in analyzing the details of outstanding dues and setting up the Task Force for collecting the outstanding dues without any further delay, on a time bound basis.

8.2 COMPUTERIZATION OF BILLING AND METER REPLACEMENT

It is noted from the information furnished and oral submissions by the KSEB that the computerization of billing in KSEB is not progressing as per the schedules earlier prescribed by the Commission. The Commission would urge upon the Board to complete the work of computerization of billing latest by 31st May, 2004, as recommended by the State Advisory Committee.

As per the original schedule submitted by the Board for faulty meter replacement, the programme was required to be completed latest by 31.3.2004. The Board should immediately report the position in this regard to the Commission. The Board should also proceed with the work of replacement of faulty meters on a continuous basis, wherever required.

8.3 SCHEDULES FOR OPTIMIZING INTERNAL GENERATION AND POWER PURCHASE

As suggested in the order of the Commission dated 31.12.2003, the Board should programme the hydro generation on the basis of annual, monthly, fortnightly and daily schedules. These schedules are required to be updated and revised on daily and fortnightly basis depending on the changes in the hydro availability. The schedules for power generation from the Diesel Plants of KSEB and power purchase from external sources are required to be co-ordinated with the schedules for hydro generation and the power generation from Diesel Plants and power purchase from external sources should be regulated strictly on merit order basis. The schedules should also be formalized and reviewed at various levels in KSEB through appropriate Management Information system.

8.4 BORROWINGS AND DEBT SERVICING BY KSEB

As stated in the Chapter IV, the Board has brought out a white paper on borrowings and debt servicing. However, the white paper has not furnished any justification for borrowing made by the Board, during 2003-04. As per the white paper, high interest loans amounting to Rs.2376 crores still remain to be swapped.

As may be seen from Annex I, the white paper does not effectively address the problem of ever increasing debt burden of the KSEB. In Commission's view, improvement of collection efficiency and swapping of the remaining high interest loans are the areas, which require immediate attention by the Board. The Commission would therefore direct the Board to revise the white paper by incorporating a concrete and time bound action plan for improving collection efficiency and swapping of all high interest loans. The revised white paper should be submitted to the Commission latest by 31.5.2004.

8.5 CAPITAL WORKS

The Commission is very seriously concerned about the management of implementation of capital projects by the Board. The expenditure on capital projects during 2003-04 up to 29.2.2004 was only an amount of Rs.243 crores which shows that even the financial progress is tardy. There is no material on record to show that physical progress corresponding even to this meagre investment has been achieved. The Commission would direct the Board to furnish the details of the work program *vis-à-vis* continuing schemes and new works and the details of physical and financial progress of each item of work along with reasons for slippages with reference to the targets. This information should be furnished to the commission latest by 15.5.2004. the information should cover both normal capital works and APDRP schemes.

The Commission would also suggest that hereafter the Board should submit the investment plan well in advance of filing the ARR & ERC. This may cover the details of the projects completed/anticipated to be completed during the year and the balance works spilling over to the year of the ARR and the details of work programme and the financial requirement there of. Similar details of new projects that may be taken up during the year of ARR may also be furnished. The investment plan for new projects should contain all relevant technical and commercial details including the benefits sought to be achieved from these projects.

8.6 INVENTORY CONTROL

Although the Commission, in the order dated 31.12.2003 in respect of ARR &ERC for 2003-04, had called for computerization of the inventory and disposal of unwanted stores, the Board has not furnished any information on the subject. The Commission would direct the Board to furnish a report on the subject latest by 15.5.2004.

8.7 REPAIR AND MAINTENANCE WORKS

Instances like the recent fire incident at the Paruthipara substation of the KSEB points to the state of affairs of repair and maintenance activities in the KSEB. The Commission is of the view that as in the case of capital works, the repair and maintenance works are also required to be taken up on the basis of a well chalked out programme. Presently, there is no such programme for R&M works in the KSEB. In the absence of a planned work programme, it is not possible to establish a correlation between financial progress and physical achievement. The Commission would direct the Board to prepare a detailed work programme for R&M works during the year 2004-05, corresponding to the approved outlay of Rs.66.70 crores. This programme should be submitted to the Commission latest by 31.5.2004.

ACKNOWLEDGEMENT

The Commission acknowledges the hard work put in by the Officers and Staff Members of the Commission in processing the ARR & ERC and issuing this order.

The Commission derived immense benefit from the deliberations of the State Advisory Committee. The co-operation extended by the Tariff and Regulatory Affairs Cell and other formations of the KSEB in promptly furnishing the information and clarifications sought by the Commission has made the job of the Commission easy. The awareness of the stakeholders, though small in number, on the various issues arising out of the ARR & ERC has been excellent. Their suggestions/objections enabled the Commission to focus attention on many vital issues.

C.Balakrishnan	**M.K.G.Pillai**
Member	**Chairman**

Annex I

KERALA STATE ELECTRICITY REGULATORY COMMISSION

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Belhaven Gardens, Kowdiar P O
Thiruvananthapuram 695 003
Ph: 0471 2725951, Fax:0471 2725963
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No.TP2/KSERC/2003/ March 09, 2004

To

Shri.T.M.Manoharan, IFS,
Chairman,
Kerala State Electricity Board,
Vydyuthi Bhavanam, Pattom,
Thiruvananthapuram.

Sir,

Sub: ARR&ERC for 2003-04 - Approval by the Commission-Submission of White Paper on borrowings and debt servicing of KSEB - reg.

I am directed to invite reference to your letter No.KSEB/TRAC/TF 03-04/111 dated 3.3.2004 on the above subject and seek the following clarifications with particular reference to the borrowings by KSEB during 2003-04.

It is seen from the information furnished in the white paper enclosed with the letter under reference that there is no co-relation between the figures furnished in the white paper and the corresponding figures in the ARR & ERC for 2003-04 submitted by KSEB and the order there of issued by the Commission. As regards the borrowings for 2003-04, the ARR and the Commission's order there of contained the following provisions:

(Rupees crores)

	As per ARR	**As approved by the Commission**
Capital Projects	674	472
Revenue Deficit	149	-
Regulatory Asset	385	-
	-------	-------
	1208	472

The Commission had disallowed the provision for revenue deficit and regulatory asset since the revenue gap had come down and there was ample scope of improving the cash flow through collection of arrears. However, although the outstanding arrears as on December, 2003 stood at a staggering figure of Rs.1043/- crores, the white paper does not contain any concrete action taken so far in collecting at least a portion of the arrears during 2003-04, and even during 2004-05 the tentative target indicated is Rs.200 crores. This is quite unsatisfactory and the Commission may not be in a position to increase the tariff for the benefit of the defaulters at the cost of honest and prompt consumers.

It is noted that a loan amount of Rs.1274/- crores has been repaid during 2003-04 as against the scheduled payment of Rs.869/- crores provided for in the ARR of 2003-04. If the excess repayment is made on account of swapping of loans this should be clarified and the white paper modified suitably to indicate the correct position. The provision for borrowing on account of capital investment should also be modified based on the actual expenditure for capital works (The expenditure incurred on capital projects as on 24.1.2004 is only an amount of Rs.205 crores). If any borrowing has been necessitated due to the non payment of subsidy by the Government of Kerala, the amount borrowed on this account may also be clearly indicated. This may, however, call for repayment of corresponding loan amount as and when the subsidy is received from the Government of Kerala.

It is noted from the white paper that the Board has paid on account of Rs.50/- crores pertaining to the purchase bills of NTPC for the past period from November 2002 to May 2003. In this connection, I am directed to invite your attention to the Commission's order on ARR for 2003-04 which *inter-alia* provides for a provision of Rs.76.28 crores for **other charges** covering Rs.58.87 crores towards prior period charges and Rs.17.41 crores towards bad debts. The Board would be entitled to borrow money for making payment against past bills only in the event of such payments exceeding the provision made towards **other charges**. Similarly the white paper states that an amount of Rs.20 crores was paid towards pension liability pertaining to the previous years. Borrowing money for making this purpose is also not justified since the order of the Commission provides for an amount of Rs.343.08 crores towards terminal benefits as against Rs.292.24 crores sought for in the original ARR on the plea of the Board that the increase was necessitated for discharging the past liabilities specifically.

It is, therefore, requested that the white paper may please be revised and resubmitted after incorporating the replies to the above queries.

Yours faithfully,

Sd/-

SECRETARY (IN-CHARGE)

Annex II

KERALA STATE ELECTRICITY REGULATORY COMMISSION

MINUTES OF THE SECOND (SPECIAL) MEETING OF
THE STATE ADVISORY COMMITTEE HELD ON 12.02.2004 AT
GOVT.GUEST HOUSE, THIRUVANANTHAPURAM

Present

1 Shri M.K.G.Pillai, Chairman, Kerala State Electricity Regulatory Commission.
2 Shri C.Balakrishnan, Member,Kerala State Electricity Regulatory Commission.
3 Dr.Dharamveer, Secretary, Food, Civil Supplies & Consumer Affairs Dept, Govt.of Kerala.
4 Shri.S.Jayathilakan, President, Kerala HT & EHT Industrial Electricity Consumers' Association.
5 Shri.M.K.Abdul Majeed, Vice President, Centre for Consumer Protection & Research.
6 Shri.N.Rajendran, Prof. & Head Electrical Engineering Dept, College of Engineering, Thiruvananthapuram.
7 Shri.M.P.Ayyappan, Managing Director, Kerala Power Finance Corporation.
8 Smt.T.R.Indira, Managing Director, Kerala Water Authority.
9 Shri.R.Mohan Doss, Chief Electrical Engineer, Southern Railway.
10 Shri.R.Ramachandran Pillai, Chief Electrical Inspector, Government of Kerala.
11 Shri.M.G.Rajagopal, Director, Energy Management Centre.
12 Shri.Ratna Kumar, General Secretary, Energy Conservation Society.
13 Shri.D.M.Rindani,Executive Director,Bombay Suburban Engineering Services, Kochi.
14 Shri.Rajeswar Datt. GM (Commercial), NTPC.
15 Shri.C.Abdhulla, Member (Distribution), KSEB.

Other members of the Committee, *viz;* Shri.K.O.Habeeb, General Secretary, Kerala State Electricity Workers' Association, Shri.N.Sreekumar, Chairman, Confederation of Indian Industry, Kerala State Office and Shri.K.S.Vijayan, Director, ANERT did not attend the meeting.

Shri.M.K.G.Pillai, Chairman of the Commission and Advisory Committee welcomed the members to the Advisory Committee and extended a warm and hearty welcome to all the participants in the meeting. He stated that on 15th December 2003, the Kerala State Electricity Board had submitted a petition covering the ARR & ERC for the year 2004-05 for approval of the Commission. The Board had projected a total revenue of Rs.3068 crores and a total expenditure (including the statutory surplus) of Rs.3922 crores leaving a revenue gap of Rs.854 crores. Apart from considering the issues arising out of the ARR & ERC filed by the Board, the Committee had a major role in advising the Commission on issues relating to quality, reliability and standards of performance of electric supply provided by the licensees and also protection of consumer interest. However, considering the urgency of according approval to the ARR & ERC, the present meeting of the Committee also might concentrate on the issues arising out of the ARR & ERC as the Stakeholders are generally more concerned about the cost of supply rather than other issues. The other issues which are also equally important for the Committee would be taken up for discussion in the subsequent meetings of the Committee. Chairman, therefore, suggested that while other issues could also be raised, the discussions in the present meeting could mainly concentrate on the ARR & ERC.

The agenda items were then taken up one by one for discussion.

1. **The minutes of the First Meeting of the Committee held on 12.11.2003 were confirmed.**

2. **Orders issued by the Commission since the First Meeting of the Committee held on 12.11.2003 which were circulated along with the agenda notes were taken note of by the Committee.**

3. Energy Requirement projections:

Initiating the discussions, Shri.C.Balakrishnan, Member of the Commission and Advisory Committee stated that for the year 2004-05, the KSEB has projected an Aggregate Revenue Requirement of Rs.3922 crores and a total revenue of Rs. 3068 crores comprising an amount of Rs.2837 crores from Tariff income and Rs.231 crores from Non Tariff income, thereby leaving a revenue gap of Rs.854 crores. So the issue before the Commission was how to bridge this gap of Rs.854 crores. For the year 2003-04, the KSEB had proposed that a portion of the revenue gap should be treated as Regulatory Asset and the balance amount as Subsidy and other concessions from the Government of Kerala. However, for the year 2004-05, the Board had not made any proposal in this regard and it was left to the Commission as to how to bridge the revenue gap. Suggestions in this regard from the Committee members were most welcome. Out of the total revenue requirement of Rs. 3922 crores, an amount of Rs.1730 crores accounted for power purchase which called for maximum attention in the processing of the ARR. The projected energy requirement during 2003-04 was 9080 MU and 9352 MU during 2004-05. The Commission felt that the projections by the KSEB called for some adjustment. The Commission had assessed the energy requirement for 2004-05 at 9200 MU, which could be subjected to discussion in the meeting.

Chairman stated that the energy requirement projection was required mainly to assess the revenue from tariff. Earlier, when the KSEB had projected an energy requirement of 9080 for 2004-05, objections were raised by the Stakeholders regarding the estimates for consumption by various categories of consumers and the number of consumers under each category. But even though there were some inaccuracies in some areas, the Commission found that the estimate of 9080 MU was by and large realistic. In this connection, the Commission asked the KSEB to furnish the details of actual consumption of energy up to 30.11.2003. Based on the details of actual energy consumption upto 30.11.2003 furnished by KSEB, the Commission made projection for the consumption for the whole year based on the normal growth of energy during the remaining period of the year 2003-04. The projection for energy consumption during 2003-04 on this basis worked out to 8800 MU as against 9080 MU projected by the KSEB in the ARR for 2003-04. By projecting these estimates into 2004-05, after allowing for normal growth in the various consumer categories, the probable energy consumption during 2004-05 would work out to 9200 MU as against the projection of 9350 MU by KSEB. The consumption by EHT Industries was maintained at the same level as in 2003-04, while 5% load growth was assumed in all other categories. The Commission would call for fine-tuning of these estimates by KSEB based on a segmented approach by developing load curves in respect of each category of consumers. This was essential from the point of view of addressing the issues regarding load management, reduction of losses and cost of service.

Shri.S.Jayathilakan, President of the Kerala HT & EHT Industrial Electricity Consumers' Association stated that as far as industries were concerned, the climate in Kerala was not encouraging. The Commission should take appropriate steps to reduce the burden on industries due to high electricity tariff, in order to enable the existing industries to continue rather than shutting down as well as attract more industries to come to the State. The industry had been requesting the KSEB, for many years, to introduce incentive measures related to load factor and power factor, but nothing had been done so far. He requested the Commission to look into this aspect and introduce some formula so as to reduce the high tariff burden on industries.

Shri.Jayathilakan stated that in the case of HT Industries there was a reduction in projection from 1325MU in 2003-04 to 1214 MU in 2004-05. The position was still worse in the case of EHT Industries. INDAL had gone out. EHT consumption got reduced from 1321 MU to 1126 MU mainly because of INDAL. Other industries were also thinking of other sources of electricity. For *e.g.,* Hindusthan Organic Chemicals were using their own captive sources for supply. As a result consumption by EHT industries had drastically gone down. Incentives were being provided by other Electricity Boards like Maharashtra to industrial consumers. He requested the Commission to look into this aspect and bring back the industrial consumption at least to the previous levels.

On a query from the Chairman, Shri.Jayathilakan stated that he would communicate his views on the estimates for energy consumption during 2003-04 and 2004-05, subsequently.

Mr.Abdul Majeed, Vice President, Centre for Consumer Protection & Research stated that the projections suggested by the Commission were reasonable. He called for providing tariff Incentives to the Small Scale Industries, as the existing provisions were not attractive.

Shri.N.Rajendran, Prof. & Head of the Department of Electrical Engineering, College of Engineering Trivandrum stated that the revenue deficit during 2003-04 had come down from Rs.926 Crores to Rs.557 Crores. The reason given for revenue gap was non-receipt of subsidy from the Government. While the subsidy from the Government could reduce the revenue gap, collection of huge arrears due to the Board could considerably improve the finances of the Board. Efficient steps should be taken to collect the arrears. T&D loss reduction was another important aspect for which necessary steps were required to be taken on top priority.

Shri.M.P.Ayyappan, Managing Director, Kerala Power Finance Corporation Ltd., stated that there was reduction of consumers in HT &EHT category and increase in LT Category. For new Industries requiring power supply at HT&EHT level, land cost and labour cost were high in Kerala. Although power was available at low tariff till recently, many industries were not in a position to afford the present tariff.

Smt.M.P.Indira, Managing Director, Kerala Water Authority stated that for all Departments, the major revenue was from industries. As far as Water Authority was concerned 5% of water consumption by industries brought in about 40% of the revenue collection. It was therefore necessary to promote industrial consumers. Industries could grow in Kerala if some concessions were offered. KSEB should take appropriate steps to retain the industries. There was need to go in for appropriate energy conservation measures so as to reduce energy consumption.

Shri.R.Mohandoss, Chief Electrical Engineer, Southern Railway stated that Railways' consumption was growing at the rate of 10% . On this basis, it was reasonable to assume a consumption level of 55 - 60 MU for Railways during the year 2004-05.These estimates were based on periodical reviews undertaken by the Railways at regular intervals. As regards overall projections, consumption by Small Scale Industries were increasing and that by major industries were coming down. Industries were getting attracted to States like Chattisgarh, *etc*; where Electricity was being offered at very low rates. Since KSEB was meeting most of its requirement through power purchase, it was functioning like a Power Trading Corporation and the cost of power purchase from certain sources was high. This was the reason why certain consumers like major industries were opting for open access. Railways were also in a similar difficult situation. Shri.Mohan Doss also mentioned about the high cost of energy supplied at about Rs.10 per unit to Railway colonies. He also referred to difficulties in making payment against a large number of bills raised by different Offices of KSEB at different locations within the stipulated time.

Shri.Mohan Doss suggested realistic assessment of energy consumption based on market research and economic power purchase to meet the requirement.

Mr.R.Ramachandran Pillai, Chief Electrical Inspector, Government of Kerala stated that the projections made by the Commission were reasonable. Regarding the industries, he felt that importance should be given to the existing industries. Most of the industries were concentrated around Palakkad. Infrastructure growth of a State could only be measured by the growth of its industry. Industries should be given priority. Regarding dues to the Board from Government Departments, the Government had been taking measures to clear the arrears up to 31-3-2003. The Government were also considering measures like provision of subsidy, exemption of duty, *etc*., for attracting new industries.

Shri.M.G.Rajagopal, Director, Energy Management Centre, stated that while considering open access, the Commission should take into account what was the actual situation regarding industries, whether there was adequate profit or not. Profitable industries should be given open access. He felt that with the boost in commercial activities like tourism, the consumption in commercial category was likely to be higher than that estimated by the Commission.

Shri.D.M.Rindani, BSES, stated that there was no view other than that. Industries should stay in Kerala by reducing power cost. Naphtha based power station could be set up very fast but the price of the fuel was very high. He felt that Naphtha should be imported at export parity price and this should bring down the price by Rs.500 per ton. BSES were having a discussion on this with IOC. In Kerala if anybody brought the fuel from outside, 22% entry tax had to be paid. They had written to the Chairman of KSEB and Govt. of Kerala for a favourable decision in removing the entry tax. Shri.Rindani felt that natural gas was the only solution in reducing the cost and LNG was not a solution in the long run.

Shri.Rajeswar Datt, GM (Comml.), NTPC stated that the industries should be encouraged through appropriate tariff concession. Cost of supply to the industries could be reduced by utilizing surplus power during night and other off-peak periods. This measure would also improve the PLF of existing thermal power stations on which there was already a liability of incurring the fixed cost.

Shri.Abdulla, Member (Distribution) stated that LT industry consumers were growing, as there was encouragement to small-scale industries by giving concessions in tax, *etc*; by the Government. Another reason was the limit of 150 kVA for availing supply at HT. HT Commercial consumption was growing due to growth in tourism and hotel industry, self-financing educational institutions, hospitals, commercial complexes, *etc*. In so far as EHT consumers were concerned, they enjoyed some concessions during off-peak periods. More concessions based on load factor and power factor could be considered. For new EHT consumers, pre 92 tariff rates were applicable for five years. Many furnace and steel industries shifted from Kerala after availing the concessions for five years. This was one of the reasons for reduction in EHT consumption. As regards INDAL, although open access was allowed, they were not in a position to obtain assured power supply from PTC on a sustained basis. It appeared as if INDAL had to depend on KSEB for at least for 50% of their requirement. EHT consumers were not likely to get assured power from PTC on a long-term basis.

KSEB also stated that micro level projection was based on historical data for the last 5 years. The projections for the last 2-3 years were made on this basis. Although 2-3 industrial consumers had gone out, new consumers could be expected. The tariff should act as a motivating factor. KSEB was not at all happy to loose the consumers. Incentives had to be given. However, the major problem was the power cost. Rationalization of tariff was necessary and the Board would always try to accommodate the industries.

Dr.Dharmveer, Secretary, Consumer Affairs Department stated that if the projections of KSEB were based on historical data for 5 years, the details as to how the projections were based on the 5 year data should be furnished.

Chairman stated that basically there were two problems. Industrial consumption at HT & EHT level was coming down. On the other hand, industrial consumption at LT level was growing. This was not a healthy trend from system consideration as it could result in overloading of the already strained LT system and thereby increasing the system losses. This would also defeat the objective of reducing the HT- LT ratio. Steps were therefore necessary to reverse this trend. He called for specific suggestion from

the Members for overcoming the problem. Chairman also mentioned about the anomaly in the data furnished by KSEB regarding LT Agricultural and HT industrial categories. While there was a reduction in the LT Agricultural consumers from 45200 in 2003-04 to 40000 in 2004-05, their consumption was increasing from 199 MU to 223 MU. In the case of HT Industrial consumers while the number of consumers increased from 931 in 2003-04 to 987 in 2004-05, their consumption was reducing from 1325 MU to 1214MU. He called for verification of the data furnished by KSEB in this regard. As regards the energy consumption estimates for 2003-04 and 2004-05, he called for specific suggestions from the Members.

Shri.C.Balakrishnan, Member of the Commission, stated that while earlier the limit for LT connection was 100 KVA, this had been subsequently raised to 150KVA and probably this could be the reason for increase in LT industrial consumption.

Shri.Jayathilakan, President, Kerala HT & EHT Electricity Consumers' Association felt that it was not healthy to encourage consumption at LT level and if necessary, the limit for LT connection should be lowered to 100 KVA.

After further discussions on the subject, the Committee unanimously came to the conclusion that Commission should take necessary steps to promote industrial development and increase industrial consumption. Necessary steps were also necessary to arrest the growth of industrial consumption at LT level. The KSEB should evolve requisite strategies in this regard and come up with necessary proposal thereof before the Commission.

As regards estimates for energy requirement, the Committee felt that the estimate might undergo an upward revision on account of higher load growth in respect of Railways and commercial activities covering tourism and service sectors. The dry spell was another contributing factor. Taking these into account, it was recommended that the estimates for energy requirement should be placed at 8900 MU and 9300 MU respectively for 2003-04 and 2004-05. The KSEB should immediately furnish the categorywise break up on this basis along with the actual billing details up to 31-1-2004, to the Commission, immediately.

Transmission and Distribution losses:

Sri.C.Balakrishnan, Member of the Commission stated that the KSEB had projected the T&D loss at 26.03% for 2004-05 by anticipating a loss reduction of 2% from the previous year's level. The losses had two components, *viz.,* technical and commercial including pilferage and theft. If the energy charges increased there was a tendency for theft. Transmission losses should be reduced by 3%. In view of the large programme of meter replacement and system improvement, high level of T&D losses projected by the KSEB for 2004-05 could not be justified. In Commission's view, losses should be contained at the level of 24.8% as against 26.03% projected by the KSEB.

Chairman stated that there might be some adjustment in the loss estimation for 2003-04 in view of the foregoing discussion on projections for energy consumption. However, since the corresponding energy input was also likely to increase, there might not be much variation from the projected figure for 27.8% for 2003-04. It was essential to bring down the losses by 3% during 2004-05, even if extra efforts were required to achieve this target.

Shri.Rajagopal, Director, EMC stated that length of LT lines were increasing and most of the technical losses were taking place in the LT system. KSEB should take suitable measures to bring down the HT-LT ratio so as to reduce technical losses. Suitable measures were also required to reduce commercial losses.

Shri.Mohandoss, Chief Engineer, Railways stated that the Board should work out separately the quantum of technical loss and commercial loss and take appropriate measures to reduce the losses in both cases. The KSEB should identify areas and sub areas involving high losses and entrust the work of loss reduction to responsible officers. Areas should be clearly demarcated and responsibility fixed. He felt that if the charges were more, people had the tendency to consume less.

Shri.Ramachandran Pillai, Chief Electrical Inspector stated that KSEB should reduce the loss is by 3%. Problems in metering should be tackled. There was also need to check harmonic distortion in the case of HT consumers.

Shri.Ratnakumar, General Secretary, Energy Conservation Society stated that large number of digital meters were required to address the problem of loss reduction. He queried whether there was any system of assessing the quality of digital meters.

Prof.Rajendran, Professor and Head of Electrical Engineering, College of Engineering Trivandrum stated that short term and long term measures were required for loss reduction. In the short term, energy output at the transformer point and the energy input at consumer end could be easily measured. In the long term, EHT line loading study should be measured. Some lines would be lightly loaded and others heavily loaded. This phenomenon should be identified and load distributed through appropriate technical measures.

Shir.Rajeswar Dutt of NTPC stated that proper base data was necessary for loss reduction and felt that 3% loss reduction during a year was quite reasonable.

Shri.Jayathilakan, President, Kerala HT & EHT Industrial Consumers' Association stated that 3% reduction of AT&C loss was sustainable by KSEB. Most of the losses were taking place at 11kV and below. Due to the inadequacy of the transmission, there had been constraints in bringing power into Kerala. Much attention had not been given by the Board in the development of Transmission network. Losses could be reduced only through accurate metering. The requisite data was not forthcoming from the Board, as to how many meters were faulty, how many meters replaced and how many meters yet to be replaced. Shri.Jayathilakan felt that a target of 3% for loss reduction during 2004-05 was reasonable.

Shri.D.M.Rindani of BSES stated that since their power plant situated near to the load centers, it served to reduce the transmission loss. This aspect should be considered while preparing merit order despatch by the KSEB.

Shri.Abdul Majeed, Vice President, Centre for Consumer Protection and Research stated that 3% was a very reasonable target for loss reduction during the year 2004-05. He suggested that, if necessary, the Board should set up a task force for achieving the target of 3% and knowledgeable staff should be assigned for the work.

Shri.Abdulla, Member (Distribution) KSEB stated that as regards technical losses, the HT-LT ratio was presently 1:6. A lot of investment was required to correct the situation. Taking advantage of the APDRP scheme, Board was planning to construct 11 kV lines. 3 circles had been selected by Govt. of India for the scheme, which covers construction of 900 kM of 11 kV lines. Out of this, 500 kM of 11 kV had already been constructed. The assistance covered 25% grant and 25% loan from the Govt. of India. The balance 50% was loan from REC. This year's programme covered 3 circles and 7 towns. Out of 10 lakh meters under APDRP scheme, 5 lakh meters had been procured. Energy audit was also covered under the scheme. Work of replacement of Electro mechanical meters with electronic meters would be completed by 31-3-2004. The entire project would be completed by 31-3-2005. Accountability was an essential feature of the programme, which was being ensured through Memorandum of Understanding. The Board had submitted a proposal for APDRP schemes in 17 towns during next year. Regarding EHT lines, 66 kV lines were being upgraded to 110 kV and 1148 Kms. of 11 kV lines upgraded to 33 kV using REC funds. In addition to upgradation, old 66 kV lines would be replaced by 110kV and 220kV. As regards Commercial losses, there was a tendency by consumers to make meters faulty. Penalty worth Rs.9 Crores had been imposed on consumers charged with theft and pilferage. Antitheft squads had been formed at circle level also. Theft was also taking place during nighttime and it was difficult to carry out inspection in the night. During the current year, the Board could achieve only 2% reduction. As EHT energy loss was low, efforts were on the distribution side, to reduce technical and commercial loss. As regards procurement of meters, orders were also placed on the United Electrical Industries, as they were the lowest.

The Board had achieved 99% billing efficiency and the collection efficiency was around 92%. As regards computerization of billing, work on software was almost complete and hardware procurement was in progress. The work for the entire State would be completed by December, 2004.

Chairman stated that accurate metering and computerization of billing were the prerequisites for any loss reduction exercise. For ensuring accurate metering, it was necessary to ascertain the exact position regarding the number of faulty meters and the programme for their replacement. Cent percent computerization of billing was essential for checking abnormalities in consumption with reference to the connected load. The Board should complete the work in these two areas on war footing. The time frame for completing computerization work proposed by the Board was abnormally long and efforts should be made to complete the work by March 2004 as stipulated earlier by the Committee and in no case it should not get extended beyond a period of two months.

After further discussions on the subject, the Committee recommended that during 2004-05, a loss reduction of 3% should be achieved from the level of that obtaining during 2003-04. For this purpose the Board should furnish the details of actual energy consumption and energy input into the KSEB system (as on date) to the Commission for assessing the actual AT & C loss during 2003-04. The Board should take all possible steps for achieving a loss reduction of 3%. These should cover replacement of all faulty meters by 31st March 2004 and computerization of billing in all sections latest by 31st May, 2004. The Board should also furnish the details regarding the present position of faulty meters and their replacement programme to the Commission immediately.

Revenue Realization:

Shri.C.Balakrishnan, Member of the Commission stated that collection efficiency had not improved. The Commission had set up a target of 98% for current level collection. For realizing the outstanding arrears, a task force was required to be set up as directed by the Commission. Unless some drastic measures were taken, things would not improve.

Chairman stated that separate accounts were required to be maintained for collection against current level billing demand and collection against outstanding arrears. Board's cash flow position would improve only if atleast a part of the outstanding arrears was retrieved. A detailed exercise was required to be undertaken by the Board for analyzing each case of outstanding arrears.

Shri.Jayathilakan stated that the cases of outstanding arrears should be segregated on the basis of nature of disputes, court cases and the period of duration of each case. The Board should take immediate action on the directive issued by the Commission vide para 7.1 of the order on ARR & ERC for 2003-04.

Shir.D.M.Rindani stated that prompt follow up and monthly review of each case was necessary to improve collection against outstanding arrears.

Shri. Rajagopal stated that as per certain directives from the Government, it was easy for the Board to recover the pending arrears from private parties.

Shri.Ramachandran Pillai stated that it should not be difficult for the Board to segregate the defaulters in appropriate groups.

Shir.Mohan Doss stated that ABC analysis was necessary and the Board should concentrate on A&B categories. C category amount might not be very significant. As regards arrears from Government Departments, discussion should be held at Secretariat level and Government help sought. Action should be taken to write off bad debts.

Shri.Mohan Doss also mentioned about present practice of calculating maximum demand of Railways on the basis of different sections although the correct method could be to base it on simultaneous demand for the system as a whole.

Prof. Rajendran stated that details of defaulters should be computerized for categorization and monitoring action in each case. Adalats could be considered for one time settlement.

Shri.Ratnakumar stated that the Government has decided to close down some of the Public Sector Undertakings in Kerala. Payment of dues by these Undertakings could be taken up with the Industries Department. Realization of arrears could also be achieved by attaching the assets like Land and Building of such Undertakings. Regarding collection of arrears, specific targets should be fixed. Serious efforts should be made by the KSEB for collecting the long outstanding arrears.

Shri.Rajeswar Dutt stated that it was necessary to improve the current level billing and collection. As suggested by the Commission, a Task Force should be set up for time bound collection of arrears.

Shri.Abdulla stated that regarding segregation of accounts for current billing demand and arrear collection had started from December 2003, onwards. The collection from Government Departments and Public Sector Undertakings was only 5-6%. The arrears from Kerala Water Authority amounted to Rs.180/- crores. This formed part of revenue gap. Billing efficiency was nearly 100%. As regards Adalats, KSEB had given chance to consumers with long pending arrears. An amount of about Rs.10/- crores was received from defaulting LT consumers by allowing 12% interest instead of 24%. The response was very good. The Task Force as suggested by the Commission would be formed shortly. Regarding outstanding payments from Government Departments, the Board had been discussing with Govt. Secretaries. As a result of this, Minor Irrigation Department paid an amount of Rs.18/- crores out of an arrear of Rs. 24/- crores. The current level collection efficiency was about 92%.

On a query,Shri.Abdulla replied that the Government Departments including the Kerala Water Authority was not paying even the current bills. The Government Organizations included Govt. offices, Educational Institutions, Police Stations, *etc.*

Chairman felt that discrimination between private consumers and Government Departments was not desirable and the treatment should be same for all consumers.

After further discussion on the subject the Committee recommended that the Board should resort to disconnection of supply of all defaulting consumers for non-payment within the specified time limit and only exception could be institutions like Hospitals, etc.

6. Power Purchase:

Shri.C.Blalakrishnan, Member of the Commission stated that the Board had projected an expenditure of Rs.1730 Crores towards power purchase in the ARR for 2004-05, which was based on a hydro generation of 5500 MU during 2004-05. Shri.Balakrishnan felt that there was scope for reducing expenditure on power purchase through optimum scheduling.

Chairman stated that the hydro availability based on a normal monsoon was 6600 MU while the Board based its power purchase requirement on the basis of 10-year average hydro availability of 5500 MU. It was difficult for the Commission to allow the power purchase cost on the basis of this lower figure. It would be appropriate to base the power purchase requirement based on an availability of atleast 6000 MU which was considered modest. Chairman suggested that in case the actual availability was lower than this figure, the Board could be compensated through a surcharge on tariff after assessing the extent of short fall. The Board should schedule the power purchase strictly on merit order basis. In implementing this, the Board should strictly follow the directives of the Commission regarding preparation of annual, monthly, fortnightly and daily schedules and their continuous updating.

There was scope for huge quantum of UI exports by using the flexibility in storage hydro and this might provide opportunity for Kayamkulam and BSES stations to maintain some level of generation even during high water period. However these stations should endeavor to reduce the variable charges as the Commission would insist on power purchase strictly on merit order basis. Chairman also felt that as per the draft tariff order for Central Generating Stations issued by the CERC, there was scope for reduction in fixed as well as variable cost in respect of these Stations and therefore the 5% increase over last year's level projected by KSEB for power purchase was not justified.

Shri.Jayathilakan fully agreed with the views expressed by the Commission.

Shri.D.M.Rindani stated that there should be transparency on the mode of application of merit order in respect of power purchases.

Shri.Rajeswar Dutt of NTPC stated that the estimates and projections for power purchase should be based on past performance and felt that the availability from Ramagundam and Talcher station should not be more than 80%.

Shri.Ratnakumar stated that the peak load demand from domestic consumers had increased for the last 10 years. Awareness programme through visual publicity by KSEB should be undertaken to reduce consumption during peak periods.

Shri.Abdulla stated that the projection for hydro generation during 2004-05 was based on the historical data for the last 10 years. Since there was severe draught during the last two years, the reservoirs might not get filled up to the expected levels due to water absorption by dry sand. The Board felt that this aspect should be kept in mind while revising the estimates for hydro availability.

The Committee held detailed discussion on the ways and means of reducing the cost of generation for Naphtha based Power Stations. It was stated by BSES and NTPC representatives that discussions were being held with the oil companies for allowing export parity price for import of Naphtha. The other issue was the entry tax imposed by the State Government for which Government of Kerala was being approached. As regards fuel conversion, it was felt that both the options by LNG and natural gas should be examined and BSES and NTPC should work in co-ordination with KSEB for a feasible solution in the shortest possible time.

After further discussions on the subject, the Committee felt that the estimates for power purchase should be based on hydro availability of 6000 MU and the schedules for power purchase should be modified accordingly. The power purchase should be made strictly on the basis of merit order and the Board should optimize the cost of power purchase through maximum UI exports. The schedules should be reworked on the basis of feasible UI exports. BSES, NTPC and KSEB should work in co-ordination to realize export parity price for import of Naphtha and obtain exemption for entry tax from the State Government.

Debt Servicing:

Shri.C.Balakrishnan, Member of the Commission stated that the debt burden of the Board was on the increase and appropriate measures should be taken to contain this.

Shri.Mohan Doss, Chief Engineer, Southern Railway stated that the interest burden on loans could be considerably reduced by swapping.

Shri.Jayathilakan stated that KSEB was doing what the Kerala Water Authority and the Government were doing. Board should comply with the directives of the Commission regarding borrowings.

Chairman stated that as per the information furnished, the total borrowings during 2003-04 amounted to Rs.1125 Crores while the money spent on capital works was only Rs.205 Crores. The projection in the ARR contained the following provisions:-

	Rs. Crores
Capital projects	674
Revenue Gap	149
Regulatory Asset	385
Total	1208

The Commission had however agreed only to a provision of Rs.482 Crores against the above proposal. This clearly showed that the Board was not borrowing money as per the projections made in the ARR and the approval of the Commission there of. This was not a desirable situation and Board should furnish full justification for borrowing an amount of Rs.1125 Crores during 2003-04.

Shri.Abdulla, Member KSEB stated that the main problem was non-receipt of the subsidy from the State Government. This coupled with the repayment burden had necessitated borrowings to the extent of Rs.1125 Crores. The Board however agreed to furnish the details of the borrowings and full justification for their utilization.

After further discussions on the subject, the Committee felt that the Board should maintain utmost financial discipline and comply with the directives of the Commission in this regard. The Board should come out with the details as to how the actual borrowings exceeded the amount approved by the Commission.

7. Employee Cost:

Chairman stated that there was a steady increase in employee cost over the years.

Shri.Jayathilakan stated that out of the total projected employee cost of Rs.737 Crores, terminal benefits alone accounted for Rs.375 Crores which was more than what had been due to the existing employees. This situation should be corrected. It was necessary to conduct a study of the wage structure of other Public Sector Undertakings and Government Departments. Increase in salary and allowances should be at par with other Public Sector Undertakings and special consideration for Board Employees should be discontinued.

Shri.Abdul Majeed suggested increase in the retirement age to resolve the problem. He felt that administrative expenses should be reduced or controlled.

Chairman stated that a study on improving the productivity of employees should be undertaken on priority. The problem of excess staff could not be resolved through abolition of non-operational posts alone. Manpower reduction should be attempted with the consent of the employees through introduction of Voluntary Retirement Schemes.

Shri.Ratnakumar, General Secretary, Energy Conservation Society felt that manpower reduction was absolutely necessary for the survival of the Board.

After further discussion on the subject, the Committee felt that it was necessary to improve employee productivity in the Board. The Committee recommended that the Board should examine the feasibility of introducing an appropriate Voluntary Retirement Scheme.

8. Capital Works:

Chairman felt that that the expenditure on capital works up to December 2003 was only an amount of Rs.205 Crores as against the projection of Rs.500 Crores for the whole year. The details of physical progress of the projects and ways and means of overcoming the delays were not available. Even in the case of the programme for 2004-05 which projected an outlay of about Rs.700 Crores , the details of transmission and distribution projects were not available. Under the circumstances, there was no justification for the proposal to borrow an amount of Rs.800 Crores towards capital works during 2004-05. In the absence of close monitoring, budgetary control of the project would also become difficult. The quantum of work in progress was quite substantial. A suitable mechanism should be evolved at the Board level to resolve this problem.

After detailed discussions on the subject the Board agreed to furnish full details regarding the capital works during 2003-04 and 2004-05. The committee recommended that the matter regarding project management, monitoring and control should be discussed at the Board level and suitable mechanism evolved to dealt with it.

9. Inventory Control:

Chairman stated it was feasible to computerize the inventory only after manual stock taking was complete. It was not clear from the information furnished whether adequate information was available on the stock position.

Shri.Abdulla, Member, KSEB, felt that the quantum of dead inventory was small.

After detailed discussion on the subject, the Committee called for completing the stock taking of the stores at the construction sites on war footing and disposal of unwanted items followed by computerization of the inventory. The Committee felt that the entire exercise should be completed within a period of 3 months.

The meeting ended with a vote of thanks by the Chairman for the valuable contributions and suggestions made by the members at the Committee and other participants including the staff of the Commission for making the meeting a success.

Annex I

Advisory Committee Meeting Held on 12.02.2004

Participants other than the Members of the Committee

KSEB

1. Dr.S.Murugiah, Member (Finance)
2. Shri.M.Ravindran Nair, Dy.Chief Engineer (TRAC)

NTPC

3. Shri.N.Kannan, Additional General Manager (Commercial), SR HQ.
4. Shri.Y.V.Rao, AGM (O&M), Kayamkulam.
5. Shri.J.Mammen, Dy.General Manager (Commercial), Thiruvananthapuram.

BSES

6. Shri.R.R.Nair, Chief Engineer.

Annex III

LIST OF OBJECTORS ON ARR & ERC

1. Executive Director,
   Agency for Development of Acquaculture,
   Kerala.
   T.C.15/1494, ‘Reeja’,
   Michin Road,
   Thiruvananthapuram – 14.

2. S.K.Unnikrishnan Nair,
   ‘Nishanth’,
   Moovattupuzha P.O.
   Ernakulam District.

3. Dominic.J.Mechery
   Secretary,
   The Association of Planters of Kerala,
   P.B.No.1178, Pattom Palace P.O.
   Thiruvananthapuram – 4.

4. President,
   Chamber of Commerce,
   Chamber Buildings,
   Main Road, Payyanur – 670 307.

5. Mariyil Krishnan Nair,
   Vice President, President Idukki District.
   Thodupuzha.

6. Managing Trustee
   A.P.Udayabhanu Endowment Trust,
   Bhadra Deepam, Kallampally,
   Thiruvananthapuram.

7. General Secretary,
   Consumer Protection Centre of Kerala,
   Murinjapalam, Thiruvananthapuram – 695 011.

8. Radhakantan Thirumulpad,
   Rtd.KSEB Employee.

9. Sasi.B.Mattam,
   Mattathil Veedu,
   Kudayathoor P.O. Thodupuzha.

10. L.Suresh,
Honourary Secretary,
South Indian Film Chamber of Commerce,
TR Sundaram Avenue, Post Box No.6226
604, Anna Salai, Cathedral P.O.
Chennai – 600 006.

11. K.Kuriakose,
General Secretary,
Kerala Hotel and Restaurent Association,
2nd Floor, KHRA Bhavan, M.G.Road,
Cochin – 682 035.

12. M.Paramasivam
Director,
Paragon Steels Private Ltd.
Precot Mill Colony, Kanjikode (West),
Palakkad – 678 623.

13. Syamkumar. R.
Company Secretary,
Asianet Satellite Communications Ltd.
3rd Floor, Karimpanal Arcade,
East Fort, Thiruvananthapuram – 695 023.

14. President,
The Sea Food Exporters of India,
Sea Food House, Willington Island,
Cochin – 682 003.

15. S.Jayathilakan,
President,
Kerala HT & EHT Industrial Electricity Consumers' Association,
Productivity House, Jawaharlal Nehru Road,
Kalamassery – 683 104, Ernakulam District.

16. J.Mammen,
Deputy General Manager (Commercial)
NTPC, TC 16/1897 (1), Gowreesapattom P.O.
Thiruvananthapuram – 695 004.

17. General Secretary,
Kerala Film Exhibitors Federation,
T.C-9/171,
Mission Quarters,
Thrissur – 680 001.

18. S.P.Ravi & C.G.Madhusoodhanan
Chalakudy Puzha Samrakshana Samithi
Chaithanya, Moozhikkakadavu,
Pariyaram P.O. Chalakudy,
Thrissur 680 721.

19. N.Sreekumar
Chairman
Confederation of Indian Industry (CII)
Kerala State Office,
Building No.27/2567, L-1, Plot No.471
Opposite Cochin Passport Office,
P.B.No.4257, Panampilly Nagar,
Kochi – 682 036.

20. Narendra Kumar
Deputy Chief Electrical Engineer
Traction Distribution
Southern Railway
Headquarters Office,
Electrical Branch,
Chennai – 600 003.

21. Xavier Thomas Kondody
State President
Kerala State Small Industries Association
2nd floor, Veekay Towers,
Beerankunju Road,
Kochi – 18.

22. M.N.V.Nair
Chairman
Public Affairs Forum,
KP-11/153C NCC Nagar,
Peroorkada, Thiruvananthapuram – 695 005.

23. C.P.Thomas
Chief Engineer K.S.E.B (Retd.)
Chirakadavil House, Kodimatha,
Kottayam.

24. Suresh George,
State Co-ordinator,
N.A.P.M. Piravam P.O. Ernakulam.

Annex IV

DETAILS OF OBJECTIONS OF STAKEHOLDERS AND BOARD'S REPLY

1. Agency for Development of Aquaculture, Kerala

Extract of Objections / Suggestions / Requests of the Stake Holder	KSEB's Response
While using electricity in aquaculture the farmers are bound to pays Rs 6/unit as against 62 paisa/unit for agriculture purpose. It is requested to consider the case of reducing the electricity tariff for aquaculture on par with agriculture so that the farmers will be benefited	• Aquaculture is included under LT IV, industrial tariff which is also a subsidized rate at present as compared to the cost of supply of power. Unlike agriculture, aquaculture is an organized industrial activity. Therefore, the Board does not favour any change in the existing categorization of the Consumer. • In the ARR for 2004-2005, the Board has not made any proposal to bridge the revenue gap. The commission may decide the request.

2. S.K Unnikrishnan Nair, Nishanth, Muvattupuzha, P.O, Ernakulam

Extract of Objections / Suggestions / Requests of the Stake Holder	KSEB's Response
The existence of KSEB from 10-12-03 is in question How can the ARR &ERC for 2004-2005 be accepted.	The ARR & ERC for 2004-05 was submitted to the commission as per section 61 of the Electricity act 2003. At present the Board is continuing to be the composite body. If there is any change in the organizational structure in future, separate ARR will be submitted at that time as may be directed by the Hon'ble Commission.
How transmission loss will affect the tariff rate is not mentioned.	Any reduction in T&D losses will reduce the Power purchase and there by influence the Tariff. In the ARR, the impact of T&D loss has already been reflected by way of reduction in power purchase.

Public notice issued by the Commission is doubtful. a) In the notice published on 2-1-04 it is stated that the details will be received from 22-12-03. b) Dates furnished are not proper. Denominations like RS, MW, Lakhs, crores not mentioned properly.	The issue does not relate to KSEB. The Commission may furnish reply.
The total expenditure for 2002-03 shown as Rs. 3722.52 Crores, but while totaling we get only Rs. 4161 Crores. Then the deficit will be Rs. 438.48 Crores. The available data are not correct.	The total expenses shown in the ARR for 2002-2003 is Rs. 3722.52 crores. The petitioner seems to have added the expenses and interest capitalized instead of deducting these items. There is no discrepancy in the data.
Generation plus purchase cost Rs. 2038.31 Crores; Revenue from sale of power 8873.3 units; Deficit – Rs. 1015.56 Crores. These facts are not at all believable.	Revenue Expenditure of the Board comprises of purchase of power, Repair &Maintenance cost, Employees cost, Administration and General Expenses. Deprecation & related Debits, Interest on Finical Charges, Prior period expenses if any and 3% / 10% return. For the year 2002-03, the total revenue expenditure was Rs. 3722.53 Crores and energy sold was 8873.30 MU. There is no discrepancy in the data given in the ARR.
Power cut enforced during 2002-03 is not necessary.	When ever the total availability of power is lower than the demand, the Board is forced to introduce Load Shedding. Unlike in other states where power cut and Load Shedding are resorted to for a number of hours in a day, only half an hour Load Shedding is practiced in Kerala. As the Board has been supplying Power at a tariff lower than the cost of supply, any lifting of Load Shedding etc would affect the financial position of the Board. In fact, introduction of power cut / load shedding for more hours is advantageous to the Board. But the Board is not doing so for the benefit of the consumers and in the process absorbing the loss on this account.
How the deficit is Rs. 1015.56 Crores, if the transmission losses is 3637.08 MU	The Stake Holder seems to have been confused with the different numbers given in the ARR. During 2002-03, the annual T&D loss was worked out as 3637.08 MU. Rs 1015.56 crore represents the

	Net Revenue Gap i.e., the difference between total income (Rs. 2706.97 Crore) and total Expenditure (Rs . 3722.53 Crores),
The liability of the organization increases due to capitalization and increases in the rate of interest annually.	Since the System is expanding, due to addition of Generating plants, more Transmission and Distribution lines and more Substations, the capital expenses and the assets keep on increasing every year .In a growing system, loan has to be taken from Financial institutions to carry out new capital works and hence both the interest and repayment liability do increase.
The venue and date of public hearing should be intimated in time.	Honourable Commission may intimate the details of Public hearing etc, to the Stake Holders, if the Commission decides to hold such hearing.

3. Secretary, Association of Planters of Kerala

Extract of Objections / Suggestions / Requests of the Stake Holder	**KSEB's Response**
The increase in the Industrial tariff during 1997-99 is very steep and further increase in the Tariff is unaffordable	The Planters are given subsidised rates of industrial tariff rate (HT I). Since the Consumer is liable to pay the cost of supply, KSE Board is unable to extend more concession. If GoK provide any concession to any category the difference between the cost and the tariff has to be paid to the Board in advance.
The Tariff for plantations should be changed from HT (I) industrial to HT (III) Agriculture.	The Agricultural tariff is applicable to those activities which use electricity for the purpose of growing of crops. Processing of Agricultural products as in the case of textile, oil, sugar and tea factories cannot be considered as an agricultural activity, and therefore it is grouped under Industrial tariff. Processing of green leaves to tea or other products is a value addition activity performed by small or large industry. Therefore, such processing units have been rightly grouped under Industrial tariff category. Tariff is determined with reference to the purpose for which electricity is used. In the plantations, electricity is used mostly for processing the products, which is an energy intensive industrial activity. The consumer argument that for agricultural income tax purpose, the plantations have been categorised as industry can't be accepted as categorisation of an activity can be different for different purposes depending on the extent of different services being availed by the said activity. However the Commission may examine the

3. Secretary, Association of Planters of Kerala	
Extract of Objections / Suggestions / Requests of the Stake Holder	**KSEB's Response**
	request of the objector while rationalising /revising the tariff.

04. Chamber of Commerce, Payyannur	
Extract of Objections / Suggestions / Requests of the Stake Holder	**KSEB's Response**
• Reduction of Cross subsidy is a responsibility assigned to the Commission. • LT VII consumers are charged more than cost plus statutory surplus. • Commission may pass orders to remove the element of cross subsidy. • Rationalisation of tariff may be ordered with immediate effect. Small traders and establishments pay higher charges than large commercial consumers	In the ARR for 2004-05, the Board has not included any proposal for tariff revision. The Board will submit a separate proposal if asked by the Commission. Therefore the Commission may consider the various issues on tariff raised by the objector.
• Security Deposit is collected in cash form LT consumers only. • Security deposit is reassessed only for upward revision; No refund or adjustment is done if there is an excess deposit.	• Security deposits are collected from EHT, HT & LT consumers. The existing practice of collecting interest free deposit as a security against payment of bills issued long after consumption of energy and also as a security against default in payment is a recognized mechanism upheld by courts. Therefore the Board does not favour to change the system. However, as per the Electricity Act 2003, Security deposits can be refunded / adjusted on

excess deposit. • Commission may order to rectify the present method of collection and retention of deposits.	request of the consumer. (Section 47(4) of EA 2003). The Commission may formulate the supply code / specify regulations in respect of security deposits (Section 181 (2) (v & w) of EA, 2003). Therefore, until such codes and regulations are framed, the existing practice as per the Conditions of supply of electricity may be allowed to continue without any change.
Use of Pre-paid meters shall be considered	This can be considered after the Commission formulates suitable regulations / codes in respect of use of pre-payment meters as envisaged in the Electricity Act, 2003. (Section 181 (2) (x & zp) of EA, 2003)

5. Mariyil Krishnan Nair, State Vice President; Idukki District President , (*Name of the Organisation not provided in the Objection*)	
Extract of Objections / Suggestions / Requests of the Stake Holder	**KSEB's Response**
Tariff in respect of Commercial Consumers to be determined considering the following:	
• The Burden of providing reduced tariff to domestic and other category of Consumers should not be passed on to commercial Consumers. The subsidy to be compensated by the State Government. • Non-Telescopic Tariff now being applied to Commercial sector alone is not justifiable especially in view of scope of employment it can provide in the state. The fixed charges now being levied in the state are higher compared to that of other states.	Revision of Tariff and cross-subsidy are within the purview of the Commission. Commission may decide on the rationalisation of tariff, elimination of cross-subsidy etc., desired by the objector. The Board shall submit tariff proposal, if it is asked to do so by the Commission.
The T&D losses are to be brought below the national level after evaluating the distribution of power in each circle.	The Board has planned to reduce the T & D losses by 2% each year. The present level of T&D loss in the state is comparable to the levels prevailing in the southern states. The Board would continue its efforts to

	reduce the losses progressively.
A uniform tariff may be adopted to protect the Common interests.	This may be decided by the Regulatory Commission
Peak hour consumption to be reduced by fixing higher peak time tariff and creating public awareness	The TOD differential tariff system is already implemented for the HT/EHT consumers. It is difficult to implement such a system for the large number of domestic and other LT consumers who consume more energy. The Board would appreciate practical solutions to reduce the present peak hour load.
Circle Level Public Advisory Committee has to be formed to address issues related to Electricity Distribution.	Local advisory committees are already functioning under the panchayat, municipal and corporation level to address issues related to distribution system.
Electricity Consumption at the Staff quarters are not meters and no load shedding is imposed to them.	Consumption at staff quarters of KSEB are metered and charged. Load shedding is followed uniformly without exception. If any specific cases of non-metering & non-implementation of load shedding in the staff quarters of KSEB are brought to the Board's knowledge, appropriate action will be taken.

6 & 7A.P Udayabhanu Endowment Trust & Consumer Protection of Kerala	
Excess amount collected towards OYEC, should be avoided	In view of the large number of applicants in the LT category, the Board find it difficult to provide connection to all the applicants in the LT category. The Board fixes cut off dates every year for

	clearing the pending applications in the LT category. The connections are given only on general priority adhering to the cut off dates and the Board does not collect the cost of connection from such applicants. Therefore, the Board has introduced the OYEC Scheme to provide connections on out-of-turn-priority (OTP) to those applicants who are willing to remit the cost of connections. OYEC amount remitted is only for the purpose of providing connections on OTP.
KSEB should pay interest on cash deposit	Security deposit is an insurance against default/ delay in payment of electricity charges .The deposit is taken from the consumers because there is a time difference between the consumption of electricity and the actual payment of the bill. A defaulting consumer is power supply is disconnected only after he has consumed electricity for about 15 days over and above the electricity consumed in the preceding billing period. In such an eventuality it is very necessary that the Board hold sufficient security to safeguard its interest. The Honourable Supreme Court has in one of its rulings said that the security deposit collection from consumers by the Board is justified and it is not binding on the Board to pay any interest on such security deposit. Thus, as per the existing rule no interest is payable on security deposit.
Service connection charge is a double payment when the Board is collecting money under OYEC Scheme	The Board had introduced Service Connection charges to recover a portion of the cost involved in giving service connections. This is collected from all categories of consumers except certain categories such as Agriculture, Domestic consumers with consumption less than 20 units etc. Payment of service connection charges does not entitle the consumer any priority for getting

	connection. But to get the connection on out-of-turn priority, the consumer has to remit the OYEC amount. The two charges are for separate purpose and are not double payments.
Collection of meter rent is illegal	Every year around 4 Lakhs LT connections are effected. The Board has to replace the faulty meters also. Therefore the Board is incurring huge expenses on this account. In order to meet the fund requirement, the Board has introduced the meter rent. It has been in existence for quite sometime and there is nothing illegal.
Collection of electricity charge for street light on the basis of the tariff fixed earlier has to be reexamined since the cost of installation and maintenance of street light is borne by the local bodies, corporation/municipalities. Board has no liabilities in this regard.	The statement is not correct. Presently the tariff for Street light is very nominal compared to other categories. Even though the materials for providing street-light are supplied by the Local Bodies, labour for replacement and repair works are done by the Board. The nominal tariff charged is towards the labour cost of repair and maintenance.
The fixed charge alone may be realised when the current consumption is not exceeding the fixed minimum charge. When the current consumption exceeds the fixed minimum, the current consumption charge alone may be realised.	To give supply to all consumers, the Board is required to incur huge capital expenditure on generating stations and T& D network. Further the capacity of the grid is designed on the basis of the total demand in the Grid and not with reference to the time at which the actual demand arises. Hence the Fixed charges can not be correlated with the consumption of energy. Fixed charge is to recover the cost of capital investment and variable charge is to recover the cost of supply of energy. Therefore, the objector's suggestion to realise either the fixed cost or current charge is not acceptable.
Expenses incurred to the Board on concessional works(Rural electrification works, Electrification of Harijan colonies, Electrification of Agricultural connections, Electrification of Girijan areas ,NPG connection) should be reimbursed by the Government in full.	Whatever subsidies admissible to these schemes, the Board has been claiming the amount. But the Government has not released the subsidy in cash.

Hydro Electric Schemes such as Shenkulam Augemntation Scheme,Pallivasal Extension,Kuttiyadi Additional Extension scheme should be completed on war- footing basis.	Shenkulam Augemntation Scheme –Investigation work is going on Pallivasal Extension Scheme-Tendering work in progress. Kuttiyadi Additional Extension scheme-work already started. Pending works will be taken up for implementation and progress will be monitored.
Construction of Small Hydro Projects	These projects considered by the Government giving to private participation.
The present cost of the electricity purchased from the Thermal station should be revised scientifically based on total production cost with the generation of electricity	The Board and the IPPs have seized of the high cost of thermal power and are exploring the possibility of reducing the cost.
Two years back Board had spent Rs 240 crores for Renovation of Pallivasal, Sholayar & Shengulam projects. But no additional generation	Normally the economic life span of the machines installed in a Hydro Electric projects is around 30-35years. After that the machines have to be replaced so as to maintain the existing level of generation. Pallivasal, Sholayar & Shengulam are very old projects. Renovation has been done after completing around 50 years of operation. No additional generation was expected on Renovation. Renovation is only to extend the life span and not to create additional capacity. Now the machines are able to generate the designed capacity subject to availability of water.
Transmission loss should be reduced by bringing down the HT/LT ratio to 1:1	KSEB has already taken a number of steps to reduce the T&D loss at the rate of 2% every year. These include energy audit, meter replacement, theft detection, computerization of billing etc. System improvement scheme to reduce the T&D loss are capital intensive and time consuming. The Board can bring down the HT/LT ratio only progressively due to requirement of huge investment.
Arrears due from Govt & Private parties should be collected.	Board is making all efforts for the collection of the outstanding arrears. Disconnection, Dismantling, Revenue recovery action etc are being taken in the normal course. Efforts are being made to get

	the huge arrears due from Government departments and public sector units. The Board has repeatedly taken up the issue of dues from the Govt. Dept with Government requesting them to help us in recovering the arrears. As recommended by the Commission, Task Forces are being set up to expedite collection of arrears.
It has been stated that the increase of supervisory places is 300%.Hence it should be reduced.	The statement made by the petitioner is wrong. Projected number of officers for 2004-05 is 4543 and in 2003-04, it is 4229. But the sanctioned strength is 5771. The projected increase is only 7.3% and not 300%.
Suggestion is to reduce the expenditure on establishment cost and unnecessary administrative expenses.	Board has already taken action to reduce the Administration costs. Steps taken are • Shifting offices from rented to own building • Hiring of vehicles as and when required instead of purchasing new ones • Limiting Telephone and transportation expenses. • Controlling advertisement expenses etc. As a result the Board could contain the expenses on Administration.
Hike on existing tariff rates should not be imposed on consumers.	The Board has not submitted any tariff proposal at the time of submitting the ARR for 2004-05. If the Commission directs the Board to submit any proposal, the Board would do the same.

8. Radhakandhan Thirumulppad

Extract of Objections/Suggestions/Requests of the Stake Holder	KSEB's Response
Suggestion is to increase the Tariff of Industrial consumers. No increase for the Domestic category.	In the ARR petition for the year 2004-05 filed by the Board, no tariff proposal has been included. The Commission may examine the suggestion of the objector at the time of revision of tariff. The Board shall submit proposal for tariff revision etc., if it is asked to do so by the Commission.

8. Radhakandhan Thirumulppad	
Reduce the salaries and freeze the vacancies.	The projection for employee cost have taken into account the arrears of DA and also the expected terminal benefits to the retired persons. The salary and allowances given to the employees are as per long term settlements which can't be varied without mutual consent. The Board has been taking all efforts to reduce the employee cost wherever possible. Some of the steps taken are reduction in payment of overtime and other allowances, abolition of redundant post, redeployment of the employees to the vacant posts etc.
Avoid the delay in getting connection	The suggestion will be considered by the Board.

9. Sasi. B. Mattom.	
Extract of objections/Suggestions/Requests of the Stake Holder	**KSEB's Response**
Reduce the T&D Loss to 15% within 6 months.	KSEB has already taken a number of steps to reduce the T&D loss at the rate of 2% every year. These include energy audit, meter replacement, theft detection, computerization of billing etc. System improvement scheme to reduce the T&D loss are capital intensive and time consuming. Therefore the T&D loss can be reduced only progressively and cannot be reduced to 15% in 6 months time. It may be noted that unlike in other states all electricity connections in the state are metered and the T&D loss computation is accurate and comparable to the position in the southern states. The Board would continue to concentrate and reduce the loss further.
Contract to be given to local agencies to switch off/on the street light.	The maintenance & operation of electrical power system of street light is under the supervision of the Board and it is done by experienced employees of special categories. Safety is an important aspect which is to be considered before introducing any change in the existing system. But the suggestion of the petitioner will be considered at the appropriate time. Wherever feasible, the Board shall consider outsourcing the activities which are non-critical.

10. Honorary Secretary, South Indian Film Chamber of Commerce

Extract of Objections / Suggestions / Requests of the Stake Holder	KSEB's Response
Reply to the representation dated 29th Sept 2003	Reply has already been forwarded to the Commission as item No 6 of Annexure XVII of the Board's letter dated 10-11-2003. (Copy enclosed)
The tariff hike for cinema Theatres has been increased by nothing less than 150% during the past 3-4 years.	The past tariff hikes are reasonable as compared to the cost of supply. The tariff for the cinema theatres coming under LT category was not revised at the time of last revision effective from 1st October 2002.
Low tariff for domestic and Agriculture consumers has lead to wastage and misuse which goes unchecked and undetected	The existing tariff for domestic and agriculture consumers were determined based on the Government policies and directions. Honourable Commission may take a decision at the time of tariff rationalisation / revision.
Film industry will not be able to bear any more hikes in tariff & must be spared	The existing tariff is low as compared to the cost of supply of power. In the ARR petition for 2004-05, the Board has not suggested any tariff proposal. The Board shall come up with tariff proposal, if asked to do so by the Commission. However, the Commission may decide the plea of the objector while rationalising /revising the tariff.

11. General Secretary, Kerala Hotel & Restaurant Association

Extract of Objections / Suggestions / Requests of the Stake Holder	KSEB’s Response
The Concessions given to small scale industries has to be extended to Hotels, Restaurants, Bakeries, Lodges in Kerala related to Tourism promotion	Since the Hotels, Restaurants, Bakeries and Lodges are engaged in Commercial activities, they are grouped under the commercial category. But Bakeries where both manufacturing process and sales are carried out simultaneously are grouped under LT-IV Industrial. Hotels, Restaurants and lodges are profit making commercial activities and can’t be compared with small scale industries. They also waste energy exorbitantly by large scale illumination etc. Therefore, there is no justification in the demand.

12. Director, Paragon Steels Private Limited, Kanjikkode West, Palakkad

Extract of Objections / Suggestions / Requests of the Stake Holder	KSEB’s Response
Allow the petitioner to take power from PTCL through the transmission system of KESB under open access	As per the Electricity Act 2003, the petitioner can approach the Commission for open access and it can be allowed after stipulating all the conditions of the Act. The Comments for allowing open access to the Company shall be forwarded separately after analysing all technical constraints. If there is no other technical constraint, the Board will have no objection as long as it is compensated by appropriate wheeling charges, surcharge & additional Surcharge etc as envisaged in the Electricity Act 2003. It is pointed out that the petition seeking open access does not contain details of such as point of import of PTC power, cost of such power, duration of importing the power etc., to analyse the proposal comprehensively. Each consumer of the objector firm may submit detailed proposal.

13. Company Secretary, Asianet satellite Communication Limited, Thiruvananthapuram	
Extract of Objections / Suggestions / Requests of the Stake Holder	**KSEB's Response**
• Considering the various activities in the IT sector, The petitioner is eligible for LT-IV tariff in place of LT-VII tariff. • The cost of Generating Electricity by captive units even by using diesel generators is Rs 5/- per unit. Since there is a vast difference between the cost of power from KSEB and that of captive plants, a large chunk of consumers has switched over to captive plants even though KSEB power is available in all their premises. Therefore reasonable tariff 13 will ensure that the consumers will revert back to KSEB power requirement, which will enhance the revenue to the Board.	The consumers are grouped under different categories on the basis of purpose for which electricity is used. Since the major function carried out by the Company is Commercial in nature, they are grouped under commercial. Satellite Communication and other activities of the firm, even if it is included in IT, are carried out as commercial business. It is a commercial service sector and not an industrial activity requiring concessional tariff. A commercial concern can not be equated with an industry and hence the request for treating the consumer under LT IV is not justified. However, the Commission may examine the request at the time of tariff revision/rationalisation.
• Increase the revenue by preventing loss by way of pilferage and transmission bottlenecks. • Revenue from other cable operators are far below as they avail power from low tariff connections unauthorisedly	The Board has already strengthened the activities of APTS to prevent pilferage, theft, unauthorised connections, misuse of energy etc. It has fixed target to reduce the T&D loss by 2% every year and is taking all actions to achieve the target. If any specific case of unauthorised drawal of power is brought to the notice, the Board will take prompt action.
IT is the proclaimed policy of the Govt of Kerala to provide IT sector all the encouragement and incentives	It is for the Government to allow incentives etc. But the Board has to be compensated for the loss it may sustain on account of any concession/ incentive.

14. President, The Sea Food Exporters Association of India, Cochin	
Extract of Objections / Suggestions / Requests of the Stake Holder	**KSEB's Response**
The cooling and freezing are the parts of Industrial process and hence it can only be categorised as HT- I Industrial. At the premises of the petitioner's factory, only industrial activity is being taking place and therefore the tariff categorisation HT-IV Commercial to the petitioner is illegal and arbitrary. In LT category the Cold storages are classified under LT Industrial. Thus there is discrimination between HT consumers and LT Consumers.	In respect of the premises where the production and preservation of sea food take place, HT-I tariff is applicable. But the preservation of a finished product alone may not be considered as Industrial activity. The finished product is preserved for the Commercial purpose and therefore HT-IV Commercial tariff is applied to the Cold storage/freezing units. The Board does not agree to change the existing classification of the objector.
Fish Culture is an Industrial activity and therefore processing of Agriculture products HT III agriculture tariff shall be given	The Agricultural tariff is applicable to those activities, which use electricity for the purpose of growing of crops. Processing of Agriculture products cannot be considered as an agricultural activity, and therefore it is grouped under Industrial tariff. Processing of farm products like sugar, cotton, fruits & fish is a value addition activity performed in a small or large industry. Therefore, such processing units have been rightly grouped under Industrial tariff category
Regulatory Commission Act came in to force in 1998 and therefore order dated 14-5-1999 issued without the approval of the regulatory Commission, is illegal. Nonforming of the Regulatory Commission is not the fault of the Consumer.	As per the Regulatory Commission Act 1998, establishment of SERC is not mandatory. KSERC was formed only on 29-11-2002. Hence the tariff revisions effected prior to the setting up of SERC are valid and the Hon'ble Courts & Commission have upheld this point. Therefore, there is no substance in the argument of the objector.
As per ARR 2003-04 an amount of Rs 4365 Crores is due to the Board from the Government. There is no mention about this in the ARR 2004-05. So it is assumed that the amount is still pending with the Government. Hon'ble Commission may direct the	At the end of March 2003, Government of Kerala owed Rs 3531.43 Crores (after adjusting the netting of proposal under consideration in Government) as subsidy to the Board. The Honourable Commission has directed the Government to release the amount.

state Government to pay the amount due to the Board.	
The terminal benefit of Rs. 382 Crores liability cannot be born by the present consumers by way of Electricity charges. While forming the Company, this liability shall be taken over by the Government.	Terminal benefit of employees who retires from service is a part of employee cost which cannot be delinked from the revenue expenditure of the Board. It is for the Government to decide whether the liability is to be taken over by them or not.
In the ARR the total subsidy is given is Rs 854 cores. As per the 2003 Act all subsidies should be given by the Government in advance.	Rs 854 Crores shown in the ARR is not a subsidy. It is the gap between the revenue and the expenditure, which needs to be bridged by way of tariff subsidy etc. The Hon'ble Commission will have to decide about the manner of bridging the gap.
Honourable commission may direct the Board to take urgent steps to reduce the huge loss.	KSEB has initiated a number of steps to reduce T&D losses by at least 2% every year. Some of the steps taken are: • More accurate estimation of losses. • Replacements of faulty and sluggish electromechanical meters by electronic meters. • Theft detection and prevention of theft by the anti power-theft squad. • Passage of Indian Electricity (Kerala Amendment) Ordinance, 2003. • Computerization of billing and revenue collection. • The above steps are in addition to the steps being taken to augment the transmission and distribution system to reduce the technical losses. As a result, the Board has reduced the T&D loss by 2% energy every year since 2002-03 impact of which has been clearly stated in the ARR petition submitted by the Board.

15. The Kerala HT & EHT Industrial Consumers Association

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<tr>
<td>ARR projects a revenue gap of Rs 854.2 crores at current tariff for the year 2004-05. KSEB has not indicated the manner of meeting the deficit.</td>
<td>It is true that while submitting the ARR, the Board did not suggest any proposal to bridge the revenue gap but prayed before the Commission that revenue gap be covered through tariff increase or other means as the Commission may deem fit and further requested for permission to present the tariff proposal if directed by the Commission separately in due course of time.</td>
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<tr>
<td>For 2004-05 the net ARR is Rs 3690.84.crores. This is 1.86% increase over KSEB ARR for 2003-04, but 6.06% higher than that allowed by the Hon’ble Commission for the year 2003-04. This is a huge and unreasonable increase due to highly inflated projection for 2004-05. In the light of various guidelines & directives given by the Hon’ble commission, one would have expected a reduction in ARR for 2004-05 over that allowed by the commission for 2003-04.</td>
<td>For the ARR&ERC for 2003-04 the Board projected an Aggregate Revenue Requirement of Rs 3850.31 Crores and expected Revenue of Rs. 2924.23 Crores, thereby leaving a revenue gap of Rs. 926.08 Crores. The Hon’ble Commission approved the ARR & ERC, and revenue gap for the year 2003-04 at Rs. 3697.83 crore, Rs. 3141.37 crore and Rs. 556.46 crore respectively and allowed to continue the existing tariff and other charges besides recommending to the Govt. of Kerala to release a subsidy of Rs. 375 crore and to grant permission to the Board for retention of electricity duty amounting to Rs. 182.56 crore. It is pertinent to observe that the Commission has agreed to the Board’s proposal for year-end truing up of the cost and revenue.

In the ARR for 2003-04, the Commission had made the following changes.

<table>
<tr><th>Item</th><th>2003-04 ARR of KSEB</th><th>2003-04 ARR of KSERC</th><th>Change</th></tr>
<tr><td><u>(a) ARR</u></td><td></td><td></td><td></td></tr>
<tr><td>Power purchase</td><td>1858.13</td><td>1775.13</td><td>(-) 83.00</td></tr>
<tr><td>Interest</td><td>721.54</td><td>679.26</td><td>(-) 42.28</td></tr>
<tr><td>Other Expenses</td><td>110.00</td><td>76.28</td><td>(-) 33.72</td></tr>
<tr><td></td><td></td><td></td><td>(-) 159.00</td></tr>
<tr><td>Less interest capitalised</td><td>115.45</td><td>108.93</td><td>6.52</td></tr>
<tr><td></td><td></td><td></td><td>(-) 152.48</td></tr>
</table>
</td>
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	(b) ERC Revenue from Tariff 2683.86 2901.00 (+) 217.24 (c) Revenue Gap 926.08 557.56 (-) 368.52 The Commission based on their assessment, estimated the power purchase cost as Rs. 1775.13 Crores. When the Hydel generation was lower than the previous year (2002-03) by about 875 MU and to that extent the overall purchase of power from thermal sources has increased in 2003-04, the overall expenditure on power purchase in 2003-04 can't be lower than the actual of 2002-03 as determined by the Commission. Thus the Commission assessment in underestimated. As per the Board's Revised Budget estimate, the power purchase cost during 2003-04 will be about Rs. 1961.19 Crores (increase of Rs. 186.06 Crores over the Commission's assessment). Similarly, other expenses are also projected around Rs. 93.96 Crores. The Commission has estimated the revenue form existing tariff more than (Rs. 2901.00 Crores) the Boards revised estimate of Rs. 2725.92 Crores.When there was no tariff rivision in 2003-04, the revenue cannot be expected to increase over Rs 400 as compared to the actual of 2002-03.Thus the Commission's estimates are not realistic and as per the revised budget estimate of the Board, the revenue deficit in 2003-04 will be around Rs 966.52 crores and not Rs 557.56 crores as under estimated by the Commission. The Board will approach the Commission for truing up of the cost and revenue as agreed by the Commission. In view of the above, an increase of just 1.86 % in the ARR for 2004-05 over the ARR for 2003-04 is reasonable and justified. It is unreasonable to compare ARR of 2004-05 with that of the one approved by SERC for 2003-04 for the reasons state above. Similarly the Commission 's directives are known only in January '04 and it will take some time to plan and implement some of the directives and realize the benefits. Therefore it is too optimistic to expect immediate reduction even before implementing the directives. It may be noted that the ARR for 2004-05 was submitted to the Commission before the Commission's orders on the ARR for 2003-04 were issued.

47.8% of energy requirement is from own generation and the balance 52.2% is from purchase. The Hydro generation cost is 3.3 ps/unit and the Board's own thermal generation is at 282 ps/unit. Average cost of power purchase is Rs 2.66/unit. The high cost of meeting power requirement is from high fixed cost payment and other commitments associated with power purchase. (Para 14 of the objection petition.)	The Hydro generation cost shown by the objector as 3.3 ps/unit is not correct. It represents only the variable cost. In the ARR & ERC for the year2004-05, 5977.5 MU of energy is proposed to be generated on KSEB 's own stations at a cost of Rs 148.99 crores. Balance 6699.5 MU of energy is proposed to be purchased from central power stations and IPPs at the expected purchase cost of Rs 1729.74 crores. The average cost/unit for the power purchase including transmission charge is Rs 2.58 /unit. The proposed Hydel generation is 5500 MU at an average variable cost of 3ps/unit and the Board's own thermal generation is 477.5 MU at an average variable cost of Rs 2.75 /unit. The Hydro thermal mix for the year 2004-05 as per the estimation is 43:57. Thus the average cost of various sources of power computed by the objector is erroneous.
In the ARR for 2004-05, KSEB has not provided load forecast as directed by the commission in section 2.4 of the order for 2003-04 and has not presented the data regarding billed energy for each consumer categories along with the corresponding energy input into the system.	For 2004-05, the Board has projected category wise energy consumption on the basis of consumption in the previous year, incremental increase in consumption of the existing consumers, consumption by the new consumers, increase in recorded energy due to replacement of the electro mechanical meters by electronic meters etc. Separate load curve for each category is not drawn since the available data on consumption pattern prior to2001-02 was based on estimation and the consumption after2001-02 is based on actual billed energy. Since there is a mismatch between the two database, it is not appropriate to draw load curve of each category with the actual data available for last three years only. This does not affect the projection of category wise consumption for 2004-05. Billed energy under each category of consumer is given in Annexure 19 in the ARR submitted to the Hon. Commission
Energy requirement of LT sales assessed for 2004-05 is on the higher side. Increase in energy requirement from 2001-02 to 2002-03 is 2.6%and from 2002-03 to 2003-04 is 4%. But from 2003-04 to 2004-05 it is 6.8%. LT sales for 2004-05 with an increase of 4.5% over 2003-04, if applied will result in saving of Rs 44.2 crores in power purchase.	The increase in energy requirement from2002-03 to2003-04 was estimated on the basis of data of the previous years. However from the data available up to 10/03, the increase is around 5%. Therefore the estimated increase for 2004-05 is reasonable and the objector's suggestion to reduce the estimate cannot be accepted. There is an increase in recorded energy due to replacement of defective and other electromechanical meters by more sensitive solid state meters.
Hydel Power estimation: The rationale for a	Hydropower for the year2004-05 is estimated based on the past ten-year average inflow of

10% reduction to the 10-year average need to be explained. During the last 10-year period, a few hydel projects were commissioned. Hence Hydel Generation for 2004-05 need to be revised upward by 650 MU and this could bring saving of Rs 217.50 crores.(Para 20 of the objection petition)	all the hydel projects commissioned till the end of March '03. This year and the last year, the inflow received and the hydel generation was far below the average of a normal monsoon year. In consideration of the recent trend in poor monsoon, a correction of 10% has been applied to the ten-year average generation After the poor monsoons for the two successive years, the catchment area and forest around the area are badly dried up and it is unreasonable to expect copious inflow into the reservoirs. Board's projection is based on historical trend and data and hence believe that the projection is realistic. Any increase without considering the reasonable possibility would only be academic and inflate the figures. Hydel generation is directly dependent on rainfall pattern on which there is no control. Therefore it is submitted that estimate made by the Board is just and reasonable. In case the Commission revises the hydel generation upwards and at the end of the year it is observed that the actual is lower than the one so revised, the Board should be compensated appropriately. The objector's suggested saving of Rs 217.50 crores is only hypothetical and hence not acceptable. The calculation of the saving based on the cost of BDPP/KDPP & Kaiga is also unreasonable as these stations are to be operated to the Board's projected level on account of system constraint and requirement and must run considerations. (Kaiga). Even if the objector's suggestion is agreed, the saving should be worked out only with reference to the average cost of power purchase and for 650 MU and not at the cost of these stations and for 666.9 MU as erroneously computed by the objector.
Reason for escalation of variable cost from Rs 2.84 to Rs 2.92 for BDPP and from Rs 2.65 to Rs 2.73 for KDPP.	The variable cost of BDPP & KDPP for the period from April '03 to Nov '03 is given in the following table.

Month	**BDPP (Rs)**	**KDPP (Rs)**
Apr-03	2.86	3.01
May-03	2.67	2.48
Jun-03	2.76	2.50
Jul-03	2.88	2.67
Aug-03	2.91	2.66
Sep-03	2.76	2.52
Oct-03	2.89	2.63
Nov-03	2.86	2.63

<table>
<tr><td></td><td>The average cost per unit of different thermal power stations for the last 2 years is shown in the table below:

Variable cost 2002 – 03 & 2003 - 04

<table>
<tr><th>Central Station</th><th>Average variable cost 2002-03 (Rs/kwh)</th><th>Average variable cost (April-03 to Dec – 03) (Rs/kWh</th><th>Percentage increase</th></tr>
<tr><td>NTPC – RSTPS</td><td>0.87</td><td>0.89</td><td>3</td></tr>
<tr><td>Taltcher – II</td><td>0.45</td><td>0.48</td><td>7</td></tr>
<tr><td>NLC –I</td><td>0.67</td><td>0.77</td><td>15</td></tr>
<tr><td>NLC – II</td><td>0.94</td><td>1.04</td><td>12</td></tr>
<tr><td>Eastern Region</td><td>0.98</td><td>0.99</td><td>2</td></tr>
<tr><td>Maps</td><td>2.02</td><td>2.18</td><td>8</td></tr>
<tr><td>Kaiga</td><td>3.25</td><td>3.49</td><td>7</td></tr>
</table>

From the table, it can be seen that there is an average increase of 6 % in the cost per unit during 2003-04 (up to December) when compared to 2002-03. It may be noted that the fuel price of Naphtha & LSHS has been highly fluctuating. After taking this into consideration of the fluctuation in prices of KDPP & BDPP, an escalation factor of 5% has been applied over the average variable cost for the period April-03 to Nov-03 to arrive the variable cost for 2004-05. The Board is exploring possibility of optimizing the cost of these plants. It may be noted that whenever the variable costs of these plants are lower than the IPPs, the Board has suspended power purchased from the IPPs during the current year. (2003-04).</td></tr>
<tr><td>All PPA documents are to be made public to understand computation process of fixed and variable cost from external sources, variation in power purchase etc.</td><td>All the PPAs and other documents have already been furnished to the Hon’ble Commission. The Board can supply the bills etc to the Commission as and when required.</td></tr>
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<tr>
<td>Plant load factor of Thaltcher-II, NLC –II, NTPC, ER and NLCII (stage-II) are to be made 80% and expensive power drawn from Kayamkulam, KPCL and BSES can be reduced if better utilization of the allotted quata from the above mentioned stations is achieved. Saving of Rs 155.60 crores can be achieved by this method. (Para 23 of the objection petition)</td>
<td>PLF considered for the CPSs is as shown below:
<table>
<tr><th>Station</th><th>Considered in the ARR</th><th>Availability admitted by CERC</th></tr>
<tr><td>Thaltcher</td><td>87%</td><td>80%</td></tr>
<tr><td>NTPC Ramagundom</td><td>90%</td><td>80%</td></tr>
<tr><td>NLC-I</td><td>77%</td><td>72%</td></tr>
<tr><td>NLC-II</td><td>77%</td><td>72%</td></tr>
<tr><td>NLC Exp</td><td>77%</td><td>72%</td></tr>
</table>
It may be noted from the above that the PLF considered is based on the PLF for the last few years and it is more than the PLF allowed by CERC for full realization of fixed Charge. Therefore there is no justification in the objector's suggestion. The saving of Rs 155.60 crores computed by the objector is again hypothetical and calculation by taking the cost of KPCL (which has been taken again and again) is also defective. Hence the Board does not accept the said saving. From the table it can be seen that the PLF assumed for the low cost stations are more in the ARR than the norms fixed by CERC, ie, the projected cost of purchase in the ARR is on the lower side. In actual condition it may exceed the estimated value.</td>
</tr>
<tr>
<td>Gross Employee cost for 2004-05 is Rs 736.64 crore. That is 6.2% increase over that allowed by KSERC in the ARR for 2003-04 and is 20% of net ARR. KSEB's statements regarding employee cost and efforts made for cutting down the cost are contradictory. KSEB indent to add 1347 employees in 2004-05. Details of employee cost requested earlier have not been given. 3% increase in expenses of the Board of Directors has to be examined.</td>
<td>Main reason for the increase in employee cost is the increase in the terminal benefits and liability to pay DA. When the inflation is around 5% and with the normal increase in pay on account of annual increment, the increase of 6.2% over the previous year is well within the limit. The 3% increase in the provision for directors of the Board is a normal one and is an insignificant item of employee cost. Rationalization and cutting down the posts does not mean non-filling up of the post of Mazdoor (for which there is no ban) badly needed for operational purpose. But for the various efforts made by the Board, the employee cost would have been still more.</td>
</tr>
<tr>
<td>The employee cost should be retained at the same level as in the previous year and the</td>
<td>As mentioned above, an increase of 6.2% is just and an inevitable one. Pay and allowances of employees cannot be reduced overnight and without support from the</td>
</tr>
</table>

increase in cost (About Rs 43 crores) should be disallowed.	staff. The Board's effort to contain the cost has been overshadowed by ever increasing trend in terminal benefits and the liabilities to pay DA etc. The Board's priority is to arrest the rate of rise in cost and improve efficiency. As the increase is only normal, there is no reason to disallow a normal one, which is beyond the control of the Board.
R&M estimate of Rs 85.5 crores for 04-05 is 28% increase over last year and 2.2% of ARR. Linking R&M to the GFA is not correct. If such a linkage is considered for computation purpose, the R&M expenses that the ERC allows should be linked to the nature and age of the asset as well. R&M expenses have remained between Rs 60-70 crores for the last 3 years and there is no reason for it to increase. Hon'ble commission to allow only Rs 66.7 crore as R&M for the year 2004-05, which will save Rs 18.55 crores.	R&M expenses form a critical part of Board's endeavor to provide quality supply to the consumers and it depends on various factors like age and expected life of asset, wear and tear due to usage, average utilization of assets and damage due to factors beyond the control of the Board. However, the Board like to highlight the fact that it is not possible to estimate the repair and maintenance expense for each asset individually. So it is estimated as a %ge of GFA. This percentage has been calculated based on average of such %ge over the past 3 years. As stated in the ARR, the R&M expenses on all items except Plant & Machineries and cable network have been retained at the same level of 03-04 and the projections given in the ARR are the justified minimum. As detailed in the ARR, the estimated amount as per norm is Rs 122.35 crore and the Board has moderated it to Rs 85.25 crores by keeping such expenses on buildings, civil works, vehicles, furniture and office equipments at the same level of 2003-04. Any further reduction in this expenditure may result in deterioration of the existing asset. In fact Board is not carrying out large scale R&M works due to fund constraint and financial crisis. Expenditure at low level in the last two years due to fund constraint and economy in spending should not come in the way of normal requirement of R & M works in 2004-05. Therefore, the Board opposes the suggestion of the objector.
Increase in hydel generation is 27%. Increase in ED due to this is 57%. This cannot be accepted. The A&G expense is in the range of 7-8 paisa per unit. In other SEB s the A&G expenses is in the range of 2to 4 paisa /unit and at this rate there should be saving of Rs 32.10 crores. Hence Rs 32.10 crores should be disallowed.	Board reiterates that the measures taken to cut down Administrative and General expenses have yielded result in the form of containment of cost and the projected increase in 2004-05 is to take care of the annual inflation only, as explained in the ARR & ERC. As per sec.3 (1) of the Kerala Electricity Duty Act, the Board is liable to pay to GOK duty @ 6ps/ kWh of energy sold to the consumers. The details of calculation for 2004-05 are as follows: Hydel 5500.00 MU Wind: 3 .00 MU

	BDPP: 255.50 MU KDPP: 219.00 MU Total Generation: 5977.50 MU Less Aux consumption: 37.00 MU Less Bulk License 203.00 MU Less NPG: 7.83 MU Net energy in kWh: 5729.67 MU Duty @ 6 Ps Rs. 34.37 Cr. As mentioned in Para 1.4.4 of ARR, the Board has reduced the A&G expenses from 79.19 crores in 2000-01 to Rs 51.80 crores in 2002-03 and more or less stabilized the expenditure. Again bulk of the expenditure is on account of electricity duty payable to the Government. Comparison of expenditure per unit in other states with Kerala is a misplaced one as the quantum of energy sold in other states is manifold of the one in Kerala. The objector's suggested amount will not take care of even the duty. Therefore, the projection of the Board is just and should be retained.
ARR for 2004-05 shows interest expense Rs. 723.3 crore (6.5% more than that allowed by the commission) Interest expense for 2003-04 allowed by the commission was only 1% over 2002-03. As lending rates in banks are coming down a steep increase should not be allowed. Interest should be restricted to Rs 686 crores.	Interest amount depends on the quantum of loan taken by the Board, which is caused by variety of reasons. The outstanding amount of loans at the beginning of 2003-04 was Rs 5094 crores. But it has been estimated to be Rs 5205 crores at the beginning of2004-05. Over the years the Board had been constrained to borrow heavily due to non-release of subsidy by the GOK, wide difference between the cost and the tariff, non-payment of electricity charges by the Govt departments and state PSUs and huge capital expenditure .The Hon'ble Commission has disallowed interest to the extent of Rs 42.28 crores during 2003-04 but allowed to continue the existing tariff with a recommendation to the GOK to grant Rs 375 crores in cash as subsidy. But the Board has not received the amount so far. Revenue expenditure towards purchase of power in 2003-04 will be around Rs 2000

	crores against Rs 1775.13 crores approved by the commission. On account of these factors, even during FY 2003-04, the expenses towards Interest and Finance charges may exceed the level approved by the Commission. The estimate projected for 2004-05 is at the same level of the Board's projection for 2003-04. Though interest rates have fallen and the Board has swapped some of the high cost loans (Rs 1168.92 crores), interest liability of the Board would continue to remain high due to high cost bonds issued in the past and large scale borrowings necessitated even at present to discharge the past debt. In view of the above the Board's estimated interest of Rs. 723.30 crores for the year 2004-05 is justified and should be retained as such. The objector's suggestion to restrict the interest is arbitrary as interest expense cannot be projected at an year on year growth basis. Hence the suggestion is not acceptable to the Board.
In the event of capital expenditure not meeting the planned expenditure for which interest on the loans is allowed in advance, the interest cost and depreciation costs should be clawed back.	During the past few years, the Board could not incur capital expenditure to the extent planned due to acute financial problem. In any case borrowing and interest cost was limited keeping with the actual capital expenditure only. Even if interest is allowed in advance on the planned capital expenditure and if the plans are not taken up, adjustment to that effect could be carried out at the time of year-end truing up exercise. The Board do not agree to the objectors proposal to claw back interest of Rs 69 crores and depreciation claw back of Rs 49.16 crores as the objector has taken the position for 2002-03 too for which interest has been worked out at high percentage (12%) for whole year. Since the capitalization of asset is done only as per actual expenses, there is no need to claw back depreciation. Though KSEB agrees with the contention of the objector that there is a need for truing up, it differs with the principle of selective true up as suggested by the objector. The Board wish to bring to notice that the T&D loss projection made in the ARR has close linkage with the projected level of capital expenditure. In case KSEB is not able to invest the planned level of fund on capital expenditure, the T&D loss reduction plan also suffers. However, the Board is not given allowance for such reduction in T&D loss resulting from reduction in capital expenditure. Despite reduced level of capital expenditure, the Board has achieved the planned T&D loss by other efforts. Therefore in case the interest and depreciation are clawed back without taking into consideration of the impact of reduced capital expenditure on the level of T&D loss, the Board will be affected doubly. Until precise mechanism of impact of the reduced capital investment on interest, T&D loss,

	power generation and power purchase, rate of return etc are understood and established, selective claw back as suggested by the objector is illogical and cannot be accepted.
KSEB should not be allowed a capital expenditure of Rs 698.27 crores when KSEB has been unable to incur capital expenditure of more than Rs 454.6 crores in 2002-03. Capital expenditure should be restricted to Rs 600 crores for 2004-05.	Board is making all efforts to complete the investment in capital works as envisaged in the ARR & ERC for2003-04. However, shortcoming if any can be examined at the time of truing up of actual costs. The objector's computation of saving of Rs. 20 crores for 2002-03 on this account is misleading as there was no ARR for 2002-03 and hence the suggestion cannot be accepted.
KSEB has been inefficient in collecting arrears and hence provision for bad debts to the tune of Rs. 43.58 crore to be included as expense in ARR should not be allowed until adequate monitoring and accounting is done.	Board is taking effective steps in collecting the arrears. The demand includes disputed amount, minimum guarantee for the periods of non-functioning of the firms, penalty etc. which have been questioned in the courts. Therefore it is unlikely that all claims are realizable. Adequate provision for bad debts has to be made as envisaged in accounting principles. The provision of 5% of the receivables as bad debts is justified and need to be allowed. The objector has rightly observed that the Hon'ble MERC has allowed such provisioning on the same ground as suggested by KSEB . The Hon'ble Commissions of Andhra Pradesh & Uttar Pradesh did not allow the fresh provisioning as there was a substantial amount of provision available as part of the transfer schemes.
In the light of directives given by the commission substantial improvement in collection efficiency is expected. An increase of 3% in collection efficiency would enhance the revenue by Rs 89.80 crores.	It is a fact that the collection efficiency is not satisfactory. The Commission and public are aware that most of the Govt. departments and state PSUs do not pay the regular monthly bills and some of the private consumers also resort to litigation on slightest pretext resulting in arrears. Due to public interest, the Board could not enforce disconnection of Govt. Department like Kerala Water Authority, Hospitals, Educational Institutions and other essential service organizations who default in paying the dues. The Board has taken up the matter with the Govt. and the latter has taken some initiative to provide adequate budgetary support to the Govt. Departments to pay electricity charges. Only with 100% computerization and elimination of incorrect demands, the collection efficiency will improve and reflect the correct position. It is expected that the recent level of collection efficiency can be improved only progressively. Disconnection of services to KWA, hospitals, lift irrigation scheme, educational Institutions etc cannot be resorted to in a normal course as in the case of other consumers. Similarly, disconnection of PSU s and other vital industries would result in rendering of thousands of workers jobless and

	would be counter productive. Therefore, merely fixing a target of 3% rise without looking at the practicability to achieve the same in the socio- Political environment of the State is only an academic exercise. The Board would continue to improve upon the collection efficiency. But due to the constraint stated above, a sudden 3% increase is not practicable. Hence the Board cannot agree to the observation of the objector.
Loss breakup between HT&LT is to be identified. Reduction in T&D loss by 3% is to be achieved and KSEB filing for 2004-05 does not account for this reduction in losses and does not mention any action plan to reduce loss.	The loss breakup between HT&LT lines is not available. The loss at the transmission and distribution points alone is estimated. Feeder wise loss calculation can be done only after installing energy meters in all these lines. The Board has planned to install meters in every feeder for energy auditing and loss calculation. Once the installation of feeder meters and metering of transformers is completed, the loss breakup at different level can be made available. It will take some time for this purpose. The Board is taking effective steps for reducing T&D loss as stated in the ARR & ERC. But it not practicable to reduce the T&D loss by more than 2% from the present level of 27%. The Board has a policy of reducing T&D loss by 2% every year and has been achieving the same since 2001-02 mostly by replacement of defective meters. The process of computerization of billing, installation of energy meters in the transformers for energy accounting, large-scale replacement of faulty meters is underway. Only when these activities gain momentum, and completed, one can expect further increase in T& D loss reduction. It may be possible to have a target of 3% in 2005-06. But at present (i.e., 2004-05) only 2% is practicable as the activities to achieve the same have been just started and yet to be implemented in large scale. Therefore, the target may be retained at 2%. The Board has already worked out the energy input into the system after allowing for T&D loss of 2% in its filing for 2004-05.
Percentage share of consumers 0-40 is 43% and 41-80 is 29% while in the case of 301-500, it is 0.4%. Out of sale of 9350 million units, 44% is domestic. This is not to be believed. The Commission has to conduct an independent enquiry to find out the actual.	The Consumption of slab wise domestic consumers were based on the data collected from 112 sections. Every data is transparent and there is no necessary to manipulate the actual. The Board can give all available data to the Commission.
The Fixed cost of IPPs can be renegotiated and reduced.	The Board has already requested the IPPs to reduce the fixed cost as well as the variable cost of power supplied by them. It will continue the process so as to reduce the cost.

Variable cost of Hydel Generation for 2004-05 is Rs. 17.33 Crore, for 2003-04, it was Rs. 13.2 Crores. Even with 5% increase it will come to only Rs.13.86 Crores.	The Hydro Generation for the year 2003-04 is 3944 MU and whereas the Hydro generation expected for the year 2004-05 is 5500 MU. That is comparing to 2003-04, the Hydro generation is expected to increase by 39.45% during the year 2004-05. This is reflected in the variable cost as well. If the objector's suggestion to project the Hydel generation at 6150 MU is accepted, the cost of Hydel generation in 2004-05 will increase to about Rs 19 crores. Therefore, there is no justification in the computation made by the objector.
To clarify whether transmission charges paid to PGCIL for NTPC Kayamkulam line is shared by Tamil Nadu. The transmission charges to southern region are increased by 27.2%. Commission may kindly verify this.	The NTPC-Kayamkulam Transmission lines constructed by PGCIL are the dedicated transmission lines for KSEB. Therefore, the transmission charges paid to PGCIL for NTPC Kayamkulam is not shared by Tamil Nadu. The transmission charges for the year 2004-05 is estimated on the basis of the actual wheeling charges claimed by PGCIL up to November 2003. For the year 2004-05, the allocation of power from Central Power Stations has been increased and hence there is a corresponding increase in the estimated wheeling charges.
According to the objector, if their suggestions are implemented there will be a saving of Rs. 913.46 crores. The average cost of supply for 04-05 is Rs 3.95 per unit. The average cost will then come down to Rs. 2.97 per unit.	It is submitted that the suggestions are hypothetical, far from reality and hence cannot be implemented. The deficit projected by the Board is 854.19 crores. If for argument sake, the suggestions of the objector are accepted, there may be a necessity to reduce the tariff. It is impossible to eliminate the present level of gigantic deficit in a single year except by arithmetic jugglery as has been done by the objector. Therefore, as detailed in the preceding paragraphs the suggested reductions are not justified and hence not accepted by the Board. But the board will continue to improve its efficiency as has been done in the last two years. The Board believes that it is only by a normal rainfall during 2004-05, better management of borrowing and efficiency gains, the deficit can be reduced.

The average cost to serve method adopted by the Board is highly inaccurate and does not reflect the true cost imposed on the system. Instead, a category wise cost to serve should be considered as per the models given by the objector.	As per the Electricity Act 2003, elimination of cross subsidy and tariff on the basis of cost of supply is to be implemented in a phased manner as specified by the Commission. So far nowhere in India, except in Andhra Pradesh, the cost of service model has been adopted by any of the Commissions. It is a fact that certain classes of consumers like agricultural, domestic etc are charged at less than the average cost of supply at present. The cost of service model can be adopted only after detailed consideration of the social and economical impact on these types of consumers. Therefore in our opinion, the cost of service model can only be adopted in a phased manner as may be determined by the Commission. Determination of the consumer class-wise cost of service model for tariff purpose, extensive data in relation to the consumption pattern (time of use) of each consumer class contribution towards the system losses by them etc. are required. The data can be collected only after complete installation of feeder and transformer meters, which is underway. The classification of expenses under demand charges and energy charges and allocation to different sub-group / categories are done hypothetically. Since it is not allocated as per the actual load curves of different categories of consumers, under restricted and unrestricted load conditions, the Hon. Commission may not accept the results of the COS models submitted by the stake holder. The correctness/reliability has to be checked before accepting such models. It is submitted that the consumer category wise models can be attempted only after refinement of the data on completion of computerization of billing and revenue collection and installation of meters in the transformers etc.

16. Deputy General Manager (Commercial), NTPC Kayamkulam

Central Generating Stations	Target availability 2002-03	Target availability 2003-04 (up to Dec)	Target availability 2004-05 (as per the information from SLDC)	PLF 2002-03	PLF 2003-04 (up to Dec)	PLF 2004-05 (as per the information from SLDC)
NTPC-Ramagundam	92,39	90,09	91,24	91,62	88,51	90,00
TALCHER-II		88,56	95,22		88,1	87,00
NLC-II- Stage-1	83,25	76,25	79,75	83,13	76,00	77,00
NLC-II- Stage-2	80,34	86,40	79,05	80,30	86,40	77,00
KAIGA	78,36	75,76	79,12	78,36	75,76	79,12

Extract of Objections / Suggestions / Requests of the Stake Holder	KSEB's Response
The quantum of energy in million units proposed to be purchased by KSEB is in excess of the quantum purchased during previous years.	The quantity of power purchase from each generating station is estimated based on the allocated capacity to KSEB, target availability declared by the Generating Station during the previous years, the actual PLF of the station over the previous years and the variable cost of generation The target availability and PLF of the major Central Generating stations for the year 2002-03 and 2003-04 and the expected availability and PLF for 2004-05 are given in the following table. Based on the target availability and PLF, the energy availability from each generating station has been estimated after making allowance for auxiliary consumption. It may be noted that, almost all the central generators have generated more than their declared capacity as UI during the year 2003-04. The Central share allocation has also increased with the commercial operation of Taltcher-II and NLC-Expansion as shown below.

	Year / Central share in MW 2002-03 / 633 2003-04 / 733 2004-05 / 868 Hence the quantum of energy proposed to be purchased in 2004-05 is more than the actual purchase during the previous years.
As per the clause 2.1 of the PPA signed between NTPC and KSEB dated 6-1-1995, NTPC is expected to operate as base load station	After the implementation of ABT and also under the regulatory regime, KSEB has to schedule the generation as per the merit order. Under this process, KSEB is compelled to back down generation from costly stations. So in order to optimize the generation and to reduce the power purchase cost, KSEB has to reduce the schedule of generation from NTPC-Kayamkulam due to the high variable cost. At the time of real scheduling, the State Load Despatch Center shall schedule the generation in such a way that, the station is run either in combined cycle operation or it is backed down. The IPP has to regulate its price in such a way that it comes within the merit order.
KSEB proposes to take electricity from KDPP, BDPP, Kaiga Atomic Power Station and Kasargod power station	(i) As per the existing arrangement, KAIGA & MAPS are not governed by the ABT system and KSEB is liable to avail the full allocated power. (ii) Though the relative variable cost of KDPP and BDPP are slightly higher than the variable cost of NTPC, due to the following technical reasons and system constraints, a minimum compulsory generation has to be maintained from these stations. (a) The unit size of NTPC is 110 MW where as the unit size of BDPP is 21 MW and that of KDPP is 16 MW. For meeting the minimum loads of less than 75 MW, generation from BDPP and KDPP is only feasible. (b) When the demand is less, all the three units of the NTPC stations are not required to be operated. i.e. and when one unit alone is operated, it has to be operated in the open cycle only. In the open cycle, the variable cost of generation is 42% higher than the variable cost in the combined cycle. Under such circumstances, generation from the KSEB thermal stations is economical.

(c) For peak load management, if the IPPs are used, then they have to be run as base load stations. But BDPP, KDPP and KPCL can be operated during evening peak hours. Though the variable cost of generation of BDPP and KDPP is higher than that of NTPC and BSES, the overall cost per unit is less if such stations are run as peak load stations instead of running NTPC or BSES as base load station for peak load use.

(d) Due to wide fluctuations in fuel prices, at times the variable cost of KDPP & BDPP are lower than the cost of IPPs and at such times these stations will automatically come in the merit order.

(iii) In respect of all other stations, including KPCL, the scheduling is based on the merit order only.

(iv) The relative merit order of each source is changing according to the prices of LSHS and Naphtha. The average variable cost of different sources of energy for the month of, Dec-03 is given below.

Variable cost of Dec-03

Station	Variable cost (Rs/kWh)
KDPP	2.46
BSES	2.66
NTPC	2.79
BDPP	2.83
KPCL	No Generation

Thus, the relative merit order of each source is changing in each month. In the real time operation, the State Load Despatch Center shall arrange the schedule based on the relative variable cost of each sources and system constraints at that time. Therefore the ARR projection may undergo change during actual operation.

The generation from NTPC Kayamkulam may be scheduled of at least 1071 Million units at 70% PLF	As explained in the above paragraphs, the proposed scheduling from each station is as per the merit order basis. In real time operation, depending on the energy demand, availability from each source, variable cost of generation from each source and system constraints, KSEB may be compelled to back down costly station in order to optimize the generation scheduling as well as to reduce the over all power purchase cost. The Board may not guarantee scheduling at 70% PLF etc. It can regulate scheduling only with reference to variable cost and system requirement / constraints.

17. Kerala Film Exhibitors Federation, Thrissur.	
The Film industry contributes almost Rs 80 Crores annually to the State Exchequer by way of Entertainment Tax and other levies (48% of the ticket sold), without any investment by the State: Cinema Theatres are forced to install and operate Diesel Generation sets due to load shedding and constant power failures - another burden on this industry - as the Board is unable to supply quality power at all times. The film industry has been given "Industry" status by the Central Government. This is yet to be notified by the State Government. So the Cinema Theatre having either LT or HT connection must at the minimum be given the tariff concessions that are allowed for SSI undertakings. In early 1990's, Cinema Theatres were given special Cinema Tariff. This must be introduced with a special low tariff at the present difficult conditions.	As per the present categorization of consumers, the Cinema Theatres come under commercial tariff (HT-IV / LT VII-C). Change in the categorization as requested by the Federation may adversely affect the revenue from charges. The cinema being an entertainment activity and theaters pass on the burden to public, there is no justification to give concessions that are allowed to SSI units. The Hon'ble Commission may decide the issue.

18. Sri. S.P. Ravi and Sri. C. G. Madhusoodhanan, Chalakkudy Puzha Samrakshana Samithi, Pariyaram P.O, Chalakkudy,	
Extract of Objections / Suggestions / Requests of the Stake Holder	**KSEB's Response**
Any petition on tariff and related aspects for a given year cannot be viewed as a stand-alone document, it must be part of a long term perspective plan in this sector.	The ARR& ERC filed before the Hon/ble SERC is the revenue statement of accounts for a particular year. But it forms part of the long term plan to turn around the Board's financial position, capital expenditure, plan to reduce T&D loss etc incorporated in the ARR flow from long term long term investment plan and strategy of the Board. Therefore the ARR for 2004-05 cannot be viewed as a stand-alone document.
Inter State Agreement on the Parambikulam Aliyar Project.	The Interstate Agreement on Parambikulam Aliyar Project is a State subject and is dealt at the Government Level by the 'Inter State Water Cell' in the office of the Chief Minister of Kerala. All issues on interstate aspects are being dealt by the Principal Secretary Water Resources (ISWC) on behalf of Kerala State. The revision of the PAP agreement and all other Inter State aspects is being dealt by this cell. The Joint Water Regulatory Division, Palakkad under the Ministry of Water Resources is dealing with the measurement of water releases in the projects covered under the PAP agreement and report to the Inter State Water Cell. There is a Joint Water Regulatory Board (JWRB) headed by the Chief Engineer (Irrigation) on behalf of Kerala for regulating the water releases for irrigation and water supply and power generation from the projects under PAP agreement. The Chief Engineer (KSEB) is also a member of the JWRB. This committee also reports to the Inter State Water Cell, Government of Kerala. Most of the information sought by the petitioner is available only with the Inter State Water Cell (ISWC). The details available with KSEB are furnished in the subsequent paragraphs.
The reservoir level in Kerala Sholayar on 1st July, 1st of Sep, 1st of Feb and average reservoir level from Sep 2nd to Jan 31st for every year since commission of the project.	The details are enclosed as a separate Table.
The yearly loss in electricity generation at Kerala Sholayar powerhouse and Poringalkuthu LB	For assessing the energy loss due to non-maintenance water level as per PAP agreement, a subcommittee was formed with two Deputy Chief Engineers from

powerhouse due to non-maintenance of water level.	Tamilnadu and two Deputy Chief Engineers from Kerala State. The committee has not yet submitted the report.
The water requirement at Kerala Sholayar power house to operate one generator (18 MW).	At design average head, 0.648 MCM of water is required to operate 18 MW for one day.
Details of steps taken by KSEB against violations by TN	Since this is an interstate issue, it is being taken up in the appropriate forum by the Inter State Water Cell, O/o the Principal Secretary, Water Resources Cell (ISWC) under Chief Minister.
The present move to renew the agreement after allowing additional water (2.5 TMC from Anamalayar and about 1.5 TMC from Nirar, both tributaries of Idamalayar) will result in more losses to the Board, as has already been acknowledged by it.	The revision of PAP agreement and related issues is being dealt at Government level by the Inter State Water Cell.
What is the anticipated loss in electricity generation at Idamalayar due to this proposed additional diversion about 4 TMC?	If 4 TMC of water is lost from Idamalayar, KSEB Board will have an annual loss of 28.3 Million Units of energy from Idamalayar Power house.
Does the Board anticipate any other loss due to the proposed renewal of the agreement? What steps have the Board taken in this regard?	The renewal of the Agreement is being dealt at Government level. Government of Kerala is the authority to take the decision and KSE Board is bound to adhere the decision of Government of Kerala in this regard.

The rainfall in the catchments of major hydel stations owned by KSEB.	The actual rainfall received in the catchment areas of the major reservoirs is given below: **Generating stations** / **Anticipated annual average rainfall (mm)** / **Rainfall received (June-03 to Jan-04)** / **Percentage reduction** Idukki / 4349.2 / 2474.3 / 43% Sabarigiri / 4572.0 / 2411.0 / 47% Idamalayar / 4750.0 / 2770.6 / 42% Sholayar / 4099.0 / 2761.0 / 33%
The expected electricity generation from HEP's for the period June-03 to May 31st 2004 and the average generation from these stations in a normal monsoon years.	• The expected generation from hydel stations for the period April-03 to March 2004 is 3940.6 Million Units. • The average hydel generation in a normal monsoon year is 6750 Million Units. The expected reduction in hydel generation in 2003-04 is 41%.
Can Board create a graph correlating the rainfall in the catchments and electricity generation?	The data required to prepare such graph is not available at present
With the proposed move to upgrade the Kayamkulam thermal power plant to 2300 MW, and with the completion of the ongoing projects, the Board will have more than 20000 MU of electricity at its disposal in about 10 years time.	• The eligible share to KSEB from the expanded Kayamkulam Station would be around 800 MW. • The existing half an hour load shedding was imposed in the State because of shortage in peak hour availability of power due to the failure of monsoon in the last two consecutive years. • As per the Studies conducted by the CEA, the demand in the State is projected to grow at an average rate of 8% every year. • KSEB expect that on rationalization of the tariff, the Industrial demand as well as the Commercial demand in the State may grow at a faster rate than the present. The consumption pattern and consumer preferences are changing every year and KSEB expect a higher growth rate than the one at present in all

Generating stations	Anticipated annual average rainfall (mm)	Rainfall received (June-03 to Jan-04)	Percentage reduction
Idukki	4349.2	2474.3	43%
Sabarigiri	4572.0	2411.0	47%
Idamalayar	4750.0	2770.6	42%
Sholayar	4099.0	2761.0	33%

	categories of Consumers. • Though enough installed capacity has been created at present, power generation is far from requirement as the hydel plants are mostly run off river types and have only moderate plant load due to inadequate rainfall/ availability of water. • But for availability of more installed capacity than the normal requirement, the state would have plunged into deep trouble in 2002-03 & 2003-04 when the hydel generation declined drastically due to poor monsoons. • Hydel power being low cost, capacity even in excess of the State's requirement can be profitably exploited by exporting power to the other States in future. • There are number of potential water resources which can be profitably exploited by creating additional capacity. So KSEB expect that, even after completing all the existing and proposed projects, there will be much demand for cheaper energy and hence creation of additional potential is advantageous to the State.
At present more than 3000MU of available electricity is not generated from IPP's and KSEB thermal generation due to lack of demand. This is resulting in a loss over 100 Crores per annuam to the Board.	After the implementation of ABT in the Southern Grid, KSEB is following the merit order dispatch based on the variable cost of energy on a real time basis. Under the ABT, KSEB is availing power from the GRID as UI, whenever the UI rate is cheaper than the variable cost of IPP's as well as variable cost of KSEB own thermal stations, by backing down these stations. Accordingly during the ABT regime from Jan 2003 to Dec-2003, KSEB availed 788.2 MU energy as UI at an average rate of Rs 1.65/unit where as the average cost of thermal generation from IPP's as well as KSEB stations is more than Rs. 2.5/unit. Thus KSEB saved about Rs. 67 Crores in power purchase by reducing generation from the costly thermal stations. No doubt that due to high cost of power (as compared to the cost of alternate power available), the capacities of IPP's and KSEB's own thermal stations are under utilized. While power is available, there is no additional demand due to exorbitant price of thermal power. The IPP's and KSEB have seized of the matter and are taking action to reduce the cost so as to utilize the full capacity. Incidentally, such under utilized capacities became handy as in 2002-03 & in 2003-04 when there was severe shortage in hydel generation.

	Though costlier such spare capacity is required for any system to maintain the reliability of power supply at better level.
Any capacity addition without proper assurance about price will become burden to the consumers.	The Board fully endorses the view of the Stakeholder. So Generation projects are taken up only after taking into account the growth in demand for energy, cost, benefit and other economical viability of the projects.
The Hon'ble Commission has directed the Board to convert the existing Diesel and Naphtha based Thermal plants to LNG.	The Hon'ble Commission has not given any direction to the Board to convert the existing Diesel and Naphtha based plants to LNG.
Whether the Board has initiated any steps to reduce peak load demand there by reducing the gap between the peak load and off-peak load demands.	• Unlike in the other States, majority of the consumers in the State belong to the domestic category and the domestic consumption is responsible for the wide gap between the peak and off-peak demand. KSEB is aware of this constraint and exploring the possibility of reducing the peak hour demand. • KSEB welcomes any practically implementable suggestion to reduce the peak – off peak ratio.
At present the generation in the hydel stations is regulated to manage the peak demand thereby causing hard ship to the downstream people of the respective river basins.	• Due to the advantage of hydel stations for instant starting and ability to synchronise with the grid, within a short time, hydel plants are being used for peak load operation. • It may be noted that, if the existing hydel projects are not there, the down stream river basins would have been completely dry as in the case of some other river basins where no projects exist. Thus, the projects have only helped the people in the downstream and not harmed them. So, it is the social responsibility of all concerned in the state to support the efforts taken by Board and the Government to tap the hydel potential in the State for the betterment of the People of Kerala by way of cheaper power generation, irrigation, drinking water and salinity control etc.
KSEB may start time of day metering for HT & EHT consumers.	KSEB has already implemented the differential pricing for EHT consumers from 1998 and for HT consumers from 2002 by introducing TOD meters.

19. N . Sreekumar, Chairman, Kerala State Council of the Confederation of Indian Industry (CII)	
Extract of Objections / Suggestions / Requests of the Stake Holder	**KSEB's Response**
The ARR for the year 2004-05 cannot be said to reflect the true state of affairs of the petitioner.	The ARR for the year 2004-05 has been prepared based on the actuals for the year 2002-03 and estimate for the year 2003-04 giving due consideration for the actuals up to Nov-2003. Therefore the ARR-2004-05 is the true projections based on solid reasons and basis.
The figures shown in the ARR 2004-05 does not reflect any improvement in the performance of the petitioner.	The statement is not based on any facts. The Board is improving its performance in each area of its activities viz. reduction of T&D loss by 2% every year, containment of Administration and General expenses, improvement in revenue collection etc. All these efforts have resulted in reduction of revenue deficit and good supply of power.
The revenue from Tariff has increased by Rs 152.79 Cr without tariff revision and there is much scope for further improvement.	KSEB is taking efforts to improve the collection efficiency by reducing theft and replacing faulty meters etc. With these activities the revenue has been increased even without tariff revision. This is an indication of efficiency improvement. KSEB shall continue to make further improvement.
The gross T&D loss for 2004-05 is 26.03% as against the 2003-04 figure of 28.02 % where as the Hon'ble Commission give direction to reduce the T&D loss by 3% from 2003-04 to 2004-05.	KSEB is targeting to reduce the T&D loss by 2% every year through the following steps. • More accurate estimation of losses through energy audit • Replacement of faulty meters • Detection and prevention of theft through anti power theft squads • Computerization of billing and revenue collection KSEB is also taking steps to reduce the technical losses by undertaking various system improvement schemes. The 3% loss reduction proposed by Hon'ble Commission is not achievable as some of the efforts to reduce the T & D loss have been just started and yet to gain momentum. It may be possible to increase it from 2% to 3% in 2005 – 06 or thereafter.
The figures shown in the ARR 2004-05 does not reflect any efficiency improvement by the petitioner. Interest charges increased by Rs. 1.76	• Interest and finance charges. There is a marginal increase in outstanding loan during 2003-2004, so the interest charges also slightly increased.

<table>
<tr>
<td>Cr, Employee cost increased by Rs.43 Cr, other expenses increased by Rs. 20 Cr.</td>
<td>
• <u>Employee cost</u>
The employee cost includes terminal benefits of the retiring employees. KSEB is liable to pay the DRCG, Commuted value of pension etc due to its employees at the time of retirements and have no control over it. The details of the employee costs for 2003-04 and estimate for 2004-05 is given below
<table>
<tr><th>Particulars</th><th>2003-04</th><th>2004-05</th><th>Percentage increase</th></tr>
<tr><td>Existing employee expenses</td><td>324.84</td><td>338.31</td><td>4.1%</td></tr>
<tr><td>Terminal benefits</td><td>368.80</td><td>398.33</td><td>8.0%</td></tr>
<tr><td>Total</td><td>693.64</td><td>736.64</td><td>6.2%</td></tr>
</table>
It shows that, the average increase in the pay and allowances of the existing employee is 4.1% only where as the terminal benefits due to the retired employees are increased by 8.0%.

KSEB is taking efforts to reduce the employee cost by curtailment of certain allowances, abolition of redundant posts, redeployment of employees on need basis etc. It may be noted that, the increase in the overall cost is only 6.2% which is well with in the limit particularly when the inflation is around 5% & the normal annual increment in pay is about 1%.
</td>
</tr>
<tr>
<td>There was a decrease of Non-tariff income by Rs. 9.19 Crores.</td>
<td>
Non-tariff income includes
- Meter rent/service line rental,
- Recoveries on theft of power,
- Wheeling charges and
- Miscellaneous charges such as
  • Unconnected minimum
  • Service connection charges
  • Testing fee
  • Reconnection fees
  • Penalty for belated payment
  • Line extension/service connection minimum
  • Processing fee for power allocation etc.
</td>
</tr>
</table>

	Revenue from these items cannot expect to go up particularly when the Board has rationalized the meter rent and allow concessions like waiver of penalty, installment facility etc to pay the dues.
The return/surplus for financial year 2004-05 is shown as Rs 155.30 Cr as against the provisional ARR 2003-04 at Rs.91.83 Cr resulting an increase of Rs 63.47 Cr	As per the Electricity Supply Act 1948, the statutory surplus allowed to the Board is 3% of the capital base at the beginning of the Year. Accordingly, the Board has been charging statutory surplus at the rate of 3% of the Capital base at the beginning of the Year. With the enactment of Electricity Act 2003, the Board is required to stream line its activities on commercial lines and also to find adequate resources for investment programs of the Board. The 3% return hitherto in practice cannot be conductive and needs to be replaced by better alternatives. In the case of Central Generating Stations like NTPC etc, the tariff provides for allowing 16% Return on equity. In the same analogy, the Board also expect to get 16% return on its equity base of Rs 1553 crores. . However, in view of reduction in interest rates in the recent period, the Board has claimed ROE at a moderate rate of 10% with effect from FY 2004-05.
The total energy input shows a marginal decrease but sales is projected to increase by 270 MU	• The expected energy sales for the year 2003-04 is 9080 MU and the projected sales for the year 2004-05 is 9350 MU. • The expected KSEB system T&D loss for the year 2003-04 is 3359 Million Units (27%) where as the targeted T&D loss for the year 2004-05 is 3079 MU (24.77%). Thus there is a reduction in T&D loss of 280 MU (2.23%) in the KSEB system. So the total energy input to the KSEB system for the year 2004-05 is 10 MU less than the energy input in the system for the year 2003-04. As explained in Para-4, by taking earnest efforts, KSEB is targeting to reduce the T&D loss by 2% every year. A loss reduction target of 3% is highly optimistic and practically not achievable. So its is submitted that, through sincere efforts the total

	input to KSEB system is maintained almost at the same level despite marginal increase in sale of power. By consistently reducing the T&D loss, the Board could contain the total input to KSEB system and there by limited the power purchase. This is another example of efficiency made by the Board.
Improve the day time consumption through following measures • avoiding unauthorized power cuts and undertaking of maintenance work during night hours • Tariff by time-of-use to be introduced to opt for day time use at reduced rates • Power based transport facilities to be encouraged in urban areas and to allow commercial activities beyond 10 PM. • Provide power connections on demand to small scale Industries & Commercial establishments	KSEB welcomes the suggestions for improving the off-peak to peak hour ratio and will explore the possibility of adopting the suggestions after detailed study.
Inventory discipline, computerization of billing, replacement of faulty meters and rationalizing total expenditure with a time bound action plan is quintessential to improve the internal efficiency of the petitioner	KSEB is taking earnest efforts to improve the efficiency through all such measures. This has paid dividends in the past two years. The Board would continue to move further on these aspects.
KSEB by itself and through the Government of Kerala had conducted several studies by various experts during the past several years like Price water house coopers, Credit Analysis & Research Ltd (CARE), The Credit Rating Information Services of India Ltd (CRISIL) and such other techno-financial experts for restructuring the Kerala State Electricity Board.	As part of the ADB reforms programme, M/s. CRISIL have prepared a study report on the KSEB reform program. At present, no Study is being done by CARE, Price Water House Coopers etc. The reports of study made in the past (wherever such report exist) can be made available to the Commission if demanded.

20.Chief Electrical Engineer, Southern Railway

Traction Tariff be reduced to single part tariff at Rs. 1.84 per unit	• The Railways has taken only the cost of energy alone and ignored other costs involved in supplying electricity to consumers. The comparison is not based on fundamental principles adopted for electricity pricing all around the world and therefore erroneous and not admissible. • The traction tariff in Kerala is extremely low compared to the rates in neighboring states which are given below: **State** — **Energy Charges (Ps./kWh)** Andra Pradesh — 460 Tamil Nadu — 350 Karnataka — 325 **KERALA** — **225** • The railway traction tariff is already 20 % below the rates charged for 110 kV Consumers and the petitioner can not be given further concessions as per the existing tariff.
Suitable incentive for high power factor be introduced	Hon Commission may consider the proposal. When such incentives are given, it should be ensured that there is penalty or disincentive for low power factor too..
• Provision for segregating LT & HT domestic consumption form LT VI (c) non-domestic and HT –II (Non-Commercial) respectively be introduced.	• All activities INCIDENTAL to a business/service shall be construed as a part of the business/service. Segregating each activity into its sub-activity and applying different tariff to the sub-sectors other than the intended sector is not justified and would affect the functioning of the electricity supplier. • However, in this respect, Hon. Commission may frame regulations and electricity

• LT Railway supply connections meant for stations, yards etc., is given a tariff of about Rs. 3.50 per unit • Level crossings be given Domestic supply rate.	supply code as envisaged in the Act, 2003 Section 50. Until such code is framed, Hon. Commission may permit to continue the existing practices as governed by the Conditions of supply of electricity. • In case segregation are allowed by the Commission, the Commission may permit KSEB, under the same principle, to apply a higher commercial tariff to railway's commercial establishments like shops/ bunks, restaurants, dormitories and lodgings etc., operating within railway premises. • The LT VI (C) supply is charged at Rs. 6.75/unit up to 500 units and Rs. 8.60/unit above 500 units and not at Rs. 10 as claimed by the objector. This cost is reasonable considering the expenses towards supplying electricity to the consumer
Increase the time limit for payment of HT & LT monthly bills to 30 days and belated payment surcharge be reduced to 0.5% per month	• Seven days and Fifteen days time is given for making the payment of LT & HT monthly bills. Increasing the time limit would increase the working capital requirement and increase the borrowings and interest cost. At the present financial position of the Board, further concessions may not be permitted. • At present penalty for belated bills is calculated at 2% for each *calendar month or part thereof.* If penalty is reduced to 0.5 % which is below the bank lending rate, it creates an incentive for deliberate delaying of payment and it is counter productive which can definitely hamper the revenue and cash flow of the supplier and therefore may not be permitted. The penalty is a penal charge and hence ought to be a high deterrent value.
Cost of alternative energy form NLC be used for computing tariff for railways	The present railway tariff (Rs. 2.25) is below the cost of alternate source of energy calculated by railways. (Rs. 2.96 per unit). The railway has ignored a number of factors for calculating the alternate cost of energy. The present railway tariff in Kerala is far below the tariff charged in other states. The tariff shall have to be increased at least to the level of tariff charged by Karnataka (Rs. 3.25) per unit.

Railway draws uniform power throughout 24 hours	The average load factor calculated from the monthly readings taken at the railway traction stations are around 0.2 only. This completely disproves the claim of uniform power drawal by railways.
Integrated maximum demand shall be used to compute billing demand.	• The four traction satiations of railways are located at different points in the grid. There is cost involved in transmitting electricity to four different stations. The maximum demand meters are not continuously recording or integrating meters, but records consumption in 30 minutes interval. The four meters record MDs at different point of time and therefore cannot be added to get a "total MD." The suggestion is devoid of sound engineering principle and cannot be accepted.

21. Kerala State Small Industries association, 2nd floor, Veekay Towers, Beerankunju Road, Kochi-18

Extract of Objections / Suggestions / Requests of the Stake Holder	KSEB's Response
The Commission may pass necessary orders to remove the element of cross subsidy in the case of LT IV Industrial Consumers and fix the tariff at cost plus statutory returns on investment only, after satisfying itself about the reliability of data furnished by KSE Board.	As per the provisional accounts for 2002-03 the average cost per Kwh sold by the Board is Rs. 4.10. But the average realization per unit including Duty from LT Industrial consumers is Rs. 3.98. Hence at present there is no cross subsidy element in the tariff of LT Industrial consumers. However the Hon'ble Commission may decide the manner in which the cross subsidy wherever exists can be reduced in a phased manner as stipulated in the Electricity Act 2003.
The Tariff structure of KSE Board represents historical influence of pressure groups and lobbyists to the detriment of small industries, which resulted in anomalies like small Industrial units paying far higher charges than other larger Industrial consumers. Fixed charge on installed capacity is totally out dated.	Fixed Charge is a component to compensate the investment made by the Board for providing sufficient and quality supply to its consumers. The two part tariff structure is a universal one and hence need to be retained.

Request KSEB to allow LT Industrial consumers to install and use TOD meters and avail of a discount, which may make for flapping of load curve, but the report has been ignored.	The feasibility of installing TOD meters at the expense of the consumers and granting of discount for off-peak consumption can be examined.
The Hon'ble commission may pass orders to rectify the present unjust method of collection and retention of security Deposit. If a consumers deposit Liability is less than the existing deposit, it should necessary be refunded or adjusted in subsequent bills.	At present an amount equal to 3 months' charges for the consumption is collected as cash deposit before giving supply to the Board. In case, the actual consumption is lower than the cash deposit consecutively for longer period, the refund of excess CD can be considered by the Board, on merit of each case.
KSEB may be given specific orders to address the issues like:- (a) Timely connection and resultant opportunities for revenue accretion, quick power connection to higher tariff paying consumers. (b) To make the functioning of APTS fair and effective (c) To carry out maintenance work without depressing the functioning of small Industries who are off peak consumers only. (d) To avoid delay in billing and collection by using third party resources. (e) While all Industrial consumers are off-peak consumers, there is no justification for imposing fixed charge on these consumers in the name of building capacity. (f) The entire issue of installation of capacity needs review. (g) Commission may order KSEB to consider use of pre-paid meters.	At present, Board is doing all possible efforts to address the issues like timely connection to all applicants, to make functioning of APTS fair and effective. Scheduled shut downs are often made after prior notice. However, in case of breakdowns, it may not always be possible to give notice. Breakdowns are beyond the control of the Board, but the rectification of the same cannot be delayed for the common interest of all. The suggestion for using third party resources for collection of revenue, installing of capacitors, use of pre-paid meters etc. can be examined in detail.

22. The Public Affairs Forum

Extract of Objections/Suggestions/Requests of the Stake Holder	KSEB's Response
Identify and estimate the Transmission and Distribution losses separately for each Division, estimate the investments required to reduce the losses under each head	The Board has been monitoring the Transmission and Distribution losses separately and circle wise. It has targeted to reduce the loss at the rate of 2% every year. System Improvement Schemes for reducing the technical losses are capital intensive and time consuming. Under the APDRP Scheme the Board focuses on upgradation of Sub transmission and distribution system in densely electrified zones of urban and industrial sectors.
Board should improve the collection efficiency.	The Board is making all efforts for the collection of the outstanding arrears. Disconnection, dismantling and Revenue recovery action etc are being taken in the normal course. Major portion of the arrear includes arrear due from the Government Departments and Public Sector Units. The Board has repeatedly taken up the issues of dues from Government Department with Government requesting them to help us in recovering the arrears. Computerisation of Cash collection and Billing in all the sections is in progress. All these efforts are expected to further improve the Collection efficiency.
Introduce modern inventory management practice to reduce cost on this account.	The Board shall undertake such issue.
Information regarding the number of posts abolished.	The sanctioned strength as on 1.2002 was 35870. But as on 1.1.2004 only 24303 employees (including Officers) are working in the Board.

Administration costs should be reduced.	Board has already taken action to reduce the Administration costs. Steps taken are • Shifting offices from rented to own building • Hiring of vehicles as and when required instead of purchasing new ones • Limiting Telephone and transportation expenses. • Controlling advertisement expenses etc. By all these actions, increase in the Administrative expenses have been contained.
The projects initiated by the Board have enormous cost over runs.	Some of the causes of time and cost over run of projects are : a. Delay in procurement of equipment and materials b. Land acquisition and rehabilitation issues c. Environmental and forest clearance issues d. Natural events like unprecedented rains and floods e. Contractual problems f. Financial problems of the Board g. Litigation h. Labour militancy in the state At present close monitoring is exercised to control the above factors and avoid cost/time over run of projects. The Board has been taking all efforts to improve its efficiency and the same will be continued.

23. C.P. Thomas, Retd Chief Engineer, Kottayam	
• Board has no proper accounts. • Consumer Numbers have been changed in the ARR for 2004-05. • The per capita consumption has also changed in new ARR. • Some 4 years back, the Board showed energy sales much more than the actual.	• The Board maintains proper accounts in its offices scattered throughout the state. The information generated from these accounts were used for administrative and other purposes in the past. Since these accounts are manually maintained, it took time to generate information for a new purpose like tariff setting. When information is required urgently, it is generated from sample data. Sample data were used for preparing the ARR 2003-04. For the ARR 2004-05, more number of samples has been used for projections. Board is committed to provide all and accurate information at its disposal to the Commission. The T&D losses calculated on wrong basis in the past has since been corrected. • Since the category wise numbers of consumers were not used for revenue accounting etc in the past, such data were not generated earlier. However, now, this data is used for revenue accounting, all efforts are being made to get more accurate data. Completely accurate data can be generated only after completion of computerisation of all the offices which is under progress.
ERC Act was enacted in 1988. The Gazette notification of 14-5-1999 is illegal and the Commission should set aside the notification.	In the ERC Act, 1998, Constitution of a State Regulatory Commission was not made mandatory, but optional. The Board had the power to revise tariff until the constitution of the Commission in 29-11-2002. This has been endorsed by the Commission in its interim order in a Case filed by M/s. Binani Zinc.
Loss of 307.9 Crores units is to be reduced.	The Board is committed and taking all efforts to reduce the losses. It has planned to reduce the losses by 2% each year. The working of the APTS has been intensified to detect pilferage and theft of energy.
All meters should be sealed.	Board is taking all efforts to seal all meters.
• Government may be directed to pay its dues/ interest to The Board	• The Board has time and again requested the Government to release the subsidy due to the Board. The Honourable Commission has also advised the Government to pay

• The Government shall pay all subsidies in advance. • Board shall get dues from the Government. No action seems taken	the amount and also to pay the interest.
Terminal Benefits should be borne by the Government while forming Companies	The Government has to take a decision on such suggestions.
Charging rent for meter is illegal. Rent Charged is not reasonable	The Commission has ordered continuation of the existing tariff for 2003-04. As the meter is a property of the Board, a rent is collected from the consumers. The rates have since been revised with effect from 1/1/2004.
Instead of meter rent, fixed Charge may be introduced	The Hon. Commission may consider this suggestion, if deemed appropriate.
Board should get subsidies and find ways to sell energy below Rs. 3	• The Board is committed to supply electricity at the lowest cost to its consumers. For many decades, Board has passed on to its consumers all the benefits of cheaper hydro electricity and therefore, the cost of electricity was the lowest in Kerala compared to other states in India. Now the cost has been increased due to increased dependence on thermal power.
Timely action to be taken to release the amount blocked by litigation	As directed by the Commission, the Board is constituting task force to get the arrears blocked by litigation etc.
Security Deposit/OYEC Charges/ Service Connection Charges are not shown in ARR	The statement of the objector is not true. It is given in Form 3 of the ARR. These items are treated as a deposit and are shown in the cash flow. They do not form part of income from tariff.

Tariff Revision: If the Government paid the dues in time the tariff revision can be avoided.	KSEB is taking every step to release the dues form the Government. If the Govt. subsidy /REC subsidy are reimbursed in time, the Borrowing of the Board and the Interest and financial charges would come down. But the revenue deficit and debt burden of the Board are so gigantic, the financial problem can't be overcome without tariff revision.
Penalty should be reduced and it should be levied after giving 30 days.	Penalty at the rate of 2 % per month is calculated from the due date for payment. Extending due date of payment will result in longer cash flow cycle, higher working capital requirement and increased borrowing which is not advisable. Penalty is a deterrent against default in payments and hence it has to be very heavy.

24. Sri. Suresh George, State Co-coordinator, NAPM, Eranakulam

Objections	KSEB response to Objections
Stringent disciplinary action is to be taken against Sri. P. X. Paulose, Sub Engineer, Electrical Section (Central) Eranakulam, for his illicit Connection with owner of "Kavitha International" at Eranakulam in tampering the meter which caused Rs 7 Lakhs to the Board, while he was at Ele. Section, College, Eranakulam.	The petition received in the vigilance wing of the Board is under investigation. There is a proper system in the Board to deal with such cases. Necessary action will be taken if the accusation is proved.

Annexure to item 10

Copy of the response to the representation dated 29th September 2003 submitted as item No 6 of Annexure XVII of the letter dated 10-11-2003.

6	**General Secretary, Kerala Film Exhibitors Federation, TC-9/171, Mission Quarters, Thrissur - 680 001**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. Kerala Film Industry will not be able to bear any tariff hike and must be spared.	In the application filed by the Board, the Hon'ble Commission was requested to allow the Board to continue the existing tariff. Only in the event of Government not agreeing to the suggested scheme of bridging the revenue gap, the Board prayed that the Commission should pass appropriate orders for regulating the tariff, after giving an opportunity to the Board to present its case. Therefore, the apprehension of the petitioner is premature. The Board shall give its comment as and when proposal for revision of the tariff is made.
	2. Due to load shedding theatres have to employ generators at additional cost	Load shedding is limited to half an hour only, every day (excluding Sundays) and it is applicable to all consumer categories without any exemption. This is resorted to for a common purpose of reducing peak hour demand and create an awareness for energy conservation. Therefore request for exemption from load shedding in isolation cannot be accepted.
	3. Film Industry should be given the status of Industry and State Governments in the neighbouring States have given incentives by way of lower electricity tariff.	The Board has to levy the tariff depending on the purpose for which energy is used. It can't afford to extend concessions particularly when it is in deep financial crisis. If the Government decides to declare the Film Industry as Industry and agree to give incentive like lower tariff, then Government will have to compensate the loss that may be sustained by the Board on this account.

TABLE TO ITEM No 18

KERALA SHOLAYAR WATER LEVELS SINCE 1970					
Water Year	1st July	1st September	1st February	2nd September to 31st January (Average Value)	First time reached FRL
1970-71	2600.40	2660.70	2650.50	2661.26	18-Sep-70
1971-72	2612.80	2663.00	2663.00	2660.88	1-Sep-71
1972-73	2575.30	2662.50	2651.55	2660.28	Not Reached
1973-74	2605.60	2659.80	2660.80	2660.66	Not Reached
1974-75	2558.70	2662.80	2655.30	2661.15	16-Aug-74
1975-76	2597.10	2662.95	2636.20	2658.55	15-Aug-75
1976-77	2556.10	2636.75	2639.00	2654.78	Not Reached
1977-78	2584.80	2656.30	2657.80	2659.38	Not Reached
1978-79	2562.70	2663.00	2645.60	2657.72	30-Aug-78
1979-80	2574.00	2663.00	2657.00	2661.58	13-Aug-79
1980-81	2605.20	2663.00	2651.90	2659.40	20-Aug-80
1981-82	2597.20	2663.00	2638.90	2656.60	22-Aug-81
1982-83	2575.00	2658.30	2647.40	2656.74	Not Reached
1983-84	2604.50	2659.60	2658.90	2658.95	Not Reached
1984-85	2605.80	2662.30	2648.90	2658.77	Not Reached
1985-86	2609.10	2660.70	2642.90	2658.13	Not Reached
1986-87	2581.00	2656.20	2652.20	2658.78	Not Reached
1987-88	2579.70	2630.10	2662.50	2656.74	Not Reached
1988-89	2615.80	2662.30	2641.50	2658.67	3-Sep-88
1989-90	2585.10	2660.20	2642.50	2658.40	18-Sep-89
1990-91	2608.30	2649.30	2653.10	2655.45	Not Reached
1991-92	2600.10	2659.80	2623.10	2642.27	Not Reached
1992-93	2614.30	2663.00	2654.90	2659.98	9-Aug-92
1993-94	2590.30	2653.80	2656.00	2657.10	Not Reached
1994-95	2641.10	2663.00	2637.00	2654.33	16-Jul-94
1995-96	2593.60	2662.80	2625.00	2650.19	2-Sep-94
1996-97	2615.70	2651.60	2618.00	2647.17	Not Reached
1997-98	2581.40	2651.80	2641.00	2651.40	Not Reached
1998-99	2585.90	2663.00	2658.30	2661.65	31-Aug-98
1999-00	2611.50	2663.00	2621.60	2652.79	29-Jul-99
2000-01	2588.10	2663.00	2650.00	2657.45	30-Aug-OO
2001-02	2600.90	2657.70	2628.20	2650.44	Not Reached
2002-03	2598.30	2632.50	2644.90	2647.71	Not Reached
2003-04	2582.30	2643.60	2644.50	2654.04	Not Reached

TABLE -1

Annex V

KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

Proceedings held on 5.3.2004 to hear the objections of Kerala HT&EHT Industrial Electricity Consumers' Association on the ARR&ERC of the KSEB for the year 2004-05.

Present: Shri.M.K.G.Pillai-Chairman
Shri.C.Balakrishna-Member

List of participants is furnished at Appendix.

Shri.M.K.G.Pillai, Chairman of the Commission welcomed the participants to the proceedings and called the objectors to present their case.

Shri.S.Jayathilakan, President, Kerala HT&EHT Industrial Electricity Consumers' Association stated that industrial consumption in the State was around 60% which came down to 27%. More and more industries were closing down mainly due to rising tariffs and poor quality of supply. As a result, the KSEB was loosing its business. The Industrial Consumers were subsidizing domestic consumers. By loosing more and more industrial consumers, the burden of the Board as well as the Government in respect of the revenue, was increasing. First motive of the Board should be to retain industrial consumers as far as possible. The only sustainable method was to reduce the existing tariff. All efforts should be made by the Board to reduce the present tariff so as to save the industries. Due to shutting down of industries, the Government was loosing heavily on excise duty. In the coming years, more and more industries would opt for open access if power was available at reduced tariff from other sources. He requested the Board to bring down the expenses, transmission loss, *etc*; so as to reduce the cost, thereby bringing down the tariff to affordable levels.

Kerala was the only State where incentives based on power factor and load factor were not given. Regarding these incentives, the Board had given a commitment and informed that they had submitted the proposal to the Government and it was under consideration of the Govt. So far no action had been taken on it. The Board gained significantly from the high power factor and high load factor load of industrial consumers, but the benefits had not been shared with the consumers. The Board should pass on at least a part of the benefit achieved to the consumers also.

He requested the Board as well as the Commission to restructure the present TOD tariff. Even though nothing had been mentioned in the Electricity Act about the banking, banking should be permitted for captive hydro generation which was being undertaken by the Industry.

The replies to the objections on the ARR raised by the Association were received late from the Board and they had not got any time to go through the replies. The present submission was without taking into account the replies of the Board and the Association would communicate the views on the replies furnished by the Board, subsequently. He appreciated the gesture of the Board in giving the details of employees as requested by the Association.

He called for steps to contain the expenditure on terminal benefits in future by restructuring the pension scheme for newly recruited employees. He suggested creation of a pension fund as envisaged by the Central Government as otherwise the expenditure on terminal benefits would become unmanageable in future.

Shri Jayathilakan pointed out that there was time overrun and cost overrun on all projects and they were required to be controlled. The financial and physical progress on capital works showed the Board's inability to spend money.

Shri Jayathilakan further stated that as per Sub section (4) of Section 47 of the Electricity Act 2003, the distribution licensee should pay interest equivalent to the bank rate or as may be specified by the concerned State Commission. Even though the Act had come into effect in the State from December 10, 2003, no action on this provision in the Act had not been taken so far.

Shri.George Thomas, Vice President, Kerala HT&EHT Industrial Electricity Consumers' Association made a presentation covering the objection of the Kerala HT&EHT Industrial Electricity Consumers' Association on the ARR. He requested the Commission for accelerated improvement in reliability and quality of supply. Industrial equipments were extremely sensitive to power quality factors, such as voltage and frequency. Continuous process industries faced huge loss of production due to poor quality and reliability of supply, which reduced the overall efficiency. The quality of supply in respect of EHT industrial consumers had shown some improvement over the past few years. But, as regards HT industrial consumers, the 11kV supply feeders to their premises were tapped at various points to give supply to step down transformers feeding LT domestic, commercial and other consumers, resulting in frequent power interruptions. He requested the Commission that an acceptable level of quality in terms of frequency and voltage maintained and reliability improved.

The HT/EHT Industries accounted for about 25% of the consumption and contributed 30% of the total revenue from tariff to the Board. The share of sales to HT/EHT consumers had significantly reduced due to rising tariffs and poor quality of supply. This led to closing down of industrial operations. The cost of power accounted for 15-61% of the total input cost of the industries. Cost of service in Kerala was the least in the Southern Region. But as per KSEB, the cost to serve was Rs.4.21/unit for FY04 and Rs.4.46 for FY05. Another factor was hydel shortfall substituted by costlier thermal power. Kerala was one of the few States in India with an overwhelming hydel-thermal ratio. Non fuel and non-purchase related costs were higher in Kerala as compared to other States and the system was inherently inefficient.

World over, there was a tendency to change over from cost plus regulation to performance based regulation. Several SERCs had adopted the performance based approach as part of the rate making process rather than restricting themselves to the cost plus approach. Benchmarking techniques were being used for comparing the performance of organisations against ideal firms to find out relative inefficiencies. The Commission should establish principles to establish efficient performance by licensees, in accordance with the provisions of Sub sections (c) & (e) of Section 61 of the Electricity Act, 2003.

The Association felt that there could be potential savings to the extent of Rs. 840 crores in the ARR submitted by the KSEB resulting in a reduction of Ps.90/unit in average cost to serve. As the rainfall in Kerala followed a 10 year pattern, the Association pleaded for assuming a hydro generation of 6150 MU during 2003-04 which would contribute Rs. 217.5 crores in the overall saving of Rs.840 crores. Accurate estimation of hydro generation would have significant impact on the ARR. If hydro generation fell short of expectation, the deficit should be set apart as Regulatory Asset. They also felt that saving of Rs.82.11 crores could be made by reduced purchase of expensive power by drawing additional energy from Central Power Stations. Maximum utilisation of allocated quota of power from Central Power Stations had to be ensured. Projections should be based at least on 80% PLF from these stations. The association pleaded for making available power purchase agreements for public scrutiny.

Skewed load curve caused KSEB to procure power from costlier sources of power and thereby kept generation capacity idle for most of the time .Shifting of load together with energy conservation efforts to flatten load curve would significantly contribute towards improved plant availability with consequent cost reduction.

The R&M expenses at 9 paise/unit for KSEB was high which showed a 28% increase and which was claimed to be linked to GFA. In TN, the R&M cost was 4 Ps/unit. They had more thermal stations than hydel, and their maintenance cost was very high. Most of Board's generating Stations were hydel and their maintenance cost should be less as compared to the Thermal Stations. Board had added about Rs.924 crores of assets to its GFA in 2003-04. R&M should not be linked to GFA. Due consideration should be given to age and nature of asset as well. Newly created assets would not require as much repair and maintenance as old assets. The UERC had disallowed R&M on new investments. A&G cost projected was also high as compared to last year. The Commission should examine this point. Regarding Employee cost, during the last Advisory Committee meeting as well as the Public hearing the Board had claimed that the increase was due to terminal benefits. From the furnished figure, it was clear that the terminal benefits constituted 51% of the total employee cost. The pension scheme of KSEB should be reviewed and rationalised in line with the latest Central Government Scheme and schemes of other Public Sector Undertakings. Pension benefits should not exceed the provision for salaries and wages. In Central Govt. Organisations, the salaries constituted 85% as against Pension benefits of 15%. Though drastic reduction in Over Time charges had been claimed in the ARR, the OT had registered an increase of more than 7% over the previous year. Regarding Capital expenditure, the Association called for a claw back on interest to the extent of Rs. 69 crores due to reduction in capital expenditure during 2003 and 2004. They also called for depreciation claw back of Rs.49 crores due to shortfall in capitalization in CWIP and savings of Rs.20 crores due to reduction in capital expenditure and depreciation claw back during 2005. They also anticipated a reduction of Rs.17 crores on account of reduction in statutory return due to fall in capitalisation. Working capital should not be based on current assets and current liability and should be based on a lead-lag study. Previous year's arrears and current year's arrears should be collected by the Board. Consumers should not be burdened with the non-payment of interest/subsidy by the Government.

The Association summarised the objections as below:

- The ARR might be reduced by Rs.840/- crores. Retail tariffs should come down to this extent.
- The HT & EHT consumers were providing around Rs.366 crores of cross subsidy.
- The Commission should consider adopting a category wise cost to serve in its tariff determination process and align tariffs to cost to serve. This would result in tariff reduction for the HT & EHT consumers.
- SERC should provide further incentives related to load factor, power factor and bulk consumption to industry to induce further efficient consumption.
- The time of the day tariff should be modified to attract increased off peak consumption and reduce system constraints.

After the presentation by the objectors, the representatives of the KSEB were called to furnish their response to the objections.

Dr. S.Murugiah, Member (Finance), KSEB stated the projections for hydro generation in the ARR were based on 10 year average hydro availability which worked out to 5500 MU. By assuming a higher hydro generation of 6150 MU, the Board would be put to huge financial loss, if there was a failure of monsoon as in the previous years. The Board, therefore preferred a moderate figure of 5500 MU. As regards availability from Central Generating Stations, the projections were based on past performance and the KSEB had been drawing its full entitled share from the Central Generating Stations. The Board felt that the savings calculated by the Association were based on availability without taking into account the auxiliary consumption which accounted for about 7.5% to 10% of the gross generation. The Board also did not agree with the cost reduction projected by the Association on account of savings in reduced purchase of expensive power as this did not take into account the system constraints. The Board stated that the target for loss reduction was 2% every year.

Regarding overtime allowance, the Board had taken effective steps and although the increase in terms of percentage looked high, the actual figure was low. As regards R&M expenditure, there was a back log in this regard and for this reason, the present level R&M expenditure had increased. The Board felt that if investment on capital works was reduced, it would affect the performance.

The Board expressed inability to provide the copies of power purchase agreements directly to the stakeholders but agreed to make available more copies to the Commission for utilising them in the manner the Commission desired. As regards the suggestion regarding modification in TOD tariff, the Board stated that it would communicate the views on the subject to the Commission, shortly.

The Commission observed that it was difficult to allow an ARR based on 5500 MU of hydro availability and the Board should rework the power purchase requirement based on a hydro availability of 6000 MU as recommended by the Advisory Committee. In this connection, the Commission directed the Board to constitute a formal system of annual, monthly, fortnightly and daily scheduling, strictly on merit order basis which should be subjected to scrutiny at different levels in the Board through a Management Information System. The schedules should be made transparent for information of the stakeholders through the web site of the Board and by other means. The Commission also felt that the target for T&D loss reduction for 2004-05 should be 3% from the previous year's level as recommended by the Advisory Committee and the Board should rework the figure for energy input, *etc*; on this basis and furnish the information to the Commission immediately.

The Board agreed to comply with the above directions of the Commission.

Appendix

List of Participants

Present

KSE Board

1 Dr.S.Murugiah, Member (Finance), Kerala State Electricity Board.
2 Shri.V.Arunagireeswara Iyer, Financial Advisor.
3 Shri.M.Raveendran Nair, Deputy Chief Engineer, TRAC.
4 Shri.A.Sudley Cardoza, Executive Engineer, TRAC.
5 Shri.Bipin Sanker, Assistant Executive Engineer, TRAC.
6 Shri.P.V.Sivaprasad, Assistant Executive Engineer, TRAC.
7 Shri.P.Devapalan, Finance Officer, TRAC.

Kerala HT&EHT Industrial Electricity Consumers' Association.

8 Shri.S.Jayathilakan, President.
9 Shri.George Thomas, Vice President.
10 Shri.K.K.George, Treasurer.
11 Shri.A.A.M.Nawaz, Committee Member.
12 Shri.Madhavan Nair, Committee Member.
13 Shri.Satheesan.A.R. Committee Member.

Annex VI

LIST OF PARTICIPANTS IN

PUBLIC HEARING ON 17.03.2004

1 T.M.Manoharan, Chairman, KSEB.
2 S.Murugiah, Member (Finance), KSEB.
3 P.N.Mohanan, Member (Generation & Transmission), KSEB.
4 C.Abdulla, Member (Distribution), KSEB, Trivandrum.
5 V.Arunagireswara Iyer, Financial Adviser, KSEB.
6 R.S.Chandramohan, Chief Engineer, KSEB.
7 K.K.Karappankutty, Chief Engineer (Construction), KSEB.
8 M.Sivathanu Pillai, Chief Engineer (Corporate Planning), KSEB.
9 G.Chandran Pillai, Deputy Chief Engineer(Corporate Planning, KSEB.
10 Cherian Oommen, Chief Engineer (Transmission), KSEB.
11 G.H.Krishna Iyer, Retd.Deputy Chief Engineer, KSEB.
12 G.S.Ajikumar, Asst.Executive Engineer, O/o the Chief Engineer (Transmission South), KSEB.
13 S.Raveendran Nair, E.D., Agency for Development of Acqua Culture, Fisheries.
14 N.Venkatesan, Chief Engineer, T,C & M, KSEB.
15 C.P.Thomas, Retd.Chief Engineer, KSEB.
16 M.Nizamudeen, Advocate, Representing Kerala Hotel & Restaurant Association.
17 Xavier Thomas Kondody, State President, Kerala State Small Industries Association, Kochi – 18.
18 Jimmy Abraham, Project Manager, MILMA, Trivandrum.
19 P.Sabu Mohan, General Manager, Binani Zinc, Cochin.
20 P.V.Sivaprasad, Asst.Executive Engineer, TRAC, KSEB.
21 P.Devapalan, Finance Officer, TRAC, KSEB.
22 Sudley Cardoza, Executive Engineer, TRAC, KSEB.
23 M.Ravindran Nair, Deputy Chief Engineer, TRAC, KSEB.
24 Bipin Sankar, Asst.Executive Engineer, TRAC, KSEB.
25 G.Satheesh Kumar, Asst.Executive Engineer, TRAC, KSEB.
26 S.S.Mediratta, General Manager, NTPC, Kayamkulam.
27 N.Kannan, Additional General Manager (Comml.), SR.HQ, NTPC.
28 J.Mammen, Deputy General Manager (Comml.), NTPC, Trivandrum.
29 K.A.Gangadharan, Vice President, Service Station Owners Association, Kannur.
30 K.C.Sasidharan, Treasurer, Service Station Owners Association, Kannur.
31 P.K.Divakaran, General Secretary, Consumer Protection Centre of Kerala, Trivandrum.
32 Dominic J. Mechery, Secretary, Association of Planters of Kerala, Pattom.
33 C.Raju, Convenor/Infra Confederation of Indian Industry.
34 G.Anand, Deputy Director, Confederation of Indian Industry.
35 S.K.Unnikrishnan Nair, Muvattupuzha.
36 S.P.Ravi, Chalakudy Puzha Samrakshana Samithi.
37 C.G.Madhusoodhanan, Chalakudy Puzha Samrakshana Samithi.
38 B.F.Vincent, Asianet Satellite Communication, Trivandrum.
39 R.Shyam Kumar, Asianet Satellite Communication, Trivandrum.
40 T.R.Balagopalan Nair, Asianet Satellite Communication, Trivandrum.
41 G.Anil, Energy Management Centre, Thycaud, Trivandrum.
42 M.K.Vijayan, General Secretary, A.A.W.K., Ernakulam.
43 M.Rajagopalan Nair, State Vice President. A.A.W.K., Ernakulam.
44 K.T.Thomas, Manager, Express Publication (Madurai), Ltd., Trivandrum – 10.

Annex VII

VIEWS EXPRESSED BY THE PARTICIPANTS DURING THE COMMISSION'S PROCEEDINGS ON PUBLIC HEARING ON ARR & ERC FOR 2004-05 HELD ON 17.03.2004 AT GOVT.GUEST HOUSE, THIRUVANANTHAPURAM

General Secretary, Consumer Protection Center of Kerala and Managing Trustee, A.P.Udayabhanu Endowment Trust, Thiruvananthapuram.	The amount realized by KSEB for giving service connections to consumers under OYEC scheme is in excess of the actual amount incurred by the Board. Also, the Board is not using the entire materials provided in the estimate. The amount collected for effecting new service connections under OYEC Scheme includes the cost of energy meter also. Since the cost of meter is already collected under OYEC scheme, it is illegal to collect the meter rent from the consumers. So also, the amount collected for OYEC connections include the cost of materials, labour and all other expenses for effecting service connection. It is unfair to collect service connection charges from the same consumer. Actually, there is duplication of collection under two heads, which is to be avoided. The tariff for the supply of power to KSEB by NTPC from the Kayamkulam Thermal Power Plant was fixed while commissioning the first 115 MW unit. The second and third units were commissioned at the same location making use of the already developed infrastructure at Kayamkulam. But no proportionate reduction in the unit cost of Electricity supplied to the KSEB has been made by NTPC. This increased cost of energy supplied is passed on to the consumers. Commission should look into this aspect.
C.P.Thomas, Former Chief Engineer, KSEB.	Board is not taking action for realizing about Rs.4000 crores of subsidy from the Government. If TOD meters are introduced in the system for loads above 50 KVA, it would increase the revenue to the Board and reduce the peak load demand. Charging meter rent is illegal. The revenue loss due to withdrawal of meter rent can be made good by introducing fixed charges for those categories of consumers from whom fixed charge is not collected at present. The surcharge realized by the Board for belated payment is not justifiable. The consumers should get at least 30 days time before disconnection irrespective of the number of days in a particular month and the penal charges for late payment should be reduced to 12% from the present rate of 24%.

State President, Kerala State Small Industries Association, Kochi.	Electricity is most essential for economic and social development of the State. HT consumers are required to deposit 60 days current charges as advance deposit, whereas Small Scale Industries are required to deposit 3 months average current charges as security deposit. While calculating the security deposit, 12 month's average current charges should be taken instead of 3 months as is being done at present and the amount of security deposit should be reduced to 2 months' average charges only. The security deposit should bear interest at the prevailing bank interest rates or Small Scale Industries should be permitted to provide either Bank guarantee or National Savings Certificate as security deposit. The existing LT industrial consumers may be allowed to reduce power allocation by surrender of excess capacity, so that it can be allocated to new units requiring power. If this is done, the initial delay in power allocation to the new industrial units can be avoided. Exemption from electricity duty for 5 years to new industrial units from the date of commencement of production should be allowed. All new industrial units starting commercial production from 1-1-2002 to 31-12-2006 shall be charged the same tariff applicable to them on the date of commercial production and any subsequent tariff revisions should not be made applicable to them.
Agency for Development of Acquaculture, Trivandrum.	Acquaculture should be treated at par with Agriculture and the concessions given to Agriculture Consumers with regard to electricity charges should be extended to Acquaculture also. The Board should come out with measures taken on various provisions of the Electricity Act, 2003.
S.K.Unnikrishnan Nair, Moovattupuzha.	Wanted to know the legal position regarding the existence of the Board after 10/12/03, when the Act came into force in the State. The figures published in the ARR by the KSEB are false and cannot be relied upon. As per the verdict of the Supreme Court of India the Commission is to safeguard the interest of the consumers. Also if T&D losses are not reduced, the financial commitment on that account is to be borne by the Board and the consumers should not be penalized. If accounting is properly done, KSEB will be running on profit and the present tariff can be reduced by 45%.
Dominic.J.Mechery, Secretary, The Association of Planters	Plantations have been going through a very serious financial crisis, particularly in Tea Plantations, which provide employment for about

of Kerala,Trivandrum.	25 lakhs of rural people. The Plantations are categorized under HT I Industrial category. The plantations are using only 0.5% of the total electricity consumption of the State, roughly 44 million units per year. They also provide employment to the poor people living in remote areas of the State. The tariff for plantations should be categorized under HT III for Agriculture.
Representative, Kerala Hotel & Restaurant Association, Kochi.	Concessions that are extended to Industry are to be made applicable to Hotels & Restaurants. Bakeries are treated as industrial units on the plea that they are manufacturing food items where as Hotels & Restaurants though they are also manufacturing units are charged under commercial tariff. This anomaly should be rectified. Hotels & Restaurants also contribute for the development of Tourism and the Government had always treated Hotels & Restaurants under Factories Act and hence other rules and regulations applicable to industry should also be made applicable to them. They should be charged under Industrial Tariff. Small Hotels in Villages throughout the State should be treated as Small Scale Industry.
Asianet Satellite Comminications Ltd., Thiruvananthapuram.	At present charged under Commercial tariff. The correct tariff applicable to Asianet Communications should be LT IV Industrial, being IT industry providing Data services, Audio & Video services through cable. Commission should consider classifying them under IT industry.
Representative, Sea Food Exporters of India, Cochin.	In 2002, KSEB shifted the Sea food industry from category HT I to HT IV. A 150 KVA LT industry doing the same process is treated as industry, whereas when the load is enhanced to 151 KVA, industry doing the same process is treated under commercial tariff. Sea Food Processing Industry should therefore be classified under HT I category.
General Manager, NTPC, Kayamkulam.	As per the power purchase agreement executed between KSEB & NTPC, the Kayamkulam Plant is supposed to be operated as a base load station. The 200.3 MU scheduled to be purchased from NTPC Kayamkulam as per ARR of KSEB for 2004-05 is quite inadequate to operate the station commercially and technically. The frequent switching on & off of the machines will affect the life of the equipment also. The machines are expected to work at a minimum of 70% load for which at a schedule of at least 1071 MU is to be provided. If the schedule is high, the per unit cost of electricity will also come down.

Chalakudy Puzha Samrakshana Samithi, Thrissur.	The Parambikulam Aliyar Project Agreement was not in the best interest of the State in general and the Board in particular. The violations of the agreement by the Government of Tamil Nadu has caused heavy losses to the KSEB. The anticipated reduction in electricity generation from hydel stations for 2003-04 at about 35% seems unrealistically high. With the proposed move to upgrade Kayamkulam Thermal Plant to 2300 MW and with the completion of the ongoing projects, the Board will have more than 20000 MU of electricity at its disposal in about 10 years time. But as per the present trend the annual increase in demand is only about 3% while 2% reduction in T&D losses is expected per annum. Thus the effective growth in demand is only about 1% without going for any energy conservation. Under these circumstances, the commitment charges will increase with the proposed capacity addition, ultimately resulting in additional burden to the consumers. Hence capacity addition, without any proper assurance about the price, will be an additional burden to the consumers. Implications of such wrong policy decision against the will of the consumers will have to be borne by the Board. The peak load in the system should be managed by introducing time of the day metering for HT & EHT consumers.
Confederation of Indian Industry (CII), Kochi.	The ARR for 2004-05 cannot be said to reflect the true state of affairs of the petitioner. KSEB itself and through Govt. of Kerala had conducted several studies by various experts during the past several years. The reports by these experts have not been acted upon by the petitioner without any just cause or excuse. In these circumstances, all such reports should be placed before the Commission along with the action taken reports by the KSEB to enable the Commission to assess the level of internal efficiency. There is scope for further reduction in the T&D losses. The Board should furnish the details of employees and pay adequate attention to the training of employees. The Board should take action on the swapping of the remaining high interest loans. There should be no tariff enhancement for industries. The inefficiency of the KSEB shall not be passed on to the consumers.
Service Station Owners Association, Kannur.	Service Stations have been started by availing huge amount of loan from banks and other financial institutions. Many Service Stations in Kannur District have already been closed and the remaining are

	facing threat of closure because of the abnormal current charges consequent on the classification of the Service Stations under commercial category. Each unit of electricity is charged at a rate of Rs.8.25 in addition to 10% duty and fixed charges. This is the highest rate prevailing in India. Electricity Board has enhanced the tariff 4 times, fourfold. In olden days, Service Stations were operated along with petrol pumps but today most of the Service Stations are working as independent workshops. So, the tariff applicable to the workshops should be made applicable to Service Stations also.
G.S.Krishna Iyer, Retd. Deputy Chief Engineer	Board has to get about Rs.4300 crores from the Government. The due shares of amount to be received from World Bank, CIDA and APDRP schemes are not being transferred to the Board by the Government. The shortage of funds is made good by the Board by availing further loans for implementation of the plan schemes which in turn increases debt servicing. If the Government is not in a position to give the due amount of Rs.4300 crores, the Commission should insist on the Government to pay at least the interest at a reasonable rate, say 10%, so that the debts can be reduced to some extent. Being a Government Organization, the Board is not taking effective steps to get the dues from the Government. So the Commission should take action to get the amount due from the Government.
Shri Jimmy, Project Manager, MILMA, Pattom.	MILMA was categorized under Industrial HT I tariff right from the start of all units in the State of Kerala. From January 2003 onwards, the HT connections under MILMA are classified under HT IV Commercial category without any notice. The LT connections of MILMA are still under LT IV Industry. Commission should consider to categorize all units of MILMA under industrial tariff.
K.T.Thomas, Indian Express	The Indian Express is at present listed under Commercial category. Electricity is used mainly for plate making, scanning, *etc;* all of which are part of printing process. The Newspaper had approached KSEB and the Regulatory Commission for reclassification. Commission should categorize the Newspaper under industrial category instead of commercial category.
General Secretary, Association of Automobile workshops of kerala, Kochi.	A reply has been received from the Deputy Chief Engineer, KSEB stating that Automobile Workshops are classified under LT IV category and the Service Stations under LT VII. But the local officers of the KSEB have been categorizing Auto repairing workshops under

	LT VII category. This irregularity may be rectified.
Reply by Chairman, KSEB	The cost of materials is fluctuating in the market. OYEC charges are collected based on the actual cost of materials which may vary with the cost data. Apart from releasing connection under OYEC scheme, ordinary connections are also effected. OYEC charges are collected for getting connections on priority. Service charges are collected irrespective of whether it is ordinary service or OYEC service, so it is not a double payment. As per Sub section 3 (a) & (b) of Section 45 of the Electricity Act 2003, the charge for electricity supplied by a distribution licensee may include a rent in respect of any electric meter provided by the distribution licensee. So charging meter rent is not illegal. Recently, CERC has issued orders regarding reducing ROE from the existing 16% to 14% which may give some relief in the charge payable to NTPC Kayamkulam. The intension of the Board is to have a cordial relationship with the Government as otherwise it will create problems for the Board for arranging loans from financial institutions, *etc.* The Government is also having a cordial relationship with the Board. Recently, Government have helped the Board by securitisation of dues to the Central Power Sector Undertaking to the tune of Rs.1172 Crores. The Board would look into the high rate of interests as well as discrepancies pointed out in the calculation of surcharge on belated payment. Board has to make prompt payment to NTPC, BSES, *etc;* for the purchase of power. So waiver of security deposit cannot be considered. The normal period of realization of expenditure incurred by the Board for providing power supply is 3 months and hence 3 months current charges collected as security deposit is only reasonable. All the pending 900 applications for industrial connection in the State will be cleared immediately. Prompt action will be taken for regularizing the unused connected load in the industrial premises on proper application. Board has no objection in freezing the tariff as per industrial policy announced by the Government of Kerala; subsidizing the Planters, Acquaculture etc., if the Board is compensated as per Sec 65 of the Electricity Act. Even though the consumption has increased, there is no proportional increase in the power purchase cost because of the concerted effort in reducing T&D losses. Categorization of consumers under different tariff is within the purview of the Commission. The units scheduled to

	be purchased from NTPC is only a projection. The actual purchase would be made as per merit order dispatch. NTPC, being a giant in the power sector should cooperate with the KSEB in reducing the cost of supply. Board will co-operate with the Government in getting due share of water from Parambikulam Aliyar Project. There need not be any apprehension over the underutilization of the capacity as the hydel projects will be operated according to the storage capacity. Agree with the suggestion put forward by the CII regarding training of employees, but there are practical limitations. Regarding computerization of billing, the software is already ready. Details of 73 lakhs of consumers are to be collected from the field. In the first stage, computerization of 88 sections will be completed immediately. Another 80 sections will be completed within 2 or 3 months and all the other sections in the 3rd stage. In this regard, the Commission has already given tight schedules which will be followed. Purchase of power from nonconventional energy sources is a costly affair. As it is a commitment by the Government of Kerala, such power will be availed with the approval of the Commission only. The target given by the Commission for the deduction of T&D losses is slightly unachievable, still the Board will try to achieve the target. The Tamilnadu portion of the Madurai-Trivandrum 400 KV line has already been completed and the Kerala portion will be completed within a period of 3 months though it has been targeted to be completed by 31st March 2004.