KERALA STATE ELECTRICITY REGULATORY COMMISSION

ORDER ON
ARR AND ERC FOR 2003-04

PETITION TP-1/2003 OF KSEB

December, 2003

KERALA STATE ELECTRICITY REGULATORY COMMISSION

Thiruvananthapuram

Petition No.TP-1 of 2003

December 31, 2003

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 2003-04 filed by the Kerala State Electricity Board vide letter No. KSEB/TRAC/TF-1/2003/306 dated August 1, 2003, considered the written objections filed by the stake holders, consulted the State Advisory Committee on 12.11.2003, considered the subsequent written and oral submissions of the KSEB, heard the views of the stake holders in public hearing on 28.11.2003, 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.

Sd/-
C.Balakrishnan
Member

Sd/-
M.K.G.Pillai
Chairman

Authenticated for issue

Secretary (I/C)

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
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
NLC	Neyveli Lignite Corporation
PLF	Plant Load Factor
PTC	Power Trading Corporation
RE	Rural Electrification
SAC	State Advisory Committee
T&D	Transmission & Distribution
UI	Unintentional exchange of power/energy

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CHAPTER I

INTRODUCTION

1.1 Preamble

In exercise of the powers conferred under section 17 of the Electricity Regulatory Commissions Act, 1998 (Central Act 14 of 1998), the Government of Kerala vide G.O.MS.No.34/2002/PD dated 14th November, 2002 constituted the Kerala State Electricity Regulatory Commission consisting of the following members, namely: -

1	Sri.M.K.G.Pillai, 'Sreekrishna', Unichakkam Veedu, Vadayattukotta, Kollam – 691 001.	Director General (Rtd.) CPRI	Chairperson
2	Sri.C.Balakrishnan, 'Chaithanya', Opposite Chinmaya Mission College, Talap, Kannur – 670 002.	Chief Engineer(Rtd.) KSEB	Member

The functions vested with the Commission under section 22(1) of the ERC Act are:

a) To determine the tariff for electricity wholesale, bulk, grid or retail as the case may be, in the manner provided in section 29;

b) To determine the tariff payable for the use of the transmission facilities in the manner provided in section 29;

c) To regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;

d) To promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of the Act.

Conduct of Business Regulations and Tariff Regulations of the Commission have been placed on the Web site of the Commission.

1.2 Procedural History

The Kerala State Electricity Board filed a petition for ARR and ERC for the Financial year 2003-04 on 1-08-2003. 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 1 of 2003 on 16th August, 2003. The Commission also approved a draft public notice for publication in the leading Malayalam and English dailies as listed below, informing the stake holders and general public with brief details of the ARR & ERC filed by the KSEB and inviting response from them latest by 30th September, 2003.

- 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 30th September, 2003.

1 Annual statement of Accounts for the last 3 years of the KSEB and energy forecast methodology for projections for 2003-04 and 2004-05.

2 Detailed statement of terms and conditions governing the existing loans availed by KSEB and working details of interest liability on loans.

3 Cost of supply to each category of consumer.

4 Details of yearwise demand and collection separately indicating the percentage of collection efficiency for the last three years.

5 Time bound programme for collection of outstanding dues towards revenue from sale of power.

6 Consumer categorywise and capacitywise details regarding faulty meters

and programme for replacement including financial requirement.

7 Details of APDRP Schemes including project outlays, assistance from Centre, schedules for completion, progress achieved so far, *etc.*

8 Details of schedules for self-generation.

9 Details of schedules for power purchase on merit order basis.

10 Details of the Capital works proposed for the financial years 2003-04 and 2004-05 along with time schedule for completion.

11 Detailed schedule of implementation of schemes under system improvement and AT & C loss reduction.

12 Details of present inventory position and proposed computerization programme for efficient materials management.

13 Details of power purchase payments during FY 2003-04 upto August 2003.

14 Details regarding computerization of billing including the time schedule for completion.

The Board was also requested to file the petition on ARR & ERC for 2004-05, with the Commission, latest by 31st October, 2003.

The copies of the petition on ARR & ERC for the year 2003-04 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.

On 16th September, 2003, the KSEB forwarded a request to consider additional revenue requirement due to shortfall in hydro generation because of failure of monsoon during the period June-August 2003. The KSEB furnished the reply to the information asked for by the Commission on 30th September, 2003.

The Commission made a detailed scrutiny of the ARR & ERC and the information furnished by the KSEB subsequently. Based on this scrutiny, the Commission sought further clarifications from the Board vide letter dated 15.10.2003 directing it to furnish the reply latest by October 31, 2003.

Although the last date of submission of written responses/objections by the stake holders was fixed as 30.9.2003, some of the stake holders requested for extension of the date and the Commission acceded to their request and extended the last date for submission of written objections to 15.10.2003. Although sufficient time was given to the stakeholders for filing the objections, the response was not encouraging as only twenty of them filed written objections before the extended date. The list of objectors is furnished at Annex I. 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. Being a maiden exercise and a new experience, the Commission took a lenient view on such procedural inadequacies and decided to register all objections. The objections were forwarded to the Board asking it to furnish replies to the objections latest by 31.10.2003. The Board, however, requested for extension of the date, which was granted. The Commission simultaneously mailed copy of the reply furnished by the KSEB in response to the information initially called for by the Commission, to all objectors. Each objector was also supplied with copy of objections raised by other objectors.

The Board furnished the replies to the objections and the replies to the subsequent clarifications asked for by the Commission, on 10.11.2003. The details of the objections raised by each of the stakeholders and the replies filed by the Board are furnished in Annex II.

The first meeting of the State Advisory Committee (SAC) was held on 12.11.2003 to discuss the issues arising out of the ARR & ERC filed by the

KSEB. Prior to the meeting, all the members of the SAC was provided with a copy of the ARR & ERC and the information furnished by the KSEB subsequently together with copy of responses/objections received from the stake holders (20 nos.) to enable them to carry out an in-depth study of the documents and offer their expert advice/views/comments on the various issues. The minutes of the proceedings of the meeting is enclosed as Annex III.

The Commission carried out further scrutiny of the ARR & ERC, additional information furnished by the Board subsequently, objections raised by the Stakeholders and replies of the KSEB to the objections. Based on this scrutiny, the Commission called for a meeting of the Senior Officers of the KSEB with the Commission for seeking clarifications on the various issues. This meeting was held on 20.11.2003.

As the next step in processing the petition, the Commission held proceedings for public hearing at the Government Guest House, Thycaud on 28.11.2003. A press release regarding the public hearing was issued well before the date of hearing, besides making publicity through the website of the Commission. Before the public hearing, the replies filed by the KSEB to the objections raised by the stake holders and the information furnished by the KSEB on 10.11.2003 in response to the clarifications sought by the Commission were also 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 IV. A summary of the views expressed by the participants during the public hearing is enclosed as Annex V. 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 18.12.2003.

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 2003-04, the Commission has taken into consideration the materials filed by the KSEB, the clarifications furnished by the KSEB in the meetings with the Commission, the objections filed by the Stake holders, the deliberations in the 1st meeting of the State Advisory Committee and further views expressed by the Stake holders during the public hearing.

1.3 Present status of Power Sector in Kerala

Kerala is relatively poor in energy sources. It does not have any known reserves of coal, oil or natural gas. Its major source of electricity is hydropower. The electricity supply system is predominantly owned by the Government owned utility organisation, *viz*; The Kerala State Electricity Board. Starting with a 5 MW hydro plant in 1940, Kerala power system has grown substantially to an installed capacity of over 2600 MW. The transmission and distribution network has grown to the extent of over 2.3 lakhs circuit km. The total number of consumers has increased to over 70 lakhs.

As far as power development is concerned, like most of the Indian States, Kerala is also in an uncomfortable situation. Resource constraints, numerous socio-economic issues and environmental considerations impede the development of power in the State. Kerala was developing its hydro potential at a fairly reasonable rate up to the commissioning of Idukki . Since then, it has run into rough weather due to diverse reasons, environmental constraints being the most important of them. Even as early as 1975, it was anticipated that Kerala would face power shortage from 1982 onwards, unless additional and alternative sources of energy were found. This has come true and continues to be even today. The total exploitable potential of hydro energy taking into account environmental constraints and inter-State disputes has been estimated between 15,000 MU and 20,000 MU.

An overview of the growth of power sector in Kerala is furnished in the table below:

Particulars	1951	1961	1980	1990	1995	2000	2002
Installed Capacity (MW)	38	133	1,012	1,477	1492	2,508	2,602
Annual Sales (MU)	140	518	4,318	4,898	7,081	9,813	8,667
Per Capita Consumption (kWh)	13	30	96	164	231	301	394
EHT Lines- Circuit km	911	1,900	4,404	5,770	6,106	7,599	9,325
EHT- S/S- (Nos)	12	22	86	130	157	178	195
HT Lines- Circuit km	1,067	5,449	13,348	19,627	24,509	28,672	31,088
LT Lines- km	992	8,899	47,606	95,838	125,390	180,499	191,469
Distribution Transformers (Nos)	324	2,898	10,821	16,394	22,478	29,551	32,282

Although all villages in Kerala were electrified by 1979, electricity is yet to reach about 20-25% of the households. During the last two decades, the share of domestic consumption has gone up from 17% to about 47%; while the share of industrial consumption has come down from 72% to about 37%. This has resulted in sharp increase in peak demand. Added to this is the substantial number of run-off the river hydro plant whose output cannot be controlled or shifted in accordance with the power demand. With a major share of the demand from domestic consumers, there is limited scope for shifting the demand pattern as well . Due to this, the power demand profile in Kerala is highly skewed with average demand to peak ratio being lower than that in other States. The present average peak availability from the installed generating capacity of 2602 MW is 1400-1500 MW. The remaining peak demand is to be met by purchasing power from the Central Sector Stations and IPPS, which is not adequate under many situations especially tender conditions of severe hydro shortage due to failure of monsoon. As a result of this, load shedding has become a regular feature. Apart from this, the system quite often experiences wide voltage and frequency fluctuations and frequent interruptions.

The average sale rate of energy to consumers has been less than the cost of energy. As a result, the internal resources of the Board show a negative balance. For implementation of projects and meeting the revenue expenses in certain cases, the KSEB borrows money from various financial institutions for covering the negative balance under internal resources. Up to the year 2002-03, the total borrowings amounted to Rs.4841 crores. Purchase of power by KSEB for meeting the demand has been increasing over the years with corresponding increase in expenditure which stood at Rs.1872 crores during the year 2002-03. Another major financial problem faced by the Board was the non-receipt of subsidy due from the State Government. It is reported that the receivable subsidy on account of revenue deficit as on 31st March 2003 is Rs.2564.21 crores. A further amount of Rs.1801.1 crores is also stated to be due from the State Government on account of RE subsidy. As a result of all these, there has been a steady increase of debt burden of the KSEB which stood at Rs.5043 crores as on 31st October 2003 while value of the net fixed assets stood at Rs.6100 crores. The financial position of the KSEB thus continues to be in a critical state.

CHAPTER II

ENERGY REQUIREMENT PROJECTIONS FOR 2003-04

2.1 Methodology

In estimating the demand and energy requirement furnished in the ARR & ERC, the KSEB has adopted a methodology of projecting the past trends into future and then making adjustments for changes in the number of consumers in various categories and the consumption pattern. Projections for the year 2003-04 have been based on the actual/estimated demand and energy consumption during the year 2002-03. For achieving this, the following procedure has been followed.

Firstly, representative daily load curve for each month of 2002-03 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 2002-03, the representative load curve of 2003-04 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 KSEB

The energy requirement projections made by the KSEB on the above basis is summarised below:

Consumer category	Energy consumption in MU		% increase over 2002-03
	2002-03	2003-04	
1 Low Tension			
Domestic	3717	3943	6.00
Non-Domestic	219	233	6.39
Industrial	669	699	4.48
Commercial	581	618	6.36
Irrigation & Dewatering	177	199	12.42
Public Lighting	151	167	10.59
Non paying Group	11	11	0.00
Others	4	4	0.00
Sub Total LT	**5529**	**5874**	**6.24**
2 High Tension			
Industrial	1324	1325	0.07
Non-Industrial	90	90	0.00
Commercial	223	219	-1.79
Others including Agriculture	9	9	0.00
Sub Total HT	**1646**	**1643**	**-**
3 Extra High Tension			
66 kV	309	313	1.29
110 kV	993	1007	1.40
Railways	47	50	6.38
Sub Total EHT	**1349**	**1370**	**-**
4 Bulk Supply (licensees)	183	193	5.46
GRAND TOTAL	**8707**	**9080**	**4.28**

The number of consumers are expected to increase from 68,27,787 in 2002-03 to 71,31,570 in 2003-04 which means that about 3.04 lakhs consumers would be added during the year, who will contribute to an additional consumption of 373 million units, which averages to 100 units per month per consumer.

From the above, it may be seen that the KSEB has assumed an overall growth rate for energy consumption of 4.28% from 2002-03 to 2003-04. While the consumption at LT level including domestic consumption is assumed to grow at about 6%, the growth in other categories is either negative or marginal. Thus significant growth is assumed on LT side especially in the domestic category with traditionally low revenue earning due to historically higher subsidised tariffs. The estimated energy consumption for 2002-03 and the projections for 2003-04 are based on manual computation and use of sample data in certain areas. In order to be more objective regarding the assumption of growth rate for 2003-04, the Commission had requested the Board to furnish the estimates based on the actual consumption during the first six months of the year. This has not been complied with by the KSEB, probably due to the difficulty in collecting the information on short notice in the absence of fully computerised billing operations. Although the KSEB has submitted a revised ARR & ERC for 2003-04 on 10.11.2003, no change has been made in the projection for energy consumption.

2.3 Stakeholders' Response

No Stakeholder has commented on the energy requirement projections for 2003-04 made by the KSEB. Stakeholders have also not questioned the methodology adopted by the KSEB for projecting the requirements. However, they have pointed out discrepancies in the data regarding energy consumption under different categories during the years 2000-01, 2001-02 and 2002-03. Most prominent among them was Sri.C.P.Thomas, former Chief Engineer, KSEB who has questioned the data regarding the number of consumers in different domestic slabs.

2.4 Commission's Observations

The KSEB has estimated the energy requirements for 2002-03 on the basis of the sales during the year, on which the projections for 2003-04 have been made. The figures furnished by the KSEB 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 slabwise and categorywise 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, urge upon the KSEB to take up and complete the computerisation of billing activity in the shortest possible time. Although the Board has indicated a target of December 2004 for achieving cent percent computerisation of billing, it should endeavour to complete the activity at an earlier date not later than March, 2004.

The Board has adopted a simplistic approach in projecting the load curves and the energy requirements. The commission would recommend 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 direct the Board to include such a detailed analysis in all future ARR and ERC exercises.

From energy requirement projections furnished by the Board, the Commission notes a disturbing trend in the pattern of energy consumption by different categories of consumers. The projections leave the industrial activity stagnant with practically no growth in HT & EHT consumption whereas the domestic consumption along with other LT categories except industrial category is expected to grow at the rate of about 6%. This has two distinct disadvantages, viz., low revenue generation and high technical losses.

It is seen that while there is no increase in productive consumption, which comes under the subsidising category, the consumption in the subsidised category is on the increase. This increase in consumption in a category with highest cost of service and high losses is likely to upset any effort towards elimination of cross subsidy. However, the ARR and ERC submitted by the KSEB do not address this major problem and seems to resign to an attitude of fait accompli.

CHAPTER III

A T & C LOSSES

3.1 Introduction

The actual energy consumption in the KSEB system based on energy sales during the year 2001-02 was 8668 MU with a total energy input of 12,544 MU into the KSEB system. Thus, the Aggregate Technical & Commercial loss was 3,876 MU, which work out to 30.90% of the energy input. The energy consumption for the year 2002-03 has been estimated by the Board at 8,707 MU with an energy input of 12,479 MU and an aggregate loss of 3,772 MU (30.23%). The energy requirement (sales to consumers) for 2003-04 has been projected at 9080 MU with an energy input of 12,353 MU, thus projecting a loss of 3273 MU which work out to 26.50% of the energy input. This would imply that the aggregate losses would be reduced from the level of 30.23% in 2002-03 to 26.5% in 2003-04, thereby achieving a loss reduction of 3.73%. A loss reduction of 3.73% would involve energy savings to the extent of 461MU. The Board had however not provided the basis of assuming a loss reduction of 3.73% during the year 2003-04, in the ARR & ERC.

With a view to assessing the losses in systems at various voltage levels, the Commission had devised a format for energy balance. However, 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 have been projected at 7.82% whereas the losses in the Distribution system covering 11 kV and LT have been projected at 18.68%.

The Commission in its letter dated 15.10.2003 had specifically asked for the basis for assuming a loss of 26.5% for the year 2003-04 and also suggested for a review of the energy requirement for the year 2003-04 based on actual performance during the first six months of the year and realistic projections for the remaining period of the year. In its reply, the Board merely stated that the estimated T&D loss for the year 2002-03 was 30.41% and the Board proposed to reduce T&D loss by 2% every year. On this basis, the Board considered that the T&D loss for the year 28.02% was reasonable, although the figure of 28.02% was not mentioned earlier by the Board. Based on the meeting held by the Chairman and Members of KSEB with the Commission on 18.12.2003, the KSEB furnished the details of energy input and energy consumed for the period from April to November, 2003, according to which the overall losses worked out to 27.43%.

3.2 Stakeholders Objections

The stakeholders in general have expressed the view that T&D loss in the KSEB system is abnormally high. They include Kottarakkara Poura Samithi, Kottarakkara, Kerala High Tension & Extra High Tension Electricity Consumers' Association, Shri C.P.Thomas, Retd. Chief Engineer, KSEB, Chalakudy Puzha Samrakshana Samathi, Kerala Small Industries Association, Chamber of Commerce, Payyannur and Confederation of Indian Industry. Some of them have also made certain suggestions regarding loss reduction. Certain stakeholders have suggested that the loss level should be brought down to the level of 20% during 2003-04. The HT&EHT Electricity Consumers' Association and Confederation of Indian Industry have pointed out that the Board had been maintaining that the T&D losses were at 17 to 17.5%. To this, the Board replied that earlier, the losses for LT consumers were estimated on the basis of the number of consumers and their connected load. Presently, the losses were assessed based on the billed energy and the total energy input into the system. The actual losses were therefore much more than the estimated figures.

3.3 Deliberations in the State Advisory Committee

The first meeting of the State Advisory Committee discussed the matter in detail. The members felt the need for a correct assessment of the losses and the need to bring them down to a reasonable level in the shortest possible time. The Committee recommended that the KSEB should draw up a detailed programme for loss reduction such as faulty meter replacement, theft detection and system improvement. The Committee also recommended a target of further reduction of losses by 3% during 2004-05.

3.4 Commission's Observations

The Commission has not received the requisite data from the KSEB so as to accurately assess the AT&C losses. While furnishing the power purchase requirements for 2003-04, in the revised ARR, the Board had indicated that actual energy generation and purchase during the first five months from April to August 2003 was 5128 MU. As per the information furnished on 18.12.2003, the actual generation and purchase during April to November, 2003 is 8219 MU. By projecting this for the whole year after adjusting for normal growth as in previous years and allowing for reduction in consumption in certain categories and T&D loss reduction during 2003-04, the total energy generation and purchase requirement for 2003-04 would work out to 12328 MU. The total energy requirement can therefore be reasonably placed at 12328 MU. After allowing for external loss of 176 MU and auxiliary consumption of 32 MU, the net input into the KSEB system during 2003-04 would work out to 12120MU. This is lower by 233 MU from the energy input projection of 12353 MU made in the original ARR.

As the projections regarding billed energy cannot be considered as quite reliable, it is not possible to accurately calculate the T&D losses. The Commission will undertake a review of the actual position in this regard after 31st March, 2004, for which the Board should be ready by collecting and compiling the data immediately after the close of the current financial year.

The Commission is of the view that as the losses has an important baring on the financial health of the KSEB, it is imperative to bring down the losses further. The Commission feels that a reduction of 3% from the level of 2003-04 is required to be achieved during 2004-05. In order to realise this, a well-chalked out action plan covering various measures such as replacement of meters, theft detection, computerisation of billing, etc., should be formulated

At present, the Board does not have enough data to assess the break up of losses in system elements of different voltage levels. The Board has however stated that the programme for installation of energy meters on distribution transformers would be completed by 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 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. The task could be easily accomplished during a very short time as the number of energy meters required for this purpose will be much less than that needed for installation on distribution transformers.

It is the Commission's belief that computerisation of billing would become handy for checking abnormally low consumption levels as

***compared to the connected loads and thereby serve as an effective means of detecting theft and pilferage without significant human effort. The Board has indicated that the total computerisation of billing in KSEB would be achieved by December,2004. However, as stated earlier, the Commission would strongly advocate for advancing this date to March*, 2004.**

The Board had indicated a target for replacement of faulty energy meters by March, 2004. This target should be adhered to as this will give a major boost towards bringing down losses in the KSEB system.

The Commission feels that a major component of the AT&C loss is theft of energy. This has to be checked and arrested. Along with the replacement of all faulty energy meters, the Board should make immediate arrangements to seal all energy meters installed. The action of the Anti power theft squad should be strengthened and made effective with regular inspection of premises of consumers having higher consumption. Major portion of the street lights are installed and operated without metering and are invoiced as fixed amount. The street lights installed are often seen burning in the day time also wasting energy which again is accounted in the T&D losses. Prompt action is required to be taken to operate the street lights for the specified hours only.

CHAPTER IV

AGGREGATE REVENUE REQUIREMENT FOR 2003-04

4.1 Introduction

The ARR& ERC submitted by the KSEB on 1.8.2003, projected a total expenditure of Rs.3726.33 crores and a statutory surplus of Rs.99.25 crores for 2003-04. The Stakeholders offered comments/objections on the various items of expenditure. The Commission also separately commented on the items of expenditure and sought clarifications from the KSEB. Based on the objections from Stakeholders and comments of the Commission, the KSEB submitted a revised ARR on 10.11.2003. The revised ARR projected a total expenditure of Rs.3758.48 crores and statutory surplus of Rs.91.83 for 2003-04. A comparison of expenditure under various major heads are furnished below:

EXPENDITURE

Rs. Crores

Sl. No.	Item	2001-02	2002-03	2003-04	
		(Actual)	(Provisional)	(Original)	(Revised)
1	Generation of power	84.60	166.23	263.17	153.32
2	Purchase of power	1451.55	1872.08	1592.63	1858.13
3	Interest	648.95	672.78	741.69	721.54
4	Depreciation	212.61	277.10	334.52	334.52
5	Employee cost	615.00	670.82	750.50	693.64
6	Repairs & Maintenance	70.32	60.64	102.53	66.70
7	Admn.& General Expenses	66.40	51.80	71.74	55.88
8	Other expenses	399.70	89.51	143.53	110.00
9	Less: Expenses capitalized	124.82	118.15	151.93	119.80
10	Less: Int.capitalised	128.87	101.09	122.05	115.45
Total		**3295.44**	**3641.72**	**3726.33**	**3758.48**

It may be seen from the above that while there is substantial increase in the projection of expenditure towards purchase of power in the revised ARR for 2003-04, the expenditure projections on all other items have been reduced except for 'depreciation', projection on which has been maintained at the same level. The position in respect of each of these items is discussed below:

4.2 GENERATION OF POWER

4.2.1 The original ARR &ERC had projected a total cost of generation from KSEB's own power stations during 2003-04 at Rs. 263.18 crores which has been brought down to the level of Rs.153.32 crores in the revised ARR. The comparative details are as furnished below.

Source	Total cost of generation - Rs.crores	
	Original ARR	Revised ARR
Hydel	19.75	13.22
Wind - Kanjikode	0.07	0.41
BDPP	98.54	67.93
KDPP	144.82	71.76
Total	**263.18**	**153.32**

The original ARR projected a hydro generation of 5658 MU during 2003-04 assuming a near normal monsoon and corresponding inflows during the year. However, the revised ARR is based on a reduced hydro generation of 4314 MU after allowing for reduced inflows during June, July and August 2003 due to failure of monsoon during the period. The Board has however not attempted to review the position after taking into account the actual position regarding rains and inflows after 31st August 2003. Although not explained in the revised ARR, the downward revision of hydro generation from Rs.19.75 crores to Rs.13.22 crores is presumably due to the reduction of hydro generation.

The revised ARR projects a significant increase in wind generation from Rs.0.07 crores to Rs.0.41 crores, the reason for which has not been explained by the KSEB. However, the energy generation projection from the wind generation plant has been reduced to 2 MU from 3 MU, in the revised ARR.

The generation from BDPP and KDPP had been projected as 378 MU and 587 MU respectively during 2003-04 in the original ARR, which has been reduced to 244 MU and 276 MU respectively in the revised ARR. The variable cost of generation for BDPP and KDPP has been increased to Rs.2.84 per kWh and Rs.2.65 per kWh respectively in the revised ARR from Rs.2.73 per kWh and Rs.2.58 per kWh respectively projected in the original ARR.

4.2.2 Stakeholder's Response

Major objection regarding generation has been raised by the Kerala High Tension & Extra High Tension Electricity Consumers' Association. They have questioned the assumption regarding hydro generation and the low PLF of BDPP and KDPP.

On hydro generation, the Association maintained that as against 2832 MU projected by the KSEB for the 7 month period from September 2003 to March 2004 , the feasible generation would be 3386 MU based on generation during 2002-03 which was the worst year of hydro generation and 3599 MU based on generation during 1997-98 which was the worst year as far as inflow was concerned. They argued that the savings in power purchase cost worked out on the basis of worst year of generation (2002-03) and worst year of inflow (1997-98) would be Rs.193 crores and Rs.251 crores respectively.

4.2.3 *Commission's Observations*

The Board has projected a revised hydro generation of 4314 MU during 2003-04 based on the reduced inflow in the reservoirs during June, July and August, 2003 from the anticipated levels. In projecting a revised

generation of 4314 MU, the Board has not looked into the actual/expected levels of rains and inflows beyond August, 2003. When the issue was raised by the Commission with the Engineers of the KSEB on 20.11.2003, they drew a more gloomy picture than that was projected in the revised ARR. They informed that as the inflows had drastically come down, the hydro generation might still be lower than that projected in the revised ARR. However, the final round of discussions on 18.12.2003, revealed that there would be improvement in the position.

***The Commission is of the view that necessary strategy may have to be adopted to deal with the situation arising out of the failure of monsoon. This strategy should aim at judicious operation of the major storage reservoirs by limiting generation to peak periods only, to the extent possible. The Commission has been addressing the KSEB since May 2003 to optimize internal generation and power purchase through detailed scheduling on a continuous basis. 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 are required to be co-ordinated daily with the schedules of power purchase on merit order basis. This will pave the way for substituting hydro generation with power purchased at most economic cost*.**

The Commission does not subscribe to the views of the Kerala HT & EHT EC Association that the PLF of BDPP and KDPP should be increased, as the variable cost itself of these stations are quite higher than even the composite cost of energy from many sources. The Commission agrees with the approach of the KSEB in regulating generation from these stations

purely on merit order basis. In fact, the Commission would desire the Board to further reduce generation from these stations by utilising the energy from other less costly sources.

The Commission would however agree to the amount of Rs.153.32 crores for power generation during 2003-04, projected in the revised ARR.

4.3 PURCHASE OF POWER

4.3.1 The original ARR submitted by the Board in August 2003 had projected an energy purchase of 6059 MU at a total cost of 1593 Crores during 2003-04, which has been increased in the revised ARR to 7810 MU at Rs.1858 Crores. The energy purchase cost projections for the year 2003-04 have been made based on contractual obligations, wherever applicable, and allowing for an increase of 5% in the actual unit variable cost applicable for March 2003 in other cases. The interse priority for purchase has been decided on the basis of the merit order of variable cost of supply from each source. The transmission losses in respect of external sources are also stated to have been taken into account in deciding the actual variable cost incident on KSEB. As per the original ARR, the despatch from Hydel stations of KSEB had been assumed to be in the same pattern as that in 2001-02. However, the methodology adopted for regulating hydro generation under the changed circumstances has not been stated in the revised ARR. In projecting the energy purchase cost during latter half of 2003-04, 2% inflation over the actual cost during the first half has been assumed by the Board.

The comparative position in respect of quantum of power purchase, variable cost and purchase cost projected in the original and the revised ARR, is furnished below:

Source	Original ARR for 2003-04				Revised ARR for 2003-04			
	Energy input into KSEB MU	Fixed cost (Rs.Crores)	Variable cost (Rs.)	Total cost (Rs.Crores)	Energy input into KSEB MU	Fixed cost (Rs.Crores)	Variable cost (Rs.)	Total cost (Rs.Crores)
Energy purchase								
Ramagundam (old)	1966	83.44	0.94	291.68	2195	83.44	0.91	282.87
MAPS	84	-	2.11	17.74	122	-	2.17	26.52
NLC I	394	18.11	0.71	66.23	520	18.11	0.79	59.00
NLC II	558	40.10	0.99	95.57	717	40.10	1.07	116.99
Kaiga APS	359	-	3.40	122.19	408	-	3.55	144.92
ER	634	-	1.89	129.38	481	-	0.97	46.66
Kayamkulam	217	129.92	3.21	219.64	1021	129.92	2.52	387.41
BSES	328	124.26	3.10	226.04	928	24.26	2.36	343.18
KPCL	141	18.07	3.82	71.79	127	18.07	3.38	61.07
NLC (New)	286	33.99	0.90	62.96	188	33.99	1.03	53.41
Tacher II	874	44.79	0.44	84.54	410	44.79	0.48	64.44
UI	-	-	-	-	622	-	1.69	105.45
Addl.Purchase (PTC)	218	-	2.05	44.77	71	-	2.09	14.90
Sub Total	6059			1432.53	7810			1706.82
Transmission charges								
Eastern Region				11.02				7.86
Southern Region				105.27				99.67
Kayamkulam				43.81				43.81
Sub Total				160.10				151.34
Grand Total	**6059**			**1592.63**	**7810**			**1858.16**

The actual generation and power purchase during the eight month period from April-November 2003 has since been furnished by the KSEB as 8219 MU. By projecting this on prorata basis for the whole year, the total requirement for the year would work out to 12328 MU, whereas the total generation and power purchase has been projected at 12647 MU in the revised ARR. This would mean that the projection for power purchase shows an excess of 319 MU.

4.3.2 Stakeholders' Objections

Major objection came from Kerala HT and EHT Industrial Consumers' Association. They have stated that the public Hearing and Review process has resulted in significant variations in power purchase cost. They have argued that the differential cost of costly power should be borne by KSEB. They reiterated that estimation of hydro generation was not accurate and hinted at significant savings in power purchase cost on this account. They called for close scrutiny of merit order despatch followed by KSEB with a verification of SLDC data. They complained that when other States had systems in place to take advantage of the ABT and UI regime, KSEB had none. They also suggested that power purchase agreements should 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 Commission notes with satisfaction that in response to the comments made by it, the KSEB has recast the power purchase projections on a more realistic basis in the revised ARR than in the original ARR. The Commission however finds substance in the argument that the merit order purchase followed by KSEB needs close scrutiny. The Commission has all along been calling for daily scheduling for internal generation and power intake from other sources in order to optimise the power purchase cost. The schedules should be based on merit order stacking taking into account optimum schedules for hydro generation as discussed earlier. Under the present condition of hydro shortage, the generation from storage reservoirs should be put to optimum use so as to absorb thermal power from cheapest available sources during off peak periods. The Commission would expect a positive response from the KSEB in this regard by evolving a system of optimum scheduling for hydro generation and power purchase so as to ensure that the power purchase cost is kept at its minimum. The Commission would also suggest that generation from BDPP, KDPP and KPCL should be utilised to the minimum possible extent and possibilities of availing less costly thermal power as a substitute may be explored.

The KSEB has furnished the details of power purchase during the period April-November,2003 and the Commission has scrutinized the information. As stated earlier, the total energy demand requirements for 2003-04 projected on the basis of the performance during the first eight months of the year would work out to 12328 MU. The Commission is therefore inclined to place the total generation and power purchase requirement during the year 2003-04 at 12328 MU as against 12647 MU projected in the revised ARR. This would mean a savings of 319 MU in the power purchase requirement. Assuming an average variable cost of Rs.2.75 in respect of this energy, the savings in power purchase cost would work out to Rs.83 crores. The Commission would therefore place the total cost towards power pruchase at Rs.1775.13 as against Rs.1858.13 projected by the KSEB in the revised ARR.

4.4 INTERESTS AND FINANCE CHARGES

4.4.1 The original ARR had projected a total amount of Rs.741.69 crores towards interest charges with the following breakup:

A. Interest on Loans & Bonds	Rs. Crores
i) Existing loans as on March 31, 2003	299.08
ii) Existing bonds as on March 31, 2003	276.89
iii) Loans from GOK as on March 31, 2003	6.11
iv) Borrowings for capital projects	37.07
v) Cash credit for working capital	12.95
vi) Borrowings for Revenue Deficit	8.55
vii) Loans to finance Regulatory Asset	22.15
Sub Total - A	662.80
B. Other Interest and Finance Charges	
i) Discount to consumers	2.82
ii) Interest on GPF	47.20
iii)Cost of Raising finance	6.17
iv)Other Charges	22.69
Sub Total-B	78.88
Grand Total	**741.68**

In the revised ARR, the projection for interest and finance charges has been brought down to the level of Rs.721.54 crores, a reduction of about Rs.20 crores. However, the break up in respect of individual items has not been furnished. Based on the comments of the Commission, details of swapping of loans have been furnished according to which the total net gain is Rs.63.64 crores (annual gain of Rs.7.15 crores). The details of the balance savings of Rs.13 crores have not been furnished.

In response to the query of the Commission regarding details of other charges, the Board has furnished the break up of 'other charges' actually incurred during 2002-03 as below:

		Amount (Rs crores)
1	Bank charges for remittance between Board Offices	0.64
2	Bank Commission for collection from consumers	1.89
3	Other Bank charges	5.47
4	Guarantee charges	14.81
	Total	**22.81**

4.4.2 Stakeholders' Objections

Many stake holders have objected to the provisions of high interest rates in the ARR. Most prominent among them are Paravour Senior Citizens Club, The Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association, Chalakudy Puzha Samrakshna Samathi and Confederation of Indian Industry. All of them have pleaded for reducing the debt burden of the KSEB by exercising strict control on borrowings. They have pointed out that while other States have achieved significant reduction in interest costs, the KSEB is not taking effective steps to reduce interest rates by holding on to the pass through mechanism. Some of the stake holders have argued that loans to meet the revenue deficit should not be loaded on to the consumers and cash credit for working capital should be allowed only on the basis of a lead-lag time study.

4.4.3 Commission's Observations

The Commission notes with concern the ever increasing debt burden of KSEB from year to year. As per the latest available information, the total debt burden at the beginning of the year 2003-04 stood at 4841 crores. As on 31.10.2003, repayment has been made to the extent of Rs.777 crores as against Rs.869 crores projected for repayment during 2003-04(whole year), in the original ARR. It is also seen that further loan to the extent of Rs.1002 crores has been availed. The scrutiny of the ARR and further information made available by the Board give the impression that the requisite care is not being exercised by the Board in its financial operations especially in availing loans. In the original ARR, the Board had proposed to borrow an amount of Rs.1208 crores with the following break up.

	Rs.Crores
Loan for financing capital prospects	***673.98***
Loan for meeting average deficit	***148.75***
Loan for meeting regulatory asset	***385.26***

	1207.99

However, as per the assessment of the annual revenue requirement by the Commission, there would be a steep reduction in the revenue gap to such an extent that both revenue deficit and provision for regulatory asset could be eliminated. This is especially so in view of the improved position on revenue demand billing and collection, and provision of subsidy of Rs.375 crores and other concessions by the Govt. of Kerala. The Commission is of the view that there is scope for further improving the cash flow position through accelerated arrear collection drive and disposal of dead inventory. Further, the Commission's assessment is that the Board would be in a position to incur only a base capital expenditure of Rs.350 crores during 2003-04 as against Rs.500 crores projected for the purpose in the ARR. It is worth mentioning that the total expenditure on

capital projects stood at Rs.169 crores as on 31st October, 2003 and it would be impossible to incur an expenditure of Rs.331 crores during the remaining 5 months of the year. This was brought to the notice of the Board when the Chairman and Members met the Commission on 18.12.2003. Under the circumstances, the Commission does not find any material before it to justify the action of the Board in borrowing an amount of Rs.1002 crores upto 31st October, 2003 with interest ranging from 10 to 13.5%. The financial management of the Board particularly with reference to the borrowing, calls for a close scrutiny and the Commission would expect a detailed report from the Board on the subject.

The Commission has also serious reservations regarding the outcome of the exercise on swapping of loans which has brought in a net gain of Rs.7.15 crores per annum which is insignificant when viewed in the context of an interest burden of the order of Rs.700 crores per annum. The Commission would expect the Board to pay adequate attention in this area as the prime lending rate is likely to further undergo downward revisions. Lack of appropriate financial planning on the part of the Board is also reflected in the provisions for items like interest on cash credit for working capital, cost of raising finances, etc. The Commission is of the view that expenditure on these items could be significantly reduced by strict financial management and control.

In view of the foregoing discussion, the Commission seeks to disallow the provisions for interest on borrowings for meeting revenue deficit and regulatory asset proposed in the ARR. As the base investment for capital works is not likely to exceed Rs.350 crores as against Rs.500 crores proposed in the ARR, the interest corresponding to the base investment of Rs.150 crores which works out to Rs.10.58 crores is also disallowed. As regards guarantee charges, the Commission seeks to allow

only Rs.13.8crores, which is the actual expense incurred on this account as against Rs.14.8 crores projected by the Board. As regards the provision for cash credit on working capital, the Commission agrees with the views expressed by some of the objectors that this should be allowed only on the basis of a lead and lag time study. However, being the first exercise of this kind, the Commission seeks to allow the provision on this score subject to the condition that approval of such provisions in future would be allowed only on the basis of appropriate supporting data. Approval for provisions for cost of raising finance, etc; in future would also depend on detailed data to justify the expenditure.

On the above basis, the Commission seeks to achieve the following reduction in interest and finances charges proposed by the Board.

			Rs.Crores
1	***Interest on borrowings to meet revenue deficit***		***8.55***
2	***Interest on borrowings for meeting the regulatory asset***		***22.15***
3	***Proportionate interest on reduced investment on capital works to the extent of Rs.150 crores***		***10.58***
4	***Guarantee Charges***		***1.00***
		Total	***42.28***

The expenditure on interest and finance charges would accordingly get reduced to Rs.679.26 crores from the projection of Rs.721.54 crores made by the Board in the revised ARR.

1.4 DEPRECIATION

4.5.1 The Board has projected a provision of Rs.334.52 crores for depreciation during the year 2003-04 based on the following rates.

	Depreciation %	Amount Rs.Crores
Law and Rights	-	-
Buildings	4.36	14.79
Hydraulic works	2.34	15.98
Other Civil Works	2.39	2.38
Plant & Machinery	6.63	171.87
Lines, Cables, Network, etc	6.79	128.32
Vehicles	1.73	0.20
Furniture & Fixtures	0.85	0.08
Office Equipments	10.61	0.90
Total		**334.52**

4.5.2 Stakeholders' Response

The main objector on the item was the Confederation of Indian Industry who have stated that the provisions for depreciation is on the high side and should be brought down to the level of Rs.239.48 crores as provided in the Budget Estimates of KSEB for 2003-04.

4.5.3 Commission’s Observations

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 heavy loan repayment commitment of the KSEB, the Commission seeks to retain the provision of Rs.334.52 crores for 2003-04 without any modification.

4.6 EMPLOYEE COST

4.6.1 The original ARR submitted in August 2003 had projected an expenditure of Rs.750.50 crores for 2003-04 towards employee cost which has been reduced to Rs.693.64 crores in the revised ARR. The comparative details are furnished below:

	Original ARR	Revised ARR
Salaries	247.13	214.81
DA	146.35	88.55
Overtime	0.60	0.13
Other allowances	26.44	17.67
Bonus	1.92	1.98
Medical Expenses	2.45	1.70
Leave Surrender	33.37	25.00
Terminal Benefits	292.24	343.80
Total	750.50	693.64

The Board has stated that due to various measures taken by the Board in reducing employee cost, there is in effective reduction of about Rs.74 crores during 2003-04. However, the overall cost has increased by about Rs.23 crores from the previous year's level while the terminal benefits have increased by about Rs.29 crores.

4.6.2 Stakeholders' Objections

Many stakeholders have raised objections on the projections of employee cost. Prominent among them are Centre for Indian Consumer Protection and Research, Kottarakkara Poura Samithi, Shri.P.C.Thomas, Kottayam, Paravur Senior Citizen's Club, Kerala High Tension and Extra High Tension Industrial Electricity Consumer's Association, Shri.C.P.Thomas, Former Chief Engineer, KSEB, the Public Affairs Forum and the Confederation of Indian Industry. All of them have pleaded for reducing employee cost by abolition of redundant posts and cutting down overtime allowances*, etc.* Some of them have called for bringing down the employee cost to last year's level. Suggestion for instituting a pension fund has also been made. Suggestion has also been made for reviewing and rationalising the pension scheme of KSEB in line with the latest Central Government Schemes and schemes of their utilities. The objectors have pointed out that the employee productivity in KSEB is low as compared to other utilities.

4.6.3 ***Commission's observations***

As per the information available in the data form-5 furnished in the original ARR, the working strength of KSEB employees is stated to increase from 24,541 in 2002-03 to 24769 in 2003-04, an increase of 228 over one year. The Board has not furnished any justification for this increase. The Board has also not furnished the details of category-wise employees although the Commission has specifically asked for this information. The Commission is inclined to agree with the views expressed by the objectors that the employee productivity in KSEB is low. It is seen that the employee cost works out to about 20% of the overall expenditure while it is in the range of 5-15% in most of the States. The employee cost per unit of sale works out to over Ps.76 while the most of the States, it is in the range of Ps.20-40. The Commission is of the view that the criticism regarding employee productivity should be taken by the Board in right spirit and all out efforts made in the direction of improving employee productivity.

The Commission however seeks to keep the provision towards employee cost untouched at Rs.693.64 crores as projected in the revised ARR, since there is no way of reducing this amount towards the fag end of the year 2003-04. However, the Commission would expect the KSEB to furnish full details regarding the expenditure towards employee cost, especially the provision of Rs.343.80 crores towards terminal benefits, in due course.

4.7 REPAIRS AND MAINTENANCE CHARGES

4.7.1 The provision for repairs and maintenance charges during 2003-04 has been brought down to the level of Rs.66.70 crores in the revised ARR from the level of Rs.102.53 crores projected in the original ARR. Many stake holders have maintained that the provision for repairs and maintenance is on the high side. One of the suggestions was not to allow R&M expenses on newly commissioned works.

4.7.2 Commission's Observations

The Commission had asked for details of actual R&M expenses during the first six months of 2003-04. The Commission notes with concern that the actual expenses on R&M during the first half of the year 2003-04 were only Rs.18.33 Crores.

The Commission would like the Board to pay requisite attention to this important item of work as frequent power interruptions have become the order of the day, a major reason for which is the lack of R&M efforts. The Commission would suggest that all-out efforts should be made by the KSEB for making up for the backlog in the area during the remaining months of the year. The Commission would expect a report on the matter from the KSEB as early as possible, but not later than January, 2004.

In view of the importance of the work, the Commission seeks to retain the provision of Rs.66.70 crores for R&M works during 2003-04 as proposed in the revised ARR.

4.8 ADMINISTRATION & GENERAL EXPENSES

4.8.1 The projection for A&G expenses for 2003-04 have been brought down in the revised ARR to Rs.55.80 crores from the original estimate of Rs.71.74. In response to Commissions' request for furnishing the details of A&G Expenses the Board has furnished the break up of the expenditure of Rs.51.80 crores estimated to have been incurred on this account during 2002-03.

Almost all stakeholders who have objected to the projections on Employee cost have raised similar objections on A&G expenses.

4.8.2 Commission's Observations

The Commission notes that there is an increase of 8% in A&G expenses during 2003-04 over that during previous year while the reasonable increase is only 5%. However, Commission seeks to retain the proposed provision of Rs.55.88 crores towards A&G expenses during the year 2003-04 with the suggestion that efforts should be made by the KSEB to curtail A&G expenses within the limit of 5% increase from last year's level.

4.9 OTHER EXPENSES

4.9.1 The Board has projected the provision for other expenses during 2003-04 at Rs.110.00 crores in the revised ARR as compared to the projection of Rs.143.53 crores in the original ARR. The comparative details are as below:

	Original ARR Rs.Crores	Revised ARR Rs.Crores
Prior Period Charges	100.00	66.47
Provision for Bad debts	43.53	43.53
Total	143.53	110.00

4.9.2. Stake holders' Objections

Some of the stakeholders especially the Kerala HT & EHT Electricity Consumers' Association has raised objection regarding provision for bad debts on the score that no details as to the constitution of the provision or its derivation has been provided. They have argued that blanket write off without a validation process would reduce KSEB's propensity to collect dues.

4.9.3 Commission's Observations

As regards prior period charges, the Commission notes that the Board has shown only an amount of Rs.58.87 crores on account of this item in the provisional statement of accounts for the year 2002-03. The

Commission is therefore constrained to reduce the provision for prior period charges to Rs.58.87 crores during 2003-04. As for provision for bad debts, in the absence of details, the Commission would allow only 2% of the outstanding amount towards bad debts. On the basis the provision for bad debt would work out to Rs17.41 crores only. The Commission would therefore place the projection for other expenses at Rs76.28 crores during 2003-04. The total reduction on this score would work out to Rs.33.72 crores.

The Commission would like the Board to take immediate steps to identify bad debts and furnish full information on the write-offs in respect of this item.

CHAPTER V

REVENUE RECEIPTS DURING 2003-04

5.1 Revenue from Tariff Income

Revenue from Tariff Income for 2003-04 has been projected on the basis of the anticipated consumption by various categories of consumers under different slabs at the prevailing tariff under each slab and each category. Details in this connection have been furnished in Data Form 19 attached to the original ARR & ERC filed by the KSEB, which is summarised below.

CATEGORYWISE CONSUMPTION AND REVENUE: 2003-04 (at October, 2002 Tariff)

Category	No. of Consumers	Consumption in MU	Average monthly consumption	Average rate per unit	Revenue (in Rs.Crores)
Low Tension LT-I a. Domestic	5485252	3942	60	1.51	596.02
LT-I b. Office of Political Parties	606	1	137.5	2.45	0.17
LT-II Colony	500	4	667	5.65	2.11
Domestic Sub Total	5486358	3947	60	1.52	598.3
LT III (Temporary Connection)	44	6	11363	3.61	2.32
LT-IV Industry	103385	700	564	4.22	294.96
LT-V Agricultural	451957	199	37	0.93	18.43
Irrigation & Dewatering	452001	206	38	1.01	20.75
LT VI Non-domestic LT-VI (a)	91559	68	62	4.61	31.12
LT-VI (b)	57399	106	154	5.88	62.64
LT-VI (c)	23120	58	209	10.32	60.04
LT-VI (d)	1169	1	71	0.77	0.08
Non-Domestic Sub-Total	173247	233	112	6.6	153.89

LT VII Commercial					

LT-VII (a) Commercial	322567	389	100	8.29	322.34
LT-VII (b) Commercial	533351	192	30	4.38	84.2
LT-VII (c) Commercial	2347	37	1313	6.03	22.3
Commercial- (Sub Total)	858265	618	72	6.94	428.83
Commercial(subtotal Incl. Non-Domestic)	1031512	851	69	6.84	582.72
Public Lighting	2563	167	5429	1.53	25.49
High Tension					
HTI-Industrial	931	1325	118600	3.64	482.93
HT II Non-Industrial/ Non-Commercial	181	89	40976	4.57	40.80
HT IV-Commercial	497	219	36720	4.57	99.81
HT Seasonal		3		2.9	0.84
HT-Sub Total	1609	1636		3.82	624.37
Extra High Tension					
EHT I		313		3.56	111.39
EHT II		1008		3.53	355.26
EHT - Sub Total	36	1321		3.53	466.65
Railway Traction	3	50		3.34	16.88
Bulk Supply					
Grid - I					
11 kV	3	43	1194444	2.74	11.8
66 kV	1	85	7083333	2.6	22.02
110 kV	1	27	2250000	2.59	7.07
Grid - II					
11 kV	1	27	2250000	3.46	9.22
66 kV					
110 kV	1	11	916666	3.35	3.62
Bulk Supply(Sub Total)	7	193	2297619	2.79	53.73
NPG	54096	11	17		
Grand Total	**7131570**	**9080**		**2.96**	**2683.86**

The total revenue realisation from tariff is projected as Rs.2683.86 crores on a total energy consumption of 9080 MU. The revenue from domestic category which consumes 43.4% of the total energy is 22% of the total revenue from tariff where as the revenue from industrial category which consumes 37% of the total energy is 46.3% of the total tariff income.

5.2 Revenue From Non Tariff Income

Although the Board has revised the ARR & ERC on 10.11.2003, there has not been any change in the revenue from tariff income. However, in the revised ARR & ERC, the revenue from non-tariff income has been revised from Rs.200 crores to Rs.240.37 crores. The total revenue receipt in the revised ARR & ERC is thus projected at Rs.2926.23 crores as against the amount of Rs.2883.86 crores projected in the original ARR & ERC.

5.3 Stakeholders' Response

Stake holders have questioned the reliability of the data used by the KSEB in projecting the revenue from tariff income. Most prominent among them is Shri C.P.Thomas, former Chief Engineer of KSEB. He has argued that the number of domestic consumers consuming more than 500 units per month would exceed 25000 and those consuming in the 300-500 units slab would be about 1 lakh. The State Advisory Committee also discussed this aspect in detail and came to the conclusion that the reliability of the data can be ensured only by total computerization of the billing activity. The Board responded stating that the discrepancies might have crept in due to deficiencies in sampling on which a certain portion of the data was based. The Committee recommended that computerization of billing operations should be completed by March, 2004 and automation of Spot Billing accorded top priority.

5.4 Commission's Observations

From the statement of category-wise consumption of energy furnished in the ARR & ERC, the average monthly consumption per consumer works out to 60 units in domestic category, 62 units in LT VI (a) category and 71 units in LT VI (d) category. Similarly, the average monthly

consumption in the LT commercial category works out to 100 units. These figures do not appear to be realistic and give credence to the objections raised by the Stake holders. In the domestic category, it may be possible that interse distribution of consumption among various slabs is erroneous with lower than actual consumption accounted in the higher slab categories in which case the estimates of revenue receipts from domestic consumers may call for an upward revision. Shri.C.P.Thomas, one of the objectors has placed the amount on this account alone at Rs.200 crores and called for a thorough audit on the subject. In the case of new domestic connections anticipated during 2003-04, the Board has assumed an average consumption of 100 units per month, as against 60 units of overall average domestic consumption projected in the ARR &ERC. The Commission would therefore suggest that the Board should carry out a thorough scrutiny of the domestic consumption in order to arrive at the correct position regarding slab-wise number of domestic consumers, their consumption and revenue realisation. Similar scrutiny is also required in respect of categories LT VI (a), LT VI (d) and LT VII (Commercial). This exercise may also establish whether there is any large-scale pilferage in the case of these categories of consumers.

In view of the foregoing discussion, the Commission is of the view that there is a need for upward revision in the estimates of revenue from tariff income projected by KSEB for 2003-04 in the ARR & ERC. The increase can be estimated only on the basis of actual data on performance during the first 6 months of 2003-04.

As per the information furnished by the Board on 18.12.2003, the revenue receipts based on billed energy during April-July, 2003 is Rs.967 crores. By projecting this for the whole year on pro-rata basis, the total

Revenue Receipt from Tariff income even on a modest scale would work out to Rs.2901 crores. The Commission would therefore place the revenue from tariff income at Rs. 2901 crores. The revised ARR & ERC has projected a non-tariff income of Rs. 240.37 crores for the year 2003-04. Taking this into account, the Commission would place the total revenue receipts for the Board during 2003-04 at Rs.3141.37 crores.

The Commission is at present not in a position to establish a co-relation between the revenue from tariff and the billed energy, as the Board could not furnish the data regarding billed energy against each category of consumers. The Commission would direct the Board to furnish this information along with the corresponding energy input into the system, as early as possible, but not later than 31st January, 2004. This is essential to verify the actual position with respect to the projection of AT&C loss during 2003-04. This information would form the basis for assessing the energy requirement for 2004-05.

5.5 Subsidy from the Government of Kerala

The ARR &ERC stated that as on 31st March, 2003, an amount of Rs.2,564.21 crores was due from the Government of Kerala towards arrears of subsidy on account of revenue deficit. In addition, a further amount of Rs.1801.1 crores was also due as on 31st March, 2002, on account of RE Subsidy.

In order to tide over the revenue deficit during 2003-04, the Board has strongly pleaded for payment of Government subsidy as per the following break-up:

		Rs. crores.
1.	Exemption from paying ED u/s 3(1) of KED Act	27.68
2.	Allowing duty collected u/s 4 as grant to the Board	153.78
3.	Release of provision made for subsidy in the Budget of Kerala for 2003-04	175.00
4.	Additional grant of subsidy	200.00
	Total	**556.46**

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

The Government of Kerala vide letter No. 9714/A1/03/PD dated 11.12.2003 have concurred with the proposal of KSEB for payment of subsidy and other concessions. The Government have favoured payment of subsidy of Rs.375 crores in equal monthly instalments. This presumably has been done mainly with the view of avoiding an immediate upward tariff revision.

5.6 *Commission's Recommendations on subsidy from the Government of Kerala*

The Commission is of the view that non-payment of subsidy by the Government of Kerala in the past has significantly increased the debt burden of the Board which is finding extremely difficult to manage debt servicing. The Commission therefore strongly recommends to the Government of Kerala to disburse the already approved subsidy of Rs.375 crores in equal monthly instalments and exempt the Board from payment of duty under Section 3(1) and Section 4 of the KED Act as prayed by the Board. This is absolutely essential for reducing the debt burden of the Board.

CHAPTER VI

COMMISSION'S ORDER ON THE ARR & ERC FOR THE YEAR 2003-04

6.1 Aggregate Revenue Requirement for 2003-04

As discussed in the foregoing section on ARR for 2003-04, the Commission seeks to make a total reduction of Rs.159.00 crores in the Annual Revenue Requirement in respect of the following items of expenditure.

		Reduction Rs. crores
1	Power purchase cost	83.00
2	Interest & Finance charges	42.28
3	Other expenses	33.72
		159.00

The Aggregate Revenue Requirement of Rs.3850.31 crores as proposed by the KSEB would thus get reduced to Rs.3697.83crores after allowing for adjustment in capitalisation of interest charges. The comparative details are furnished below:

Aggregate Revenue Requirement: Rs. Crores.

Sl. No.	Particulars	2001-02 (Actual)	2002-03 (Provisional)	2003-04 (Estimates)	
				KSEB	KSERC
1	Generation of Power	84.60	166.23	153.32	153.32
2	Purchase of Power	1451.55	1872.08	1858.13	1775.13
3	Interest	648.95	672.78	721.54	679.26
4	Depreciation	212.61	277.10	334.52	334.52
5	Employee Cost	615.00	670.82	693.64	693.64
6	Repairs & Maintenance	70.32	60.64	66.70	66.70
7	Admn. & General Expenses	66.40	51.80	55.88	55.88
8	Other expenses	399.70	89.51	110.00	76.28
9	Less: Expenses capitalized	124.82	118.15	119.80	119.80
10	Less: Interest capitalized	128.87	101.09	115.45	108.93
11	Total Expenditure	**3295.44**	**3641.72**	**3758.48**	**3606.00**
12	**Statutory Surplus**	62.85	80.78	91.83	91.83
13	Total Revenue Requirement	**3358.29**	**3722.50**	**3850.31**	**3697.83**

6.2 Expected Revenue from Charges

As discussed in the Section on Revenue Receipts, the Commission has projected the total expected revenue from charges at Rs. 3141.37 crores as against Rs.2924.23 crores projected by the KSEB in the revised ARR. The comparative break-up is furnished below:

Expected Revenue from Charges: Rs. Crores

Sl. No	Particulars	2001-02 (Actual)	2002-03 (Provisional)	2003-04	
				KSEB	KSERC
1	Non Tariff Income	95.86	226.27	240.37	240.37
2	Revenue from tariff	1946.00	2480.69	2683.86	2901.00
3	Total Revenue	**2041.86**	**2706.96**	**2924.23**	**3141.37**

6.3 Commission's Order

On the above basis, the Commission hereby approves an Annual Aggregate Revenue Requirement of Rs.3697.83 crores and a Total Expected Revenue from Charges of Rs.3141.37 crores for the year 2003-04 as against Rs.3850.31 crores and Rs.2924.23 crores projected respectively by the KSEB.

The revenue gap of Rs.556.46 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 from payment of ED under Section 3 (i) of KED Act***	***(Revised)***	***182.56***
2.	***Allowing duty collected under Section 4 as Grant to the Board***		
3.	***Release of subsidy provided in the Budget Of the Government of Kerala, in cash***		***175.00***
4.	***Grant of additional cash subsidy***		***200.00***
			557.56

The Commission strongly recommends that the Government of Kerala may release the subsidy amounting to Rs.375 crores in monthly instalments to the KSEB and grant permission to the Board for retention of duty amounting to Rs. 182.56 crores.

Apart from seeking approval to the ARR & ERC for 2003-04, the Board has requested that the existing tariffs and other charges be allowed to continue***.***

The Commission approves the continuance of the existing tariffs and other charges .

The Board has also 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 VII

COMMISSION'S DIRECTIVES

7.1 Receivables and collection efficiency

As per the information furnished by the KSEB, as on 31st March 2003, the outstanding dues from the consumers stood at a staggering figure of Rs.894.48 crores. Although the Commission had asked for consumerwise details and the specific efforts made by the KSEB in liquidating the arrears, the details in this regard have not been furnished except for a list of defaulting consumers and the amount due from them. As per the information, the outstanding amounts from the consumers varied from Rs. 2/- to Rs. 80 crores and this clearly shows the lack of efforts on the part of KSEB in realising the long outstanding dues.

As per the information furnished by the KSEB, the current level collection efficiency during April-July, 2003 is 94.8%. However, the picture regarding collection of previous years' outstanding dues continues to be stagnant which is a matter of serious concern. During the meetings the KSEB had with the Commission on 20.11.2003 and 18.12.2003, the Commission has suggested creation of a Task Force for collection of arrears. This Task Force should be set up immediately to go into the details of each case of outstanding dues and take action on war footing. In this process, it is necessary to identify bad debts and take suitable action for writing them off. The Commission would like to know the details of each case, action taken and the results there of. The Commission would also strongly recommend specific action on the part of the Board to improve the current level collection efficiency to the level of 98-99% as even an increase of 1% in efficiency would improve the cash flow by over Rs.30 crores during an year.

7.2 Computerization of Billing and Meter Replacement

As already pointed out in relevant sections earlier, computerisation of billing is an activity calling for action by the Board on top priority. Apart from ensuring reliability of data needed for all sorts of efficiency improvement measures, it is particularly important for monitoring billing & collection and also for detection of theft and pilferage of energy. The Commission would set a target of March, 2004, for achieving cent percent computerisation and expect compliance by the Board without fail.

Although the Commission has been asking for details regarding the number of faulty meters and the prgramme for replacement, the Board has furnished information only on the status of replacement of meter covering number of meters already purchased, number of meters replaced and the number for which orders have been placed. This information does not provide an overall picture regarding actual number of faulty meters in each category, the present status regarding their replacement and the programme for replacing the remaining numbers so as to achieve near cent percent accurate metering and billing. This is a prerequisite for effective implementation of system improvement measures aimed at reducing financial losses. The Commission would like to receive full details regarding meter replacement, after 31st March, 2003, the target date set by the Board for completing the programme for faulty meter replacement.

7.3 Schedules for optimizing internal generation and power purchase

The Commission is not so far aware of any system in the KSEB for optimizing utilization of its own hydro generation and minimizing the cost of purchase of power from external sources. As already stated in earlier sections, the hydro generation is required to be regulated 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 hydro availability and the economics of power purchase from external sources. The purchase from external sources is required to be optimized on the basis of daily schedules. The Commission would expect the Board to institute the system for scheduling immediately and furnish the summary of the schedules to the Commission on a fortnightly basis.

7.4 Borrowings and Debt Servicing by KSEB

The Commission notes with concern the ever increasing debt burden of KSEB from year to year. The debt burden of KSEB as on 31st October, 2003 stood at Rs.5043 crores as against the net fixed assets of around Rs.6000 crores (including the works in progress). The financial position of the Board thus continues to be in an alarming state. The scrutiny of the information made available by the KSEB on the subject reveals that the requisite care is not being exercised by the Board in its financial operations especially in availing loans. The Commission has also no material on record to justify the action of the Board in borrowing an amount of Rs.1002 crores up to 31st October, 2003 with interest rates ranging from 10 to13.5%.

The Commission has also serious reservations regarding the outcome of the exercise on swapping of the loans which has brought in only a meager gain of Rs. 7.15 crores per annum. Lack of appropriate financial planning on the part of the Board is also reflected in the provisions for items like interest on cash credit for working capital, cost of raising finances, *etc.*

The Commission is of the view that the expenditure on debt servicing could be significantly reduced by strict financial management and control. The Commission would direct the Board to prepare and submit a white paper on the subject to the Government of Kerala, the Planning Board and the Commission latest by 31st January, 2004.

7.5 Capital Works

The Board has proposed a base level investment of Rs.500/- crores for capital works during the year 2003-04. However, this is not supported by any work programme. The information furnished merely indicates the target dates and the financial progress in items of expenditure upto 31st October 2003. The details such as the total cost of the project, amount spent upto 31st March 2003 in respect of continuing schemes, work programme during 2003-04, physical achievement as on date, programme for the remaining period of the year, spill over to the next year, if any, *etc*, have not been furnished although the Commission has specifically asked for this information. What is available on record is the project-wise breakup of the total expenditure of Rs.168.80 crores, which has been incurred upto 31st October 2003 on capital works. This leaves a balance of Rs.331.20 to be spent on capital works during the remaining five months period. It is also not clear whether or not the corresponding physical progress has been achieved. This would reveal that the Board has at present no system of project monitoring and control as a result of which budgetary control also suffers a setback. It would appear that the loans taken for capital projects remain unutilised with resultant financial loss to the Board. The Commission would urge upon the Board to immediately institute a system for project management, monitoring and control so that cost and time overruns on capital projects are totally avoided. Hereafter, the Commission will be constrained to disallow interest on loans remaining unutilised or misappropriated and IDC on projects, which gets delayed. The Commission would also expect the Board to submit a detailed investment plan for the capital works during 2004-05.

7.6 APDRP Schemes

The picture on APDRP schemes is also not different from that of other capital works mentioned in the foregoing para. Out of a total outlay of Rs.350.35 crores for APDRP schemes, the expenditure upto 15.11.2003 is Rs.66 crores. Out of this, meter replacement accounts for about 40 crores, which gives the indication that the progress on construction works is alarmingly tardy. The Commission would require the Board to take immediate action to correct the situation and put the scheme back on rails. The Commission would also direct the Board to formulate additional schemes for APDRP assistance with a view to reduce borrowings at commercial rates of interest.

7.7 Inventory Control

Inventory Control is an area, which has not received the requisite attention of the Board in the past. Many stake holders have pleaded for strict control of inventory through computerisation of the activity and by reducing duration of inventory. Apart from this, the Commission has noted with concern the huge pile up of inventory especially at the construction sites calling for immediate disposal of unwanted items. The Commission's assessment is that the disposal of unwanted items alone would bring in revenue of about Rs.400 crores, which may enhance the cash flow and thereby reduce the debt burden. The Commission would recommend computerisation of the inventory and disposal of unwanted stores in the shortest possible time.

7.8 Cost of Service

Reduction of cross subsidy among various consumer categories in a phased manner is the responsibility assigned to the Commission under the Electricity Act, 2003. The ARR & ERC filed by the KSEB does not contain any details regarding the cost of service to different categories of consumers, although it can be argued that the Board has not proposed any tariff revision. The ARR & ERC simply gives the average cost of supply which is uniform to all categories of consumers and does not give any indication regarding cost of supply in respect of each category. The information furnished by the Board regarding the consumption by each category of consumers can also not be considered reliable. In the absence of details of cost of service and the accurate data regarding category-wise consumption, the Commission is not in a position to undertake the exercise on tariff rationalization. The Commission would direct the Board to furnish the details regarding the cost of supply to the various categories of consumers and their consumption along with full supporting data, as early as possible.

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 co-operation extended by the Chairman, KSEB and his team of Officers in promptly furnishing the information and clarifications sought by the Commission has made the job of the Commission easy. Also, the Commission derived immense benefit from the deliberations of the State Advisory Committee. 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.

Sd/-	**Sd/-**
C.Balakrishnan	**M.K.G.Pillai**
Member	**Chairman**

Annex I

NAMES AND ADDRESSES OF STAKE HOLDERS RESPONDED TO THE ARR & ERC

1 The Secretary,
Kerala Vyapari Vyavasayi Ekopana Samithi
Kumbalangi Unit,
Kochi – 682 007.

2 M.K.Abdul Majeed.MSC(Engg)
Scientist-H(VSSC)Retd
Vice President, Centre of Indian Consumer Protection and Research (COINPAR)
Lumiere, TC 9/2297
Sasthamangalam P.O.
Thiruvananthapuram – 695 010

3 The President,
Kottarakkara Pourasamithi
(Reg.No.Q 902/1997
Pin – 691 506

4 General Secretary,
Kerala State Ice Manufacturers Association,
ER-906/2002
Premier Enterprises Building,
Fisheries Harbour,
Thoppumpady, Cochin – 5.

5 P.C.Thomas,
Proprietor,
Copy Tiger,
Metharvidath Bldgs
Opp.Dist.Hospital,
K.K.Road, Kottayam.
Kerala

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

7 Secretary,
Paravur Senior Citizens Club
C/o.Chaithanya Nursing Home,
N.Paravur
Reg.No.ER 174/2003.

8 Sri. E.Harigovindan
SE,
Offg Chief Engineer
Chief Engineer (Navy)
Kataribagh, Naval Base PO
Kochi – 682 004

9 The President,
Kerala High Tension and Extra High Tension Industrial
Electricity Consumer's Association,
Productivity House,
Jawaharlal Nehru Road,
Kalamassery – 683 104
Ernakulam District.

10 Sri. C.P.Thomas B.SC.Engg.
(Rtd.Chief Engineer-KSEB
Chirakadavil,
Kodimatha
Kottayam – 686 039

11 S/s. S.P.Ravi & C.G.Madhusoodhanan
Chalakudy Puzha Samrakshana Samithi
Reg.No.734/2002
Chaithanya, Moozhikkakadavu,
Pariyaram P.O., Chalakudy,
Thrissur – 680 721.

12 Kerala State Small Industries Association
2nd Floor, Veekay Towers,
Beerankunju Road,
Kochi – 18.

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

14 The Chairman
Public Affairs Forum
KP 11/153 C
NCC Nagar,
Trivandrum – 695 005.

15 The Chief Electrical Engineer,
Southern Railway,
Headquarters Office,
Electrical Branch
Chennai – 600 003.

16 Sri.C.G.Jolly,
Chief General Manager,
Alupuram Complex,
Indian Aluminum Company Limited,
Alupuram, Post Box No.30,
Kalamassery – 683 104.

17 Sri.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

18 The Secretary,
The Association of Planters of Kerala
No.41, Vrindavan Housing Colony,
P.B.No.1178, Pattom Palace P.O.
Thiruvananthapuram – 695 004.

19 Sri.M.S.Iyer
TC 50/155(1)
Cheriyani Complex,
Kalady South
Trivandrum – 695 002.

20 Shri.C.T.Kuriyappan & George.C.Paul
Grasp Institute of Technology & Education
28/387, Aiswarya,
Sastha Nagar, Thrissur.

ANNEX II

1	A D Ajeyan Azhakanthara, Secretary, Kerala Vyapari Vyabasai Akopanasamithi, Cochin	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. Cross subsidies should be removed	This is a matter to be considered by the Hon'ble Commission and KSEB does not have any comments except pointing out the provision in the Electricity Act 2003 that the tariff should progressively reflects the cost of supply of electricity and should be reduced & eliminated cross subsidies within the period to be specified by the Commission.

2	M. K. Abdul Majeed, Scientist-H (VSSC) Retd, Vice President, Centre of Indian Consumer Protection and Research (COINPAR), Lumiere, TC 9/2297, Sasthamangalam P.O., Thiruvananthapuram – 695010	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. During 70s consumers were encouraged to consume more power and tariff was tapering beyond 100kW. Lack of foresight, abuse by politicians and unions has landed KSEB in this predicament resulting in serial tariff hike and consumer hostility.	During 70s, the electricity supply was predominantly dependant on cheap hydel power. At present it is a mix of cheaper hydel and costly thermal power. Over the years the tariff determined was administrative in nature and did not reflect the cost of supply. Government did not release the subsidy due to Board forcing the latter to resort to heavy borrowing involving huge interest burden. Failure of monsoon added to the woes of the Board. The above are some of the causes for the present financial crisis of the Board. Even now there is wide gap between the cost of supply of power and average rate of realisation of revenue per unit and the existing tariff is low.
	2. Sub-engineers are taking meter reading which can be done using digital meters at no extra cost, over heads of KSEB are exorbitant	It is not correct ot say that the over heads are ballooned. The percentage of the administrative and general expenses, employee cost, repair and maintenance, interest charges etc. to the total revenue expenditure either remained constant or decreased during the period 1998-99 to 2002-03. Similarly it is not true that Sub-engineers are taking meter readings. Meter readings are taken by Meter readers and it is not true that digital meters or automatic meter reading instruments do not involve additional cost. The Board will consider progressively computering the meter readings depending on the cost verses benefit.

	3. Lock up of huge dead inventory	i. Procurement are made limiting the quantity to actual requirement assessed after taking into consideration the stock position, outstanding supply from on-going contracts, planned work, lead time for supply etc. ii. Introduced computers in the central office and in the regional stores to facilitate effective monitoring of store items. iii. Fixed limit for holding stock in the Regional stores iv. Stopped subsequent tenders for procurement wherever material procured earlier were in stock. v. Set up scrap disposal committees in each circle to identify the un-serviceable items and to approve disposal of the items. vi. Continuously monitoring utilisation of slow/non-moving store items. The position of stock held in the Regional Stores are given below:
	4 & 5. Authentic informations are not available to the consumers.	Board can make available information other than classified items, wherever deemed necessary
	6. Employee expenses are high at Rs 0.44 crores for supply of power worth Rs. 1 crore	It will take some time to bring the cost down. Towards this, KSEB has taken the following steps:

Nam eof Stores	Rs. In Crores		
	As on 31.03.02	**As on 31.03.03**	**As on 30.06.03**
Regional Store-Kundara	5.03	4. 61	4. 48
Regional Store-Aluva	8. 96	6. 43	5. 83
Regional Store-Kallai	5. 88	3. 82	4. 03
Total	**19. 87**	**14. 86**	**14. 34**

		Electricity Industry is a labour intensive one. Cost of power, though a major component, is only one of the items of expenditure. Comparing the employee cost with power cost is irrational. The employee cost accounts for about 16% of the revenue expenditure. It is pointed out that during the last 5 years, the percentage of employee cost to the total revenue expenditure has come down from 21.36% in 1998-99 to 15.30% in 2002-03. The main reasons for high employee cost are DA liability and increase in payment liability to the retired personnel, which are beyond the control of the Board. The Board has taken the following to reduce the cost: - • Drastic reduction of payment of overtime • Abolition of redundant and unnecessary posts • Limiting the increase of officers' salary to the end of the pay scale • Redeployment of employees to vacant posts • Cutting down certain allowances such as leave surrender and holiday wages and stopping of pension disbursement by Money Order
	7. Kerala will not need more thermal power station since adequate hydro power will be added in near future.	• Thermal power being costlier than the hydel sources and the full capacities of existing thermal sources in the state are not exploited at present due to cost consideration, it would be preferable to tap more hydel sources and explore the possibilities of reducing cost of thermal power of the existing thermal stations.
	8. Tariff hike on the ground of failure of monsoon is unjustified. If necessary, it can be in the form of a surcharge	The power system in the state consists of both hydel and thermal powers more or less in equal proportion. Whenever there is failure of monsoon as in 2002-03 and in the current year, the deficiency in generation of cheaper hydel power has to be met by purchase of additional thermal power, which is costly. To compensate the revenue deficit on account of such contingency, it is inevitable that tariff is suitably adjusted by way of revision or levy of surcharge etc.
	9. It is essential to improve the efficiency of KSEB.	The Board has been taking all efforts to improve its efficiency and will continue to do so.
	10 & 11. KSEB should be privatized	This is a policy matter to be decided by the Government and the Board has no comments to make.

3.	**Kottarakkara Poura Samithi, Kottarakkara**	
Sl.	**Extract of Objections / Suggestions /**	**KSEB's Response**

<table>
<tr><th>No.</th><th>Requests of the Stake Holder</th><th></th></tr>
<tr><td></td><td>1. Present level of arrears of electricity bills and how much does KSEB expect to realise within a time frame?</td><td>The outstanding arrears as on 30-6-2003 from HT and EHT consumers are given in the table below: -
<table>
<tr><th>Type of Consumers</th><th>Arrear
(Rs. in Cr.)</th></tr>
<tr><td>Bulk consumers</td><td>32.12</td></tr>
<tr><td>Central Government Departments</td><td>0.07</td></tr>
<tr><td>Central Public Sector Units</td><td>11.65</td></tr>
<tr><td>Co-operative sector</td><td>1.68</td></tr>
<tr><td>Interstate sales</td><td>8.09</td></tr>
<tr><td>Kerala Water Authority</td><td>100.61</td></tr>
<tr><td>Local Bodies (Excluding Thrissur Municipality)</td><td>0.01</td></tr>
<tr><td>Minor Irrigation department</td><td>12.55</td></tr>
<tr><td>Other State Depts. (Excluding Minor Irrigation Department)</td><td>11.36</td></tr>
<tr><td>State Public sector Units (Excluding Kerala Water Authority)</td><td>120.99</td></tr>
<tr><td>Private consumers</td><td>430.73</td></tr>
<tr><td>Total</td><td>729.87</td></tr>
</table>
The outstanding dues from the Low Tension consumers as on 30-6-2003, amount to Rs. 256.03 crores. This comprises Government Departments, Public Sector Units and Local Bodies' Rs. 160.41 crores and Private consumers - Rs. 95.62 crores.

Thus, the total demand remained to be collected is Rs. 985.90 crores. Bulk of the amount is pending due to litigations and major part of the demand pertains to minimum demand due for the period of lock out, disconnections etc. A significant part of the demand is also disputed. A number of consumers particularly the industrial units have become sick and unable to pay the arrears. In view of the complex nature of the outstanding dues, it is difficult to fix a time frame and quantify the amount expected to be realised within that time frame. This is a continious process and the Board has been taking all efforts to collect the arrears.</td></tr>
</table>

	2. Disposal of unwanted inventory – what portion of the unwanted inventory is proposed to be liquidated during 2003-04?	The value of unwanted inventory is not readily available. Board has been taking all efforts to dispose off the unserviceable inventory.
	3. Steps being taken to reduce cost of employees	The steps being taken by the Board for reducing the cost of employees are: • Drastic reduction of payment of overtime • Abolition of redundant posts and rationalisation of the posts on need based. • Limiting the increase of officers' salary to the end of the pay scale • Redeployment of employees to vacant posts • Cutting down certain allowances such as leave surrender, holiday wages, stopping pension disbursement by Money Order and limiting payment of other allowances
	4. Pilferage of energy by KSEB employees	Metering of energy supply to the quarters of KSEB employees has been made mandatory. Specific pilferage by the employees if brought to notice, action will be taken against them. Some of the other areas in which KSEB propose to effect savings are: i. Swapping of high cost loans ii. Curtailment of administrative and general expenses iii. Limiting expenses on R&M iv. Optimisation of power purchase by resorting to merit order despatch scheme v. Continued adoption of economy measures etc.
	5. Salaries and benefits of employees are highest in the State. Excess payment of Rs. 100 crores made to employees in recent past.	The salary and allowances given to the KSEB 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. It appears that payment of Rs. 100 crores referred to in the objection relates to an audit objection. The audit comments were duly considered by the Board as per Government directions and action deemed necessary has been taken/persued further.
	6. T&D losses are high and efforts made by KSEB need to be evaluated	Several measures have been taken to reduce the T&D loss. These include: § More accurate estimation of losses through energy audit § Replacement of meters wherever meters are defective § Theft detection and prevention by formation of anti power-theft squad

		§ Passage of Indian Electricity (Kerala Amendment) Ordinance, 2003 § Computerization of billing and revenue collection The above measures are in addition to the steps being taken to augment the transmission and distribution networks to reduce the technical losses. Fixing of target to reduce the T&D loss by 2% every year.
	7. Cost over-run in projects; corrupt officers manipulate cost over-run to their benefit	There are cost overruns in some of the projects. However, it is not true that corruption is the only cause of cost overruns. Some of the causes for cost over run are: - i. Inadequate investigation before finalising the project estimate. ii. Major changes in the scope of work during execution. iii. Delay in procurement of equipment and materials iv. Land acquisition and rehabilitation issues. v. Contractual disputes. vi. Labour militancy in the state. vii. Difficulty and delay in getting forest & environmental clearances viii. Financial crisis of the Board. At present close monitoring is exercised to control the above factors and avoid cost/time over run of projects
	8. Suggestion to fix specific targets for collection of arrears by forming various cells in each district	KSEB welcomes the suggestion and would attempt to take necessary initiatives.
	9. Naphtha based projects should be converted to LNG based projects	The feasibility of such a proposal depends on various factors such as availability of gas, necessary transport and storage infrastructure and the technical feasibility of converting the existing plant to suit to different fuel. The issue is under the consideration of NTPC.

4	**K. Uthaman, General Secretary, Kerala State Ice Manufacturers Association, Premier Enterprises Building, Fisheries Harbour, Thoppumpady, Cochin – 5**

Sl. No.	Extract of Objections / Suggestions / Requests of the Stake Holder	KSEB's Response
	1. There should be no tariff hike for LT-IV consumers as the Board is already making a profit from electricity supplied to them	In the petition filed by the Board, no tariff revision was proposed. Only in the event of Government not agreeing to a suggested scheme of bridging the revenue gap, the Board prayed that the Commission may pass appropriate orders for regulating the tariff, after giving an opportunity to present the case by the Board. In the view of the above, the issues raised in the objection are premature. The Commission has to decide the issues depending on the happening of tariff revision, creation of regulatory Asset etc.
	2. Commission has to lay down proper guidelines for recovery of regulatory asset and interest thereon; so that there is no recovery from categories paying above cost tariffs	
	3. Ice industry cannot withstand a further hike in tariff	
	4. Cross subsidies should be reduced	

5	**P C Thomas, Proprietor, Copy Tiger, Metharvidath Building, Opp. District Hospital, K. K. Road, Kottayam**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. Categorisation is not correct; category should be changed from LT-VIIA to LT-IV or LT-VIB to LT-VIIB (without restriction to connected load)	Categorisation of consumers for various tariff categories is done on the basis of purpose for which electric power is used. As per the existing notification, the power consumed for photocopying is categorised under Commercial since it is commercial activity. Hence the request of the petitioner for change of tariff cannot be allowed.
	2. Technical, commercial and administrative performances of KSEB should be improved	KSEB is endeavouring to improve the internal efficiency. Some of the steps taken by the Board are summarised below: *Steps taken for reducing cost of employees* • Drastic reduction of payment of overtime • Abolition of redundant posts • Limiting the increase of officers' salary to the end of the pay scale

		• Redeployment of employees to vacant posts • Cutting down certain allowances such as leave surrender, holiday wages and stopping pension disbursement by Money Order *Steps taken for reducing T&D losses* § More accurate estimation of losses through energy audit § Replacement of meters wherever meters are defective § Theft detection and prevention by formation of 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. *Steps taken for reducing administration and general expenses* • Shifting of offices from rented to own buildings • Hiring of vehicles as and when required instead of purchasing new ones. • Limiting telephone and transportation expenses • Controlling advertisement expenses • Adoption of economy measures

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 every 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 top 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.

7.	**Secretary, Paravur Senior Citizens Club, c/o Chaithanya Nursing Home, N. Paravur**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. Power generation: Cost at Rs. 263.17 crores for 2003-04 is high and should be kept at 30% over 2001-02 levels i.e. Rs. 110 crores	The cost of power generation is a function of various factors such as the level of generation (in terms of MkWh) and fuel costs. The absolute value of the same cannot be projected on a year-to-year growth basis. While projecting the cost of generation and power purchase cost, KSEB has taken into account • Availability of hydel power • Cost of power procurement (based on fuel and other costs) from various stations • Merit order dispatch applied on the basis of representative load curve and availability of power from various sources with different costs These factors are taken into account to project the power generation/ purchase schedule. The cost of generation includes not only cost in the hydel plants but also the cost of generation in the two thermal plants of the Board. Considering the availability of water for hydel generation, cost of thermal energy produced in the Board's own thermal stations, the cost of generation and power purchase cost have been revised. The objectors suggestion to reduce the power purchase cost in the ARR is not acceptable to the Board.

	2. Idukki power project is not working at rated capacity for the last 2/3 decades because of faulty generators	This is not true. The problems in the operation of generators are due to wear and tear on account of usage. The Board sometimes also faces the problem of procurement of spare parts. The PLF of hydel plants are not high due to constraints of water availability.
	3. Power purchase should be scaled down to 10074 MU instead of 12686 MU because some major industrial EHT consumers have shut down. This would result in savings of Rs. 254.28 crores	Power purchase cost shown is based on demand projection for various consumer categories and takes into account the fact that some major industrial EHT consumers may require lesser power. Average power consumption per day is about 35 MU and at this rate the projected power requirement of 12615 MU for 2003-04 is justified and cannot be reduced with out affecting the supply.
	4. Working capital requirement can be brought down through monthly billing	At present approximately 46% of the revenue comes from bi-monthly billing and covers about 98% of consumers. Changing the billing cycle of all the consumers will result in increase in cost.
	5. Interest charges should be brought down by renegotiating existing loans with the lenders	The Board has already swapped high cost loans of Rs 1031 crores to bring the interest cost down. Despite swapping of high cost loans, the interest burden continues to be very high due to huge dept burden and need to borrow further. As the existing tariff does not match the cost, Government has not paid subsidy to the Board and repayment of loans is heavy, the Board is constrained to borrow incurring further interest. The views of the objector to reduce the provision by 50 % is arbitrary and cannot be agreed.
	6. Employee expenses are high and should be reduced	It is agreed that the employee related cost is high. But this issue cannot be addressed overnight and it will take some time to bring the cost down. Towards this KSEB has taken some steps described below: • Drastic reduction of payment of overtime • Cutting down the number of redundant posts • Limiting the increase of officers' salary to the end of the pay scale • Redeployment of employees to vacant posts • Cutting down certain allowances such as leave surrender and holiday wages and stopping pension disbursement by Money Order • Imposition of travel discipline The objector's suggestion to reduce the employee cost is arbitrary and cannot be agreed.

	7. R&M expenses are very high and should be reduced	Repair and maintenance (R&M) expenses have been estimated as a percentage of gross fixed assets. This percentage has been calculated based on average of such percentage over the past three years. R&M expenses form a critical part of the Board's endeavour to provide good quality supply to the consumers. The fact that in FY 2002-03, R&M expenses were low due to liquidity problems should not affect the expenses in FY 2003-04.
	8. KSEB should be organised on profit centre basis with a CEO as head of the organisation	The Board has already set up profit centres for functional purpose. But the assets and liabilities are yet to be apportioned to the profit centres. In the context of Electricity Act 2003, the issue needs review.
	9. Contributory pension scheme with 10% each from employee and employer should be introduced	At present the terms and conditions of employment are governed by Kerala Service Rules. As a part of restructuring, creation of pension fund etc. would be examined. In view of the above, the objectors suggestion to reduce the projections in the ARR are illogical, arbitrary and cannot be admitted. It is submitted that the Commission consider the actual facts presented before it for deciding the ARR

8	**E. Harigovindan, SE (Navy), Kataribagh, Naval Base P.O., Kochi – 682004**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. MES incurs considerable expenditure over and above tariff payments and its requirement on MD varies depending on troop deployment. Hence limitation/ penal charges related to contracted maximum demand should not be levied on defence establishment	Based on the maximum demand, the Board is required to incur capital expenditure to put up large infrastructure. Further, a significant level of expenses is required for maintaining such a large infrastructure. The KSEB thus should have the means of collecting revenue irrespective of whether actual consumption matches with the contracted maximum demand or not. The consumer has the option to revise the contracted demand depending on his/her trend of actual consumption. If the consumer consumes less energy, the KSEB cannot reduce or remove the infrastructure already created for the said consumer. Therefore, the Board is justified to levy charges limited to maximum demand.
	2. Tariff applicable to MES should be reduced by Rs. 1.25 per Kwh.	MES is not a bulk consumer drawing power in one area. The Defence establishments in the State are spread in a number of places and draw power from separate feeders as individual consumers. They cannot be equated with bulk consumers like Trichur Municipal Corporation. The objector, though has mentioned that they incur huge expenses over and above the tariff payments, they have not given the details of their infrastructure and cost. The Board cannot expect to meet their cost as pass through. Since MES is not a bulk consumer and their establishments are similar to the Central/ State Govt. offices (having many branch offices) spread over in the State, they are charged similar to other similarly placed consumers. No special and concessional tariff can be allowed to MES as the request is not justified. If it is allowed, it is

		requested that the Commission/ Government should compensate the Board the loss that may be sustained by it.

9.	**The Kerala High Tension and Extra High Tension Industrial Electricity Consumer's Association, Productivity House, Jawaharlal Nehru Road, Kalamassery 683104, Ernakulam District**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. ARR should be filed by December 31 of every year and the tariff revision should be announced by March for it to be applicable from 1st April of that financial year.	The filing for the year 2003-04 was delayed, as it was the first filing by the Board. The Board intends to file the ARR for 2004-05 by the prescribed due date.
	2. Provisional estimates of revenue requirement for 2002-03 are 10% higher than 2001-02 figures. Considering an inflation of 4-5%, the provisional estimate is on the higher side.	Power sector being capital intensive and so far the tariff being administrative in nature, the revenue requirement cannot be projected on the basis of inflation only. There are costs such as power purchase, interest etc. which are driven by factors like demand for power, capital expenditure, availability of right mix of various sources of power etc. It is not correct to compare the year-to-year changes in revenue requirement with changes in inflation rate only. The year 2002-03 was one of the worst monsoon years. Due to reduction in hydel generation of power from 6716 MU in a normal year to 4819 MU in 2002-03, the Board had to incur an additional amount of Rs 420/- crores on power purchase during 2002-03. Despite this increase, the Board had reduced revenue gap from Rs 1316 crores in 2001-02 to Rs 1015 crores in 2002-03.
	3. PLF for the KSEB plants is low; 47% for thermal and 36% for hydel plants	PLF of any plant depends on the despatch from the plant, which, under the merit order despatch principles, is further dependent on the variable cost of production of energy in the plants. The thermal plants of KSEB are diesel plants whose variable costs are high. Also the system in Kerala is faced with a situation where the peak demand is almost twice the off-peak demand. The capacity designed for peak demand is idle during off-peak hours. Since the variable costs of KSEB's thermal plants are high, it is not cost effective to produce more energy from them. This results in lower despatch from KSEB's plants and lower PLF. Increasing PLF of the Board's own thermal plant would only contribute to the cost and not reduce it as the cost of power from the Board's thermal plants are far higher than the power available from other sources. The Board is exploring the possibility of making its thermal plants cost effective. Therefore, it is submitted that increasing PLF of the Boards thermal plants would not save Rs 15 crores as erroneously concluded by the objector. PLF for hydel plants is not a good indicator of efficiency of the plant because the generation and despatch of energy from a hydel plants depends on availability of water. Also significant part of the hydel capacity

		in Kerala is run-off the river type, where water availability depends on the rainfall during the period. Therefore the despatch from the hydel plants would be irregular.
	4. Facilitate use of DSM (shifting of load curve and energy conservation) to flatten the extremely skewed load curve;	The consumption pattern in Kerala has a skewed pattern with Domestic (43%) and Commercial (9%) consumption comprising more than 50% of the total consumption. Flattening of the load curve by shifting loads of these consumers is extremely difficult (except may be through a strong tariff signal). Further, the industrial consumption consists of a significant proportion of process industries, which are not amenable to shifting load. Unlike most other states, where load is shifted primarily through the rostering of agricultural load, Agricultural consumption in Kerala is not significant enough to enable this. However, the Board agrees that there may still be some scope for introducing DSM measures and the Board intend to introduce them in future.
	5. Power purchase agreements should be reviewed to reduce costs	The Board would take efforts to review the PPA's to reduce the cost, in mutual consultation with the parties to the Agreements.
	6. Power purchase cost from CPP may be lower and the Board should assess this option	The actual availability on firm basis and on commercially viable terms needs to be assessed.
	7. Nuclear plant should be considered must run only up to the minimum loading of the plants	This is a policy decision not in the hands of KSEB. The Board would take up the issue with the concerned authorities
	8. Review merit order despatch methodology and ensure strict adherence to "true" merit order despatch	Actual "merit order despatch" is a continuous process and the Board endeavours to adhere to the same at all times subject to technical constraints.
	9. Cost volatility of fuels like naphtha may be mitigated through a process of long term contracts and forwards	The Board has requested a pass-through mechanism and annual true-up mechanism to mitigate this risk. However, entering into long term contracts or forwards may not be feasible at this stage.
	10. Board intends to add/ has added 752 employees in 2003-04; Board of Directors' expense has increased by 60% without increase in numbers KSERC should allow only 5% increase in salaries and wages, 7% increase in terminal benefits KSEB should be asked to bring its pension	It is a fact that the employee related cost is high. But this issue cannot be addressed overnight and it will take some time to bring the cost down. Towards this KSEB has taken the following steps: • Drastic reduction in payment of overtime • Cutting down the number of redundant posts • Limiting the increase of officers' salary to the end of the pay scale • Redeployment of the employees to vacant posts

policy in line with the latest Central Government Schemes and schemes of other companies.

- Cutting down certain allowances such as leave surrender salary and holiday wages and by stopping pension disbursement by Money Order
- Imposition of travel discipline

The state Government had frozen filling up of vacancies except in the cadre of mazdoors. Due to the absolute necessity the Board intends to add / has taken action to recruit the mazdoors.

The projections for employee cost have taken into account the arrears of DA and also the expected terminal benefit payment due to high number of retirees in FY 2003-04.

The estimated cost component of Board of directors (0.32 crores) is a miniscule item of employee cost and the amount is to meet the salary and other allowances.

Due to the various measures taken by the Board in reducing the employee cost, there was a saving of Rs 73.95 crores in 2002-03 as compared to the previous year 2001-02. The details are given below: -

(Rs in Crores)

Particulars	**2001-02**	**2002-03**	**Reduction in 2002-03**
Salary of staff	264.41	219.69	44.72
Cancellation of E/L Surrender	36. 59	24.60	11.99
Limiting Over time	12.05	0.13	11.92
Other allowances	21.45	16.88	4.57
Bonus	3.42	2. 67	0.75
Total	337.92	263.97	73.95

A comparitive statement of employee cost for the period 1998-99 to 2002-03 is enclosed. It may be observed from the statement that while salary is on the path of decline, payment of terminal benefits is on the rise over which the Board has no control.

On the basis of expenditure for 6 months of 2003-04 & actuals of 2002-03, the estimated employee cost for 2003-04 has since been scaled down from Rs 750.50 crores to 693.64 crores.

	11. (a). Relationship of R&M expense with GFA is empirical; assets purchased in 2002-03 should not be considered while calculating R&M expense	Repair and maintenance expenses have been estimated as a percentage of gross fixed assets. This percentage has been calculated based on average of such percentage over the past three years. The Board would like to highlight the fact that it is not possible to estimate the repair and maintenance expense for each asset individually. The contention that assets added during the year 2002-03 should not to be considered, is not valid. Certain R&M expenditure is incurred on new assets as well. Further, the R&M expenditure is expressed consistently as percentage of opening gross block of assets for each year and if the assets created during a year is not taken, that would change the percentage.
	(b). Higher R&M expenditure in 2003-04 to compensate for lower expense in 2002-03 should not be allowed	R&M expenses form a critical part of the Board's endeavour to provide good quality supply to the consumers. The fact that in one-year R&M expenses were low due to liquidity problems should not come in the way of such expenditure in future.
	c. R&M cost is high in comparison with other States. The total expense that should be allowed is Rs. 77.53 crores based on inflation related increase over the expense in 2001-02	R&M cost depends on the various factors like the age and expected life of asset, wear and tear due to usage, average utilisation of asset and damage due to factors beyond control of the Board. All these factors are bound to vary from State to State. Hence direct comparison with other state is not justified. Also inflation can only take care of the price of material used in repair and maintenance and not the quantity of material used. Hence R&M expense cannot be projected simply on the basis of past year expense and inflation.
	12. A&G expenses are high in comparison to other states even after considering the fact that the Board is taking measures to reduce this expense. A&G expense should be allowed at 4 paise/ unit i.e. Rs. 46.37 crores	The A&G expenses are not a direct function of the energy generated or sold. The Board needs to maintain basic infrastructure and to maintain such infrastructure, the Board has to incur A&G expenses like insurance of assets, rent, rates and taxes, legal charges etc. irrespective of the quantum of the energy generated. The Board, due to its financial crisis has reduced the A&G expenses in 2002-03 as compared to 2001-02 and expect to maintain the expenditure in 2003-04 at the same level of 2002-03. The position of A&G expenses since 2000-01 are given below: - **Year** — **AmountRs in Crores** 2000-01 — 79.19 2001-02 — 66.40 2002-03 — 51.80

	13. Develop detailed investment guidelines for KSEB and ask KSEB to submit detailed investment plans according to guidelines.	The Board will provide all information on investment plans as and when asked by the Commission.
	14. Disallow interest on loans taken towards rural electrification unless firm commitment towards Govt subsidy is received for bridging the revenue gap arising out of rural consumption at subsidised rates	This is a policy matter beyond the purview of KSEB.
	15. Refinance loans to reduce interest burden/ interest expense per unit is high when compared with expense per unit in other states.	The projected expenses towards interest rate was based on the average interest rate at which KSEB was able to contract loans during 2002-03. KSEB issued Non-SLR bonds during 2002-03, @ 11.40%. In addition Kerala Power Finance Corporation (KPFC) raised two series of bonds (Rs. 200 Cr. And Rs. 307.74 Cr.) for KSEB on which KSEB is to pay interest at 11.75% and 10.91% respectively. Therefore, the interest rates assumed for the loans estimated to be drawn during 2003-04 are taken as 11% for loans to meet capital expenditure and 11.5% for other loans. Interest rates have reduced since preparation of the ARR. Interest rates cannot be compared from one state to another on a per unit basis. Interest amount depends on the quantum of debt taken by the Board, which is caused by variety of reasons including capital expenditure, release of subsidy by the Government, etc. The KSEB has a higher debt burden when compared with other states. Over the years, the Board had been constrained to borrow heavily due to non-release of subsidy by the Government, wide difference between the cost and tariff, non payment of electricity charges by Government Departments, State PSUs and huge capital expenditure are some of the reasons for heavy borrowings and huge interest liability. In fact repayment of debt is the major problem of the Board. The Board has already swapped high cost loan to the tune of Rs 1031 crores saving interest of Rs 63 crores. In spite of falling interest rates & swapping etc, interest payment will continue to be high. The actual interest payment since 2001-02 are as follows: - **Year** **Amount (Rs in crores)**

		2001-02 648.95 2002-03 672.78 In view of the above, the objectors arbitrary suggestion to allow interest @ 30 paise/unit is unreasonable. The Board has since revised the projection for 2003-04 to Rs 721 crores.
	16. Age wise debt analysis to be undertaken to determine provision for bad and doubtful debt/ KSEB be asked to recover all arrears	The provisions for doubtful dues from consumers are made as prescribed in Rule 4.2 of Annexure-V to the Electricity (Supply) (Annual Accounts) Rules, 1985. KSEB is making all out efforts for the collection of the outstanding arrears. Disconnection, dismantling, revenue recovery action etc., are being taken in the normal course. Substantial amount of arrears are held up due to litigations. Some of the efforts taken by the Board are mentioned below: - • Efforts are being made to get the huge arrears due from the Government departments and Public Sector Units. The Board has repeatedly taken up the issue of dues form Government Departments with Government requesting them to help us in recovering the arrears. • Special arrangements have been made to intensify checking of disconnection of the services of the defaulters. • KSEB has also undertaken an awareness program for all officers up to the Assistant Engineers. The problems and prospects of KSEB are presented directly by Chairman, KSEB, in the meeting, with emphasis on improving revenue collection; priority based faulty meter replacement etc. • With a view to mobilize fund blocked due to litigation, one time settlement by waiving or reducing surcharge was resorted to by conducting Adalats. Board has decided to conduct similar Adalats this year also. A definite time frame cannot be fixed for realisation of arrears because of the complexities like delay in getting court orders and lack of funds with Government departments etc. By enforcing strict disconnection and pursuing the court cases, the Board plans to realise significant part of the arrears.
	17. T&D losses for the period 1999-02 were in the region of 17.2& - 17.4%. However the ARR shows it as 26.50%	Prior to 2001-02, consumption of LT consumers was calculated based on the connected load and the number of consumers. I.e. consumption was arrived by assuming that consumers in each category having 1 kW-connected load will consume a particular amount of energy. This was done because meter reading was taken every six months but billing was done monthly based on provisional data. Thus out of total energy available for sale, energy sold was estimated on provisional basis and T&D losses were estimated as 17%. From 2001-02 onwards the meter reading is being taken bi-monthly and hence actual energy billed is

		available. T&D losses are now calculated using energy available for sale and energy sold/ billed. Accordingly, the T&D loss in 2002-03 was 30.41% and the estimate for 2003-04 is 28.02%. Thus, the difference in the method of computation of T&D loss was the reason for the said inconsistencies. The suggestion to reduce the T&D loss to 25% during 2003-04 is not feasible as it requires huge investment & T&D loss can be brought down only progressively and not overnight. The objectors suggested saving of Rs 54.01 crores is unreasonable and cannot be accepted.
	18. T&D losses have not come down despite the steps taken by the Board; KSEB should be directed to follow a time bound plan to reduce T&D losses	KSEB has initiated a number of steps to reduce T&D losses by at least 2% every year. The steps taken are as follows: § More accurate estimation of losses through energy audit § Replacements of meters wherever meters are defective § Theft detection and prevention of theft by through formation of anti power-theft squad § Passage of Indian Electricity (Kerala Amendment) Ordinance, 2003 § Computerization of billing and revenue collection § Formation of special "Adalats" for quick dispute settlement The above steps are in addition to the steps being taken to augment the transmission and distribution system to reduce the technical losses.
	19. Rebate in electricity charges if payment made within specified period	The payment of the electricity bills takes place at a point much later than the actual consumption of electricity. The Board already provides credit to the consumers in terms of time gap between consumption and payment. Hence providing discounts for prompt payment would adversely affect its revenues.
	20. Multi-year tariffs should be introduced	According to section 61 of Electricity Act 2003, the issue is within the jurisdiction of the Commission and the Board will follow the guidelines issued by the Commission in this regard.
	21. Commission to specify amount of subsidy and the manner it is to be paid by State Govt in advance	The issue is within the jurisdiction of the Commission and the Board endorses the suggestion of the objector.
	22. Develop an appropriate cost to serve model to identify the extent of cross subsidy in each category of consumers. KSEB to provide all necessary information for computing the cost to serve.	The objector has suggested that the Hon'ble Commission should develop a model and will be supported by data provided by the Board. The Board will endeavour to provide all information available (within the existing constraints of information availability) as and when required by the Commission. The issue of reduction of cross-subsidy is within the jurisdiction of the Commission and the Board does not have any comments.

	Develop a time-frame to eliminate cross subsidy	
	23. KSERC to ensure that KSEB followed strict merit order despatch principles for procuring electricity for the period April to August, 2003	The Board endeavours to follow the "merit order despatch" at all times subject to technical constraints on the system.
	24. Ferro-alloy units should get special incentives because these units are power intensive	Such a decision is under the purview of Hon'ble Commission. However, the Board would like to point out that such a move has been considered to be against the principles of tariff rationalisation by Maharashtra Electricity Regulatory Commission (MERC) in its tariff orders. The Maharashtra State Electricity Board (MSEB) had proposed to create a separate tariff category for bulk consumers (power intensive connections) such as ferro-alloy industries. However, the MERC, citing the principle of tariff rationalisation, had disallowed such a proposal.
	25. Incentive schemes based on load factor, power factor should be introduced; Incentive for off peak hour consumption should be enhanced Consumers with arrears should be allowed to avail of the incentive schemes	For incentive schemes based on power factor it is within the jurisdiction of the Hon'ble Commission. As regards incentive based on load factor, on account of two part tariff existing, the consumer is getting a concession in case his load factor is high by paying lower per unit demand charges. Therefore, the current tariffs are providing a built-in concession. Consumers in arrears are not paying their dues in time and should not be allowed to avail of any incentive schemes, if applied. The same principle has also been followed by Maharashtra Electricity Regulatory Commission in its tariff order.
	26. KSEB should be directed to pay interest on security deposit Security deposit may be collected using non-cash instruments	The Honourable Supreme Court has in one of its rulings said that Security Deposit collection from consumers by the Board is justified but it is not binding on the Board to pay any interest on such Security Deposits. The security deposit collected from the consumers is used for working capital requirements. Hence bank guarantees, fixed deposits and other non-cash instruments may not be accepted as security deposit.

	27. Commission should set standards of supply and determine compensation if KSEB does not meet those standards.	This is a suggestion for the Hon'ble Commission. However, the Board wishes to point out that introducing penalty for not meeting quality of service standards before addressing other critical issues faced by the Board may be counterproductive.
	28. Cost of supply for Keralan has increased by a large amount in recent years and is high when compared with other states like Tamil Nadu, Gujarat and Maharashtra.	In the recent years the characteristics of the system have undergone a change. The power supply which was primarily through hydel plants is now through both hydel and thermal plants in almost equal proportion. Since the fuel for operating the thermal plants (naphtha and coal) is not available in Kerala, the cost of power purchase has risen considerably. The consumer mix is also undergoing a change with domestic consumers increasing dramatically and HT and EHT consumers' share decreasing. This has lead to a situation where peak demand is almost twice as much as off -peak demand. The capacity designed to meet the peak demand is idle in the off-peak hours. The above factors have lead to a considerable increase in expenditure for the Board without corresponding increase in tariff.. Since the subsidy also not paid by the State Government in many years, the Board has to resort to increased borrowing to meet its expenditure. Hence the interest cost have also risen. The Board submits that the cost of supply inter-alia depends upon many factors like (a) Generation Capacity & Hydro-Thermal ratio of generation capacity; (b) type of thermal generating capacity - naphtha or coal; (c) cross-section of consumers of consumer mix; (d) availability & quality of supply; (e) the quantum of statutory revenue surplus; (f) socio-economic condition of the respective state; (g) geographical situations; etc. All these factors are but natural to defer from one State to another. Therefore, a simple comparison of the cost of supply from state-to-state is not appropriate. In view of the above replies and justification, the objector's suggestion to disallow certain amount from the ARR be rejected. It may be noted that based on the current position of water available in the reservoir, the Board has revised the power purchase cost upward from the originally estimated amount of Rs.1592.63 crores to 1851.89 crores. The Hon'ble Commission may take into account these developments while approving the ARR.

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10. C.P.Thomas, Bsc.Engg, Chirakadavil, Kodimatha, Kottayam-686 039		
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. No. of consumers in LTA category consuming more than 500 units/ month should be more than 2000 per division as opposed to a number of 549 considered by the Board	The Board has taken all possible care and diligence in furnishing data to the Commission. The Board has taken care in providing the best possible estimates wherever actual data is not available. The number of consumers in a given range of consumption has been estimated from the sample data collected from 48 electrical section offices of the Board. The number of consumers having more than 500 units of consumption per month is higher only in urban areas, especially in the Corporation area. In rural areas and villages, there are only very few such consumers. The actual number of such consumers may vary slightly from the figures given in the ARR. But a large variation is not expected. Irrespective of the category wise consumption, all revenue from sale of energy has been taken in to consideration in the ARR.
	2. Cost anticipated for HT & EHT consumers differ in the Budget, but corrected proposal	The Budget for 2002-03 was prepared long before the preparation of ARR. The Cost of Generation and Cost of energy purchased etc. changed since Preparation of the budget and such changes have been included in the ARR and therefore the difference.
	3. In table 3 even though total consumption of power has decreased in 2002, per capita consumption has increased	Prior to 2001-02, the total consumption in a year was estimated based on certain factors like the connected load and number of consumers. This method was adopted due to difficulties in collecting details of actual consumption. Before 2000-01, the domestic consumers were billed under the *provisional invoice card system*. Under that system, the meter readings at the consumers premises were taken only once in six months. The total consumption calculated from such readings taken once in six month introduced large errors and hence, the consumption was estimated as mentioned above. The total consumption for the years 1994-95 and 1999-00 given in the ARR are such estimated values. Since 2001-02, the bi-monthly billing system was adopted in all the section offices and the actual energy billed became available. Therefore, the total consumptions based on two different methods are not comparable. If the previous method is used to estimate the total consumption for the year 2001-02, the consumption would be 10394 million units instead of the actual 8867 million units. Thus the reduction in consumption is on account of such correction and not due to actual reduction. If the method adopted in the previous years is used to estimate the total energy consumption, it would be 10394 million units and corresponding per capita consumption will be 318 units. The per capita consumption in Kerala, has shown a marginal increasing trend as expected during the past few years.
	4. Cost of generation and purchase is Rs. 1.50 per unit whereas handling costs are Rs. 2.60 per unit. The handling costs are high. The selling price should not be more than Rs. 3/unit	The average cost of Generation for the year 2003-04 is Rs. 0.32 per unit; the average cost of energy purchased is Rs. 2.43 and the combined average cost of energy at the generation/ purchase end is Rs. 1.62. The handling cost of the Board comprises mainly the employee cost and the interest cost. The debt burden of the Board has increased many fold due to the tariffs was insufficient to cover the cost over the years and the State Government has not paid the subsidy due to the Board. Therefore, the Board had to resort to borrowings to bridge the revenue gap, meet the capital expenditure and repayment of debts. Unrestricted borrowings resulting from administered tariffs, poor financial support from Govt and of course inefficiency etc led to spiralling of interest cost.
	5. Decrease in consumption in all categories requires detailed study	It is submitted that the inference drawn by the objectioner is wrong as the above-mentioned changes in estimating the consumption have not been considered by him.

	6. Employee and administrative cost should be disallowed by Rs. 65 crores and Rs. 10 crores respectively considering last year's figures	The employee cost projected for this FY 2003-04 is higher than that of 2002-03 due to increase in DA and terminal benefit payment. The increase in DA is on account of payment of arrears, while the terminal benefit payment has increased due to increasing number of retirees. The Board has since revised the estimates for 2003-04, on the basis of actuals of 2002-2003.
	7. The State Govt. can take over the interest burden.	This is a suggestion for the State Government and the Hon'ble commission to consider.
	8. KSEB should take earnest efforts to reduce T&D losses. All the meters should be sealed with a new sealing plier within one or two months. Tampering of the seal may be considered as a highly punishable offence	KSEB has initiated a number of steps to reduce T&D losses by at least 2% every year. The steps taken are: More accurate estimation of losses through energy audit Replacements of meters wherever meters are defective Theft detection and prevention of theft by formation of 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. The suggestion of the objectioner to ensure proper sealing of meters will be examined by the Board.
	9. For commercial, domestic and non-domestic consumers tariff may be fixed at below 3 times the power purchase and generation cost i.e. below Rs. 4.50/unit (Rs. 1.50 x 3)	The commission may examine the suggestion at the time of revision of tariff.
	10. Subsidies given to upper strata of domestic consumers should be withdrawn	The issue of reduction of subsidy is within the jurisdiction of the Commission and the Board does not have any comment.
	11. A cess of 50 paise per unit should be introduced on generation from old hydel stations and the proceeds could be used to provide meaningful subsidy	The commission may examine the suggestion.

11	**Chalakudy Puzha Samrakshana Samithi**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. Whether there is any criterion for fixing cost of electricity based on generation/ purchase cost?	In the ARR/ERC filing for the year 2003-04, KSEB has been guided by the principles of tariff setting as provided in Section 59 (1) of the Electricity (Supply) Act, 1948. The relevant provisions are quoted below: -

		“*The Board shall, after taking credit for any subvention from the State Government under section 63, carry on its operation under this Act and adjust its tariffs so as to ensure that the total revenues in any year of account shall, after meeting all expenses properly chargeable to revenues, including operating, maintenance and management expenses, taxes (if any) on income and profits, depreciation and interest payable on all debentures, bonds and loans,*[2]*[leave such surplus as is not less than three percent, or such higher percentage, as the State Government may, by notification in the Official Gazette, specify in this behalf, of the value of the fixed assets of the Board in service at the beginning of such year.*” The above provision clearly shows that all costs including power purchase/generation, interest, other operating and maintenance costs, statutory return, etc. are to be taken into account while arriving at the cost of electricity. The Electricity Act 2003 envisages that tariff should progressively reflect the cost of supply of Electricity.
	2. ARR does not include capital expenditure, borrowings and loan repayments.	While determining the revenue requirement, all the costs chargeable to revenue are taken into account (as mentioned above). Capital expenditure is not chargeable to revenue account in a year and is recovered through depreciation. Interest on borrowings are charged to the revenue account.
	3. Has the Board evaluated the change in revenue collection due to replacement of meters?	A Study conducted in Kottayam Circle revealed that the revenue have increased by40% after replacement of faulty meters. The overall monthly revenue has shown improvement, one of the factors for which is replacement of faulty meters.
	4. Even though the Board claims that it is taking stringent measures to cut down administrative expenses, the projections show an increase.	The rate of increase projected for various components of administration and general expenses are explained in detail in the ARR/ERC filing. The Board reiterates that measures taken to cut down costs have yielded result. This is evident from the following figures of Administration and General expenses **Year** — **Amount (Rs in Crores)** 2000-01 — 79.10 2001-02 — 66.40 2002-03 — 51.80 2003-04 (Revised) — 55.88

[2] Substituted by Act 16 of 1983, for words “for leave such surplus, as the State Government may, from time to time, specify”

	5. Need clarity on projections for hydel generation.	In the ARR, the Board had projected hydel generation to the tune of 5630 MU. But due to continued poor monsoon in the catchment areas of the Board, the hydel generation during 2003-04 is expected to be around 4315 MU only, which is lower than the last year figure of 4819 MU. The percentage of hydel generation (4315 MU) to the total power requirement (12615 MU) works out to 34% only as against a level of 50% in a normal monsoon year. This reduction in hydel generation would necessitate additional power purchase and the estimate for power purchase shown in the ARR would undergo revision. This is as per the position prevalent at present.
	6. Total debt servicing requirement for 2003-04 is shown as Rs. 1518.53 crores (Page 7), but Table 6 shows interest as 741.69 Cr. and Table 27 shows Rs. 868.68 as repayment. The total does not tally.	Table 26 shows interest and finance charges and not just interest payments alone. An amount of Rs. 78.88 crores comprising finance charges should be removed to calculate the debt service requirement. Further, the interest on cash credit Rs. 12.65 crores is also not considered while discussing about debt servicing requirement.
	7. Following additional information asked for: § Details of monthly hydro-generation station-wise for last 10 (ten) years § Details of non-tariff revenue § Details of dues receivable by the Board under each category and the strategy and targets for collecting § .Cost for providing new connections and improvement of existing T&D system. § Category-wise peak and off-peak T&D loss § For all hydel projects commissioned after 1990, information required on capital cost, repayment schedule, O&M	1. Details of monthly hydro-generation station wise details for the last 10 years are attached herewith. 2. Non-tariff revenue includes Ø Meter rent/service line rental Ø Recoveries on theft of power Ø Wheeling charges recoveries Ø Miscellaneous charges from consumers such as • Unconnected Minimum • Fee for maintenance of public lighting • Service Connection Charges • Testing fees • Reconnection fees • Penalty for belated payment • Line Extension/service Connection Minimum • Processing fee for power allocation etc 3.The outstanding arrears as on 30-6-2003 from HT and EHT consumers are given in the table below: -

	costs, employee costs § Future energy demand projection	Type of Consumers / Arrear **(Rs. Cr.)**

Type of Consumers	Arrear **(Rs. Cr.)**
Bulk consumers (Includes Thrissur municipality)	32.12
Central Government Departments	0.07
Central Public Sector Units	11.65
Co-operative sector	1.68
Interstate sales	8.09
Kerala Water Authority	100.61
Local Bodies (Excluding Thrissur Municipality)	0.01
Minor Irrigation department	12.55
Other State Depts. (Excluding Minor Irrigation Department)	11.36
State Public sector Units (Excluding Kerala Water Authority)	120.99
Private consumers	430.73
Total	729.87

Where as the outstanding dues from the Low Tension consumers as on 30-6-2003, amounts to 256.03 crores. This comprises Government Departments, Public Sector Units and Local Bodies' dues amounting to Rs. 160.41 crores and from Private consumers amounting to Rs. 95.62 cores.

KSEB is making all out efforts for the collection of the outstanding arrears. Disconnection, dismantling, revenue recovery action etc., are being taken in the normal course. Substantial amount of arrears are held up due to litigations. Some of the efforts taken by the Board are mentioned below: -

§ Efforts are being made to get the huge arrears due from the Government departments and Public Sector Units. The Board has repeatedly taken up the issue of dues form Government Departments with Government requesting them to help us in recovering the arrears.

§ Special arrangements have been made to intensify checking of disconnection of the services of the defaulters.

§ KSEB has also undertaken an awareness program for all officers up to the Assistant Engineers. The problems and prospects of KSEB are presented directly by Chairman, KSEB, in the meeting, with

		emphasis on improving revenue collection; priority based faulty meter replacement etc. § With a view to mobilize fund blocked due to litigation, one time settlement by waiving or reducing surcharge was resorted to by conducting Adalats. Board has decided to conduct similar Adalats this year also. A definite time frame cannot be fixed for realisation of arrears because of the complexities like delay in getting court orders vacated and lack of funds with Government departments etc. By enforcing strict disconnection and pursuing the court cases, the Board plans to realise significant part of the arrears. The other information desired by the objector vide item No 4 to 7 will be furnished separately.
	8. The Board has not provided any concrete suggestions to tackle the most important item of dept servicing. The objector has made some suggestion which include borrowing of Rs 2000 crores on the guarantee of employees of the Board: long term interest free Govt loan-1000 to 1500 crores: and mobilisation of Rs 2000 crores as bonds from the consumers	The Board will examine the suggestion of the objector.
	9. For reducing T&D loss, Board should take the following steps: § Preparation of plan for T&D loss reduction § Capital investment should be focussed on target oriented T&D loss reduction projects § Measure the T&D loss during peak & off peak hours.	Board appreciate suggestions of the objector and will examine the matter

	§ Steps to reduce the peak load demand by offering incentives § Measure electricity input at transformer level	
	10. Board has to evolve a time bound & target oriented strategy for electricity conservation § Can provide incentives for conserving electricity § Involve students and NGOs in campaigns for conservation	The suggestions will be examined by the Board
	11. Review all the power purchase agreements and eliminate the unfavourable clauses in the agreements.	Board will take efforts to do so wherever it is acceptable to the other parties to the agreements
	12. Model demand projection & financial analysis	The model financial and demand projections suggested by the objector will be kept in view, while the Board do such exercise.

<table>
<tr><td>12</td><td colspan="2">Kerala State Small Industries Association, 2nd Floor Veekay Towers, Beerankunju Road, Kochi-18</td></tr>
<tr><td>Sl. No.</td><td>Extract of Objections / Suggestions / Requests of the Stake Holder</td><td>KSEB's Response</td></tr>
<tr><td></td><td>1.(a) Tariff for LT-IV Industrial consumers should be reduced by a minimum of 23 paise per KWH.

(b) The prayer of KSEB to retain the existing tariffs be disallowed.

(c) The need to eliminate cross subsidies may be kept in view while determining the tariff.</td><td>It is submitted that under the existing tariffs, the average rate of realisation per unit of energy sold does not match the average cost of supply of unit of energy. In a social welfare State like ours and until the cross subsidies are reduced or eliminated, it is inevitable that some category of consumers pay in excess of the cost while others pay below the cost. Until the Hon'ble Commission decides to rationalise the tariffs including reduction /elimination of cross subsidies and the Board proposes any tariff revision, it is necessary that the existing tariffs are allowed to continue. The Board does not oppose reduction/ elimination of cross subsidies if it is assured to get the full cost of supply of energy from all categories of consumers or Government pays to the Board the element of subsidy if any in built in the tariffs. In view of the above, the request for reducing the LT-IV Industrial tariff cannot be admitted. The Board reserves its right to approach the Hon'ble Commission to revise the tariff if Government does not agree to the scheme of bridging the revenue gap as prayed in the tariff petition already filed by the Board.</td></tr>
<tr><td></td><td>2. Security deposit is charged at a high level as an interest free deposit. Either a grace period be given for payment of bills or the deposit be reduced to cover KSEB's security requirement.

Periodic reassessment of security deposits should provide for downward revision also, if the consumption level comes down. Interest for belated payment of bills should not be charged as long as the dues are covered by the consumer's deposit.</td><td>The security deposit is taken from the consumers because there is a significant time difference between the consumption of electricity and the actual payment of the bill. A defaulting consumer's power supply is disconnected only after he has consumed electricity for about fifteen days over and above the electricity consumed during the preceding billing period. In such a situation, it is very necessary that the Board hold sufficient security to safeguard its interests. Further, the amount of security deposit is linked to the consumption of energy and thus linked to the tariffs. If the tariffs are increased, the Security Deposit would also increase and vice-versa. It is an insurance against default in payment of bills. In many cases it has been found that the outstanding arrears of electricity charges far exceed the security deposit. There fore, the request for reducing the existing level of security deposit can be agreed to.

The Supreme Court has in one of its rulings said that Security Deposit collection from consumers by the Board is justified but it is not binding on the Board to pay any interest on such Security Deposits.

Any change in the grace period for payment of bills would impact the working capital position of the Board. Increasing the grace period for payment of bills would worsen the working capital situation for the Board, resulting in higher borrowing, higher debt service requirement and ultimately higher tariffs. Increasing the grace period will also act as an incentive for delayed payment of bills. Therefore, the request cannot be admitted.</td></tr>
<tr><td></td><td>3. Steps claimed to have taken by KSEB to cut costs are not reflected in the projected cost. Hon'ble Commission should direct KSEB to implement more effective efficiency improvement initiatives to reduce cost.</td><td>On account of various initiatives (i.e. curtailment of allowances) taken by the Board, there was reduction in pay & allowances (other than DA) paid to the staff by about Rs 73 crores in 2002-03 as compared to the expenses in 2001-02. Despite this reduction, the overall employee cost increased due to increase in the liability to pay DA & retirement benefits. Had the steps not been taken by the Board, the expenses would have been still high. The year –to-year employee cost fluctuated widely due to uncertainty regarding decision to disburse DA and increase in terminal benefits. As compared to the BE of Rs. 651.50 crores for 2002-03 an increase of about Rs. 100 crores was estimated for the year 2003-04. However, as per the provisional accounts, the actual for 2002-03 is about Rs. 670.82 crores. Therefore, on the basis of actual of 2002-03, the estimate for 2003-04 has since been revised to Rs. 693.64 crores. Similarly, in the case of Administration & General expenses too the Board has by taking number of steps contained/ reduced the expenditure as shown below: -

<u>Admn. & General expenses (Rs in crores)</u>
1998-99 71.49
1999-00 76.54
2000-01 79.19
2001-02 66.40</td></tr>
</table>

		2002-03 51.80 The Board has swapped high cost loan to the tune of Rs. 1031 crores and saved interest burden of Rs 63 crores. The Board will continue to implement efficiency improvement schemes so as to reduce cost
	4. T&D losses should be reduced to below 20%	KSEB has initiated a number of steps to reduce the T&D losses by at least 2% every year. These include: § More accurate estimation of losses through energy audit § Meter replacements wherever meters are defective § Theft detection and prevention of theft through formation of 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. System improvement schemes to reduce T&D loss are capital intensive and time consuming. Therefore the T&D loss can be reduced only progressively. Accordingly the Board has set a target of reducing the loss by 2% every year. The T&D loss during 2002-03 was 30.41% and the target set for 2003-04 is 28%.
	5. Fixed charges should not be collected from LT IV Industrial consumers.	Due to its obligation to supply power to all consumers, the Board is required to incur huge capital expenditure on generating stations and T&D networks. 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 cannot be correlated with the working hours of the industrial consumers. The system of two-tariff (fixed & variable) structure is a well-established one. Fixed component of the tariff is to recover the cost of capital investment and the variable component is to recover the cost of supply of energy. Therefore, the request for dispensing the fixed charges cannot be admitted.
	6. KSEB should improve operational practices in the matter of new connections and maintenance to improve revenues	The Board agrees to the suggestion and is making efforts to expedite giving new connections.
	7. Normal functioning of KSEB's own capacitors at sub-stations should be ensured.	The Board endeavors to efficiently maintain all capacitors at all sub-stations. However it may happen that due to some exigencies or wear and tear, some capacitors may get damaged. In such cases the Board tries to repair them at the earliest.
	8. KSEB should implement a One-Time Settlement Scheme to realise the arrears held up in litigation.	The Board is taking action to identify and dispose off the disputes and billing complaints so that the revenue in such cases are not blocked. Special "Adalats" were conducted in 2002-03 to dispose off the disputes and billing complaints. Such

		adalats are being held in 2003-04 too. By wavier of interest and giving installment facility to pay the dues, a number of disputed claims could be settled. The Board would further persue the suggestion.
13	**Chamber of Commerce, Payyanur, Chamber Buildings, Main Road, Payyanur 670 307**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. Tariff for commercial LT VII be reduced by a minimum of Rs. 2.95/kWh. The prayer of KSEB to continue the existing tariffs be disallowed. Sources other than cross subsidy should be found to cover deficits.	The Board reiterates its request for continuing the existing tariff, if Government agrees to bridge the gap as per proposals contained in the petition submitted by the Board. In the event of Government not agreeing to the proposal, the Hon'ble Commission should pass appropriate orders for regulating the tariff and to bridge the gap. In a welfare society cross subsidy is bound to exist and can be reduced or eliminated only progressively. Hon'ble Commission may take appropriate decision as and when tariffs are revised.
	2. A system of prepaid meters linked to incentives for advance payments may be introduced to eliminate the need for Security Deposits. The Commission may direct KSEB to remove anomalies in the matter of Security Deposit collected from commercial LT VII consumers.	Security deposit is an insurance against default/delay in payment of electricity charges. It is a well-established system as in supply of telephone services and other commercial contracts and hence need not require to be eliminated by introducing any other system. The security deposit is linked to the billing cycle. 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's power supply is disconnected only after he has consumed electricity for about fifteen 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 interests. The amount of security deposit is linked to the billed amount and is hence linked to the tariffs. If the tariffs are increased, the Security Deposit would also increase and vice-versa. The Supreme Court has in one of its rulings said that Security Deposit collection from the consumers is justified but it is not binding on the Board to pay any interest on such Security Deposits. There is no anomaly or discrimination in collecting Security Deposit from the LT VII consumers. Like in all other categories, Security deposit equivalent to three months energy charges is only collected from the LT VII consumers.
	3. KSEB should reduce costs on account of salaries and wages, administrative and general expenses and interest. KSEB should implement more effective efficiency improvement initiatives to reduce costs.	The salary and wages of the KSEB employees are governed by Long Term Settlements, which cannot be altered without mutual agreement between the parties concerned. In any case, the Board has already taken a number of steps to reduce the allowances like Leave Surrender Salary, Holiday Wages, Over time Expenses, Increment beyond maximum of the scale etc. As a result saving to the tune or Rs. 73 crores per year on employee cost was achieved in 2002-03. The administrative and general expenses has been contained to the level of previous years

		With a view to reduce interest burden the Board has already swapped the loan of Rs1031 Crores saving an interest of about Rs. 7 crores per year. The Board would continue to implement efficiency improvement activities.
	4. KSEB should reduce the T&D losses to below 20%and pass on the resultant cost savings to the consumers.	Though the Board has desire to reduce the T&D loss drastically, it can't be achieved over night, as huge capital investment in Transmission and Distribution System Improvements are required. The Board has plan to reduce the T&D loss progressively by 2% every year. Accordingly it has set a target of reducing the loss from 30 to 28% during 2003-04.
14	**The Public Affairs Forum, KP 11/153C NCC Nagar, Thiruvananthapuram 695 005**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. A management audit should be undertaken to correctly identify the inadequacies and suggest measures.	KSEB appreciates the detailed analysis and suggestions provided by the petitioner. KSEB has initiated a number of measures to reduce cost and enhance efficiency and will take into account appropriate suggestions from all quarters. As the objection petition is a general write up on the various issues & problems of the Board known to many, replies to only important issues wherever deemed necessary, are given here.
	2. Commission must ask both the Government and the KSEB on the status of implimentation of their respective commitments under the Memorandum of Understanding.	The Board will supply the information as and when asked by the Commission.
	3. The cost of production of the thermal stations (both KSEB & IPPs) is high. A solution to reduce the cost is conversion to the thermal plants in the state to LNG	The Board and IPPs are exploiting the ways to reduce the cost of generation of energy by the thermal stations in the state.
	4. To reduce the employee cost, it is essential to institute a pension fund and enhancement of the retirement age by 5 years. In the ARR filed, there is no actual mention of the savings effected.	The proposal to create a pension fund will be examined by the Board. Enhancement of retirement age by 5 years will only shift the burden to future years and it is not a solution to reduce the cost. It has been estimated that on account of efficiency initiatives, a saving of about Rs. 73 crores was achieved in 2002-03 as compared to 2001-02.
	5. Considerable savings in administration and General Expenses is possible.	The Board has contained the A&G expenses during the recent years and will continue to take efforts in this direction.

	6. An effective operational plan specifying the transmission & distribution losses separately for each division & sub-division, investment needed for eliminating them, a time bound programme of implementation fixing responsibility for implementation should be prepared.	The Board has already been monitoring the T&D loss circle-wise and taking all efforts to reduce the loss at the rate of 2% every year. It will keep the suggestion in mind while intensifying the efforts to reduce the T&D loss.
	7. The smart card system may be introduced to reduce revenue collection costs, eliminate arrears and reduce distribution losses.	The Board shall examine the matter.
	8. The criteria for fixing tariff to each section of the consumer should be based on the cost of supply. Giving concessions on social or considerations other than commercial considerations is not the function of the Board.	The Board endorse the suggestion.
15	**Narendra Kumar, Deputy Chief Electrical Engineer, Traction Distribution, Southern Railway, Headquarters Office, Electrical Branch, Chennai 600 003**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. Tariff for Railway be reduced from its present level and a single part tariff at about Rs 3 /- unit be fixed considering the cost of energy to KSEB and cost of energy from alternate source.	In the ARR/ERC filing for the year 2003-04, KSEB has adopted been guided by the principles of tariff setting as provided in Section 59 (1) of the Electricity (Supply) Act, 1948. The relevant provisions are quoted below for ready reference: ***"The Board shall, after taking credit for any subvention from the State Government under section 63, carry on its operation under this Act and adjust its tariffs so as to ensure that the total revenues in any year of account shall, after meeting all expenses properly chargeable to revenues, including operating, maintenance and management expenses, taxes (if any) on income and profits, depreciation and interest payable on all debentures, bonds and loans, [2][leave such surplus as is not less than three percent, or such higher percentage, as the State Government may, by notification in the Official Gazette, specify in this behalf, of the value of the fixed assets of the Board in service at the beginning of such year."***

[2] Substituted by Act 16 of 1983, for words "for leave such surplus, as the State Government may, from time to time, specify"

		The above provision clearly shows that all costs including power purchase/generation, interest, other operating and maintenance costs, statutory return, etc. are to be taken into account while arriving at the cost of electricity. While arriving at the cost of Rs 3.00/ unit, Railways have taken only the cost of power, wheeling charges and a return of 10% and conveniently ignored the operation, maintenance, depreciation and interest etc. The Electricity Act 2003 also envisages that tariff cost of power alone. As against the average cost of supply of Rs 3.99/ unit, the tariff fixed for Railways is about Rs 3.62 / unit only. As admitted by the Railways, the existing tariff is a concessional tariff aimed at promoting electrification of Railway traction in the state. In view of the existing tariff not matching the cost, the request for reducing the tariff cannot be admitted. It is all the more necessary that the 20% concession is with drawn.
	2. Power factor incentive should to be provided.	When the Board is passing through serious financial crisis, it can't afford to extend incentive linked to power factor etc. The Board can consider such issues when it becomes financially sound.
	3. Provisions for segregating LT & HT domestic consumption from LT VI (C) non-domestic and HT-II (Non-commercial) respectively be introduced.	The request will be examined by the Board.
	4. Time limit for payment of HT and LT monthly bills should be increased to 30 days.	Any change in the period for payment of bills would adversely impact the working capital position of the Board thereby impacting the tariff. The period can't be increased only for Government organisations like Railways. The present time limit is found adequate and may be retained without any change.
	5. Belated payment surcharge be reduced to 0.5% per month (6% per annum).	The interest on delayed payments is charged only if the consumer defaults on payment. It is vital that the KSEB has timely cash flows for its smooth operations. The arrears in payment by the consumers result in increased working capital for the KSEB. The high interest charge on late payment will thus serve as a deterrent against late payment. The surcharge is a penalty against delayed payment and such penal charges cannot be softened. Inspite of such high penal charges, it is found that huge arrears of electricity charges are out standing to be paid to the Board. Under these circumstances, the Board is constrained to keep the surcharge at the present rate (24% per annum).

16	**C. G. Jolly, Chief General Manager, Indian Aluminium Company Limited, Alapuram Smelter, Kalamassery 683 104**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**

	1. Government and KSEB did not take a decision on the matter of giving incentives limited to power factor and load factor.	When the Board is passing through severe financial crisis and the average cost of supply of power far exceeds the average rate of tariff/ realisation per unit, the Board is not in a position to allow concessions like the one asked by the petitioner (INDAL).
	2. Special tariff for bulk Industrial consumers like INDAL should be fixed as they provide a consistent base load with high load factor and high power factor. Other states provide special tariffs for certain category of Industrial consumers. Unless a special tariff is provided, the industries would become unviable.	The existing tariff paid by the consumer is the tariff as applicable to the Industrial category of consumers, which is a distinct class itself. The request for special category within Industrial category of consumers is irrational. The Board would like to point out that keeping separate category would be against the principles of tariff rationalisation. This stand has also been adopted by the Maharashtra Electricity Regulatory Commission in its tariff orders. The Maharashtra State Electricity Board (MSEB) had proposed to create a separate tariff category for bulk consumers (power intensive connections) such as ferro-alloy industries. However, the MERC, citing the principle of tariff rationalisation, had disallowed such a proposal. The Hon'ble commission may keep this in consideration while deciding such request. It is submitted that if special tariff is allowed and if it is far below the cost of supply, either the Government or the commission should compensate the loss that may be sustained by the Board.
17	**N. Sreekumar, Chairman, Confederation of Indian Industry, 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**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	1. The ARR filed by the Board is exaggerated. The ARR & ERC for 2003-04 should be assesses by an Independent agency	The Board wish to point out that the estimates provided in the ARR & ERC are available for scrutiny by public.
	2. The total of Employee cost plus Administration and General Expenses shown in the ARR for 2003-04 is Rs. 822.24 crores which are higher than the figures shown in the Budget Estimates for 2003-04. The estimates for 2002-03 & provisional figure for 2001-02 shown in the ARR for employee cost and Administration and General Expenses is also exaggerated when compared to the Budget document.	It is pointed out that the Budget Estimates & the ARR for 2003-04 were prepared at different point of time taking into considerations the position prevalent up to the time of preparing the respective documents. The statement made by the objector is not true. As per figures provided on page 15 of the Budget Estimates, the employee cost is Rs. 750.50 crores, which is the same as that in the ARR. With respect to Administration and General Expenses, the figures on page 15 of the Budget Estimates are exclusive of Section 3(i) electricity duty. Excluding the same from ARR figures, the Administration and General expenses in the ARR is Rs. 44.06 crores as compared to the estimate of Rs. 40 crores in the Budget. It is submitted that the figures for employee cost and A & G expenses for the year 2001-02 and 2002-03 are same both in the ARR and Budget document. It appears that the objector has referred to wrong

		figures.
	3. The depreciation in the ARR is shown as Rs. 333.52 crores. This is exaggerated when compared to the Budget Estimate i.e., Rs. 239.48 crores. All the figures in the ARR pertaining to depreciation for 2002-03 and 2001-02 are also exaggerated.	The depreciation projected in the ARR for 2003-04 is Rs. 334.52 crores. This has been computed by taking the product of average rate of depreciation for 2001-02 and the estimated cost of fixed asset at the beginning of 2003-04. The Budget Estimate of Rs. 239.48 crores for 2003-04 is an under estimate as is evident from the actuals of 2002-03 i.e., Rs. 277.10 crores (provisional). The figures shown in the ARR pertaining to depreciation for 2001-02 and 2002-03 are the actuals i.e., Rs. 212.61 crores and estimate Rs. 272.88 crores for 2001-02 and 2002-03 respectively. It may be noted that the figures for 2001-02 are actuals and the estimated figures for 2002-03 are also close to actuals (The actuals for 2002-03 as per the provisional account are Rs. 277.10 crores.) Thus, the statement of the objector that figures in the ARR are exaggerated is not correct.
	4. R&M expenses shown in the ARR 2003-04 i.e., Rs.102.53 crores as against the Budget estimate of Rs. 60 crores is also highly exaggerated.	The repairs and maintenance expenses have been estimated as a percentage of gross fixed assets. This percentage has been calculated from the average of such percentage over the past three years. R&M expenses form a critical part of the Boards endeavour to provide good quality supply of power to the consumers. The fact that in 2002-03 the R&M expenses were kept low due to liquidity problems of the Board and economy measures adopted by the Board should not come in the way of normal R&M expenses in 2003-04. Considering the continued liquidity problem & past trend of expenditure, the R&M expenses for 2003-04 has since been scaled down to Rs. 66.70 crores. The R&M expenses since 2000-01 are given below: **Rs. in Crores** 2000-01 (Actual) 79.64 2001-02 (Actual) 70.32 2002-03 (Provisional) 60.64 2003-04 (Revised Estimate) 66.70
	5. Interest of Rs. 741.69 crores shown in ARR is higher than that in Budget. With	The interest on the outstanding loans of the Board (as on March 31, 2004) has been estimated on the basis of following principles:

	falling interest rates, there cannot be quantum jump in the interest cost. The interest is highly exaggerated	§ Loans are assumed to be drawn and repayments made equally over a year § In view of the above, interests are computed on the average balance of the loans except for the known loan repayment schedule of the existing loans and bonds § New Loans for Capital Expenditure are assumed to be available at 11% per annum. The total borrowings during the FY 2003-04 have been projected as Rs. 1207.99 crores. With regards to the contention that the interest rates are falling, the assumption on interest rate was based on the average interest rate at which KSEB was able to contract loans during 2002-03. KSEB issued two series of Non-SLR bonds during 2002-03 @ 11.40%. In addition Kerala Power Finance Corporation (KPFC) raised two series of bonds (Rs. 200 Cr. And Rs. 307.74 Cr.) for KSEB on which KSEB is to pay interest at 11.75% and 10.91% respectively. Therefore, the interest rates assumed for the loans estimated to be drawn during 2003-04 are taken as 11% for loans to meet capital expenditure and 11.5% for other loans. It may be noted that the interest rates have fallen further after preparation of the ARR. Due to low credit rating of the Board and the state, the Board is not able to borrow at low interest rates. During 2003-04, the Board has already borrowed about Rs. 1000 crores and the average rate of interest is around 10%. The Boards major burden is repayment of past loans having interest rates ranging from 11 to 17%. While falling interest rates give benefit only in the case of new loans, the Board has continued liability of past bonds and loans having high interest rates. The Board has swapped high cost loans to the tune of Rs. 1031 crores. Yet the interest payments are continued to be high due to huge debt burden and high borrowings required to be made in 2003-04. The actual interest payments during the past few years and the revised projection for 2003-04 are given below: - **Rs. in Crores** 2000-01 590.32 2001-02 648.95 2002-03 672.78 2003-04 721.54
	6. KSEB has no scientific basis for assessing the correct T&D losses. The Board has been maintaining that the T&D loss was around 17-17.75% in the past	Prior to 2001-02, consumption of LT consumers was estimated based on the connected load and the number of consumers. i.e. consumption was arrived at by assuming that consumers in each category having 1 kW connected load will consume a particular amount of energy. The consumption figure was only an estimate and not actual. Due to this deficiency in the method, the T&D loss was projected around

<table>
<tr><td></td><td></td><td>17% in the past.

From 2001-02 onwards, the meter reading is being taken bi-monthly and actual energy billed is available. T&D losses are calculated on the basis of energy available for sale and energy sold/ billed. The correct T&D losses amounted to 32% in 2001-02.</td></tr>
<tr><td></td><td>7. Administration and General expenses continue to show an increasing trend and there is no improvement as claimed.</td><td>The rate of increase projected for the various components of administration and general expenses are explained in detail in the ARR/ERC filing itself. The Board reiterates that measures taken to cut down these costs have yielded result and the Board could contain the cost on this account as may be seen from the following: -

<u>Administration and General Expenses</u>

<table><tr><td></td><td>Rs. in Crores</td></tr><tr><td>2000-01 (Actual)</td><td>79.19</td></tr><tr><td>2001-02 (Actual)</td><td>66.40</td></tr><tr><td>2002-03 (Provisional)</td><td>51.80</td></tr><tr><td>2003-04 (Revised Estimate)</td><td>55.88</td></tr></table></td></tr>
<tr><td></td><td>8. The projects initiated by the Board has enormous cost over runs.</td><td>Some of the causes of time and cost over run of projects are:
i. Inadequate investigation before finalizing project report
ii. Major changes in scope of the work during execution.
iii. Delay in procurement of equipment & materials.
iv. Land acquisition & rehabilitation issues.
v. Environmental & Forest clearance issues.
vi. Natural events like unprecedented rains & floods.
vii. Contractual problems.
viii. Financial problems of the Board.
ix. Labour militancy in the state.</td></tr>
</table>

		At present project execution is monitored closely by controlling the above-mentioned factors to the extend possible.
	9. Due to inadequate attention of the petitioner and the Government of Kerala towards the Power Sector Reform Programme, the reform-linked grants available from the Government of India could not be tapped.	The statement is not correct. The State is already implementing reform linked APDRP schemes worth Rs. 350.35 crores (in 3 Circles and 7 Towns) and till 31.10.03 about Rs. 65 crores have been spent. The Circle Schemes (Rs. 181.58 crores) are expected to be completed by 31.03.04. On account of reduction in loss in 2002-03 as compared to 2001-02, the Board has already written to GOI to release the grant/incentive payable to the state under the Reform linked incentive scheme of GOI.
	10. The petitioner be directed to produce all expert reports along with a report detailing action taken thereon.	The request of the objector is not related to ARR or tariff matters.
	11. The petitioner lacks fiscal discipline and the submissions made by the objector herein above show that the petitioner has shown exaggerated figures in the ARR & ERC for 2003-04.	As given in the foregoing replies, the objector's submissions are misleading and not based on correct facts. The petitioner has taken a no. of efficiency improvements due to which the rising deficit has been halted and reversed. There has been saving of employees cost to the tune of Rs. 73.75 crores in 2002-03; Administration & General Expenses have been reduced from Rs. 79.19 crores in 2000-01 to Rs. 51.80 crores in 2002-03. High cost loan to the tune of Rs. 1031 crores have been swapped deriving an interest benefit of Rs. 63.64 crores. These savings/efficiency gains have been achieved during a period when the monsoon has failed for the two consecutive years.
	12. The letter No. KSEB/TRAC/Plg/ARR& ERC/369 dated 16-09-03 of the Chairman, KSEB to the Hon'ble Commission is redundant in the light of the rainfall during the last few weeks.	It is submitted that though there has been rainfall during the last few weeks, it is unfortunate that it has been raining in wrong places. The reservoir areas of the Board are continued to receive only scanty rainfall. As a result, as against hydel generation of 6716 MU in a normal monsoon year and 4820 MU in 2002-03 (Bad monsoon year), the estimated hydel generation in 2003-04 is around 4315 MU, which is only 34% of the total power requirement. This would greatly increase the power purchase cost beyond the estimate provided in the ARR. In the light of the continued poor monsoon in the reservoir areas, the letter dated 16-09-03 to the Hon'ble Commission is still relevant and Commission should consider this aspect while taking decision on the ARR.

18	Association of Planters of Kerala, No. 41, Vrindavan Housing Colony, P.B.No. 1178, Pattom Palace.P.O, Thiruvananthapuram 695 004	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**
	Objected to further tariff increase and requested to include the plantations in the tariff category HT – III agricultural instead of the existing category of HT – I industrial. The main grounds justified for the request are: - i) The integrated and interdependent activity of growing plantation crops and processing the	In its filing before the Hon'ble Electricity Regulatory Commission, the Board has not proposed any increase in tariff. The Board has asked the Commission to allow continuance of the existing tariff subject to the condition of Government meeting the suggested scheme to bridge the revenue gap of the Board. In the event of Government not agreeing to the proposed scheme, the commission has to decide about tariff revision etc. after hearing the Board. Therefore, the request of the objectioner not to increase the tariff is premature.

	same for the market cannot be considered as business or industry. ii) Govt. of Kerala has been levying agricultural income tax on plantations treating them as agricultural activity. iii) Tea is a common man's beverage in India and therefore cannot be grouped under an Industrial produce. iv) Stoppage of the operations in the tea factory (on account of high electricity tariff etc.) has a direct effect on the employment of people. v) The plantation industry has been going through one of the worst financial crisis and this has left more than half the plantations either locked out or not functioning and vi) The total consumption by the plantations accounts for 0.5% of the total power consumed in the State and the consumption now is almost half of the normal consumption due to non-functioning of several estates.	Though raising plantations may be an agricultural activity the interdependent processing & manufacture of their end product is an energy intensive & labour intensive Industrial activity. Electricity charges are decided with reference to the purpose and quantum of electricity used. For tariff purpose the plantations have been categorised under HT – I industrial as the tea factories consume large quantum of energy as in any industrial activity. Levy of taxes and electricity charges can't be compared. While the former is a means of mobilising resources from the well to do for the Government, the latter is the cost of services provided. Unlike Government, which can afford to extend concessions in collecting taxes, the Board has to collect the full cost of supply of electricity and can't afford to extend concessions and rebates, particularly when it is passing through severe financial crisis. Whether tea is an industrial produce or agricultural produce; whether the factories would be exposed to stoppage of operations due to high tariff; and other grounds stated by the objectioner cannot be taken into consideration while deciding the tariff. As mentioned above, tariff is determined with reference to the purpose for which electricity is used and the quantum of its use. An energy intensive tea factory has to be charged higher than the less energy consuming agricultural activities. Therefore, the request of the objectioner to include plantations in the tariff category of HT – III cannot be agreed to. Hon'ble commission may reject the objection.

19	**M S Iyer, TC 50/155 (1), Cheriyani Complex, Kalady South, Trivandrum – 695 002**	
Sl. No.	**Extract of Objections / Suggestions / Requests of the Stake Holder**	**KSEB's Response**

	1.Proper planning and implementation of small hydro projects including allocation to competent and capable people. Need for formulating an encouraging policy for Small Hydro and private sector participation. KSEB should take up bigger projects with a 20-25 years perspective planning.	The objection petition does not contain any comments relating to ARR or the tariff. The opinion relating to causes for the present status of KSEB and the suggested solutions to improve health of the Board are not supported by details. The Board would consider the opinion / suggestions as & when the relevant issues are examined in the Board.
	2. Diesel Power Plants of KSEB are loss making and should be sold to the best bidder for initial payment and lowest fixed variable price formula.	The Board is aware of high cost of its Diesel power plant. It is exploring the possibilities of reducing the cost including the suggestion of the objectioner.
	3. Allow power import, at least for captive use.	Power import is already provided in the Electricity Act. The Board has no objection as long as it is compensated as per provisions in the Act.

20. C.T.Kuriyappan, Kunnamkulam and George C Paul, Kunnamkulam		
Sl. No.	**Extract of Objections/ Sugestions/Requests of the Stake Holder**	**KSEB's response**
A (a)	Stop the practice of KSEB in allowing benefit of a court order only to the petitioner. Benefits should be made uniformally applicable to all consumers.	KSE Board has followed all court orders in letter and spirit. Wherever a court has ordered for a uniform application, such benefits are passed on to all the consumers and wherever the order was specific to the petitioner; the benefit has been limited to that consumer only.
(b)	Continuation of wrong practices even after court order should be stopped.	
C (i)	Arbitrary fixing of tariff slabs by KSEB staff should be stopped.	Before the constitution of Kerala State Electricity Regulatory Commission, the tariffs fixed by the Board were based on the relevant provisions of the Electricity (Supply) Act, 1948 and as per the decisions and directions of the State Government issued from time to time.
C (ii)	Wrong spot billing should be stopped. KSEB should provide the consumer with the option of purchasing the energy meter as in the case of telephone instrument.	Bimonthly Spot Billing System is in vogue for all the Low Tension consumers other than the LT industrial consumers and those with connected load above 10KW. The meter reader issues the bill for the consumption based on a ready reckoner issued to him/her. The ready reckoner is prepared for bimonthly consumption. There is no disparity between the ready reckoner and the tariff notification of November, 2002. This is neither arbitrary nor there is any illegal financial gain to the Board on this account. Telephone receiver is not a measuring instrument. The metering equipment for telephone services are maintained by the Respective Service Provider at the premises of the telephone exchange/the Service provider. The energy meters and telephone receivers are not comparable. At present, the energy meters are purchased by the Board and installed at the consumers' premises after testing them as per relevant standards. The accuracy of these meters is important for accurate billing. The meters, if becomes faulty are also replaced by KSE Board. With the present arrangement for meter purchase, testing, installation, periodical inspection and replacement, the Board is not in a position to permit the LT consumers to install their own energy meters obtained from open market. However, in the case of HT and EHT, the meters and associated instruments are purchased/replaced by the consumers themselves. The proposal of the petitioner can be considered in future after the present programme for replacing faulty/electromechanical meters with electronic meters are completed.

		Regarding the categorisation and tariff rate assigned to the consumers by the Electricity Department of Thrissur Municipal Corporation, KSEB has no comments to offer as the issue is outside the jurisdiction of KSEB.
B (i)	Payment of excess salary to the staff of KSEB for six years. No action by the Board to recover excess salary which runs into several crores of Rupees.	The Accountant General of Kerala had audited service books of 2532 employees pertaining to 60 units of the Board and reported that pay fixation in rspect of 2011 cases were erroneous. On the basis of the above cases, it was reported that the total monetary loss would be Rs.40 crores if the service books of 26,000 employees were audited and not Rs.100 crores as stated in the complaint. The Internal Audit Wing of the Board subsequently conducted thorough check of the entire 1993 pay revision fixation. Most of the objections raised by the Accountant General were on the basis of comparison with the State Government Rules and the objections were not with reference to the orders issued by the Board and various bilateral-agreements. Based on the direction of the Government, necessary follow up actions have been taken and pursued.
B (ii)	Engagement of temporary staff in place of regular staff	The Board has stopped temporary employment in February 2000.
C	Wasting of power. High T&D losses. (i) Burning of street lights during day time (ii) Poor maintenance of installation (iii) Faulty meters	The total losses in the system comprise of both technical and commercial losses. The gross T&D loss projected for the year 2003-04 is 28.02%. The Board has already planned and initiated several measures to reduce the T&D loss by 2% every year. These include: Distribution Transformer metering and energy audit, Replacement of meters wherever meters are defective, **Theft detection and prevention of theft by formation of anti power-theft squad,** Passage of Indian Electricity (Kerala Amendment)Ordinance, 2003, Computerization of billing and revenue collection. The above measures are in addition to the steps being taken to augment the transmission and distribution networks to reduce the technical losses.
D	Very poor quality of power due to technical incompetence and poor quality of work.	Quality of supply:- The quality of supply (Voltage and frequency) to the consumer is dependant on a number of factors including the quality of supply received by the Board and local network conditions. The Board is committed to provide quality supply to its consumers. The Board has taken the following measures to improve the supply voltage: Installation of capacitors at substations to improve bus voltages. Augmentation of transmission and distribution networks. KSEB alone cannot control the supply frequency in al interconnected grid system. With the introduction of availability Based Tariff by the CERC in the Southern Regional Grid, it is observed that the frequency during peak and off-peak hours are within the permitted limits. The power factor at the consumers end is determined by the ratings of his/her equipment. KSEB

		cannot control the power factor at the consumer's end. Earthing: The earthing of transformer neutrals are carried out as per the relevant standards. In certain cases where copper earth leads are removed by pilferage. KSEB make attempts to rectify the defects in earthing as soon as possible. Bringing Electrical Inspectorate under SERC. KSE Board has no comments to offer on this proposal. These are issues determined by law.

Annex III

MINUTES OF THE FIRST (SPECIAL) MEETING OF THE STATE ADVISORY COMMITTEE HELD ON 12.11.2003 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. Shri.Dr.Dharamveer, Secretary, Food, Civil Supplies & Consumer Affairs Dept, Govt.of Kerala.
4. Shri.C.Abdhulla, Member (Distribution), KSEB.
5. Shri.R.Rama Rao, General Manager, Kayamkulam Power Station, NTPC.
6. Shri.S.Jayathilakan, President, Kerala HT & EHT Electricity Consumers Association.
7. Shri.R.Mohan Doss, Chief Electrical Engineer, Southern Railway.
8. Shri.R.Ramachandran Pillai, Chief Electrical Inspector, Government of Kerala.
9. Shri.Ratna Kumar, General Secretary, Energy Conservation Society.
10. Shri.M.G.Rajagopal, Director, Energy Management Centre.
11. Shri.M.P.Ayyappan, M.D, Kerala Power Finance Corporation.
12. Smt.T.R.Indira, Managing Director, Kerala Water Authority.
13. Shri.M.K.Abdul Majeed, Vice President, Centre for Consumer Protection & Research.

Shri.K.O.Habeeb, General Secretary, Kerala State Electricity Board Workers' Association sought leave of absence due to health reasons, which was granted.

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 1st August 2003, the Kerala State Electricity Board had submitted a petition covering the ARR & ERC for the year 2003-04 for approval of the commission. The Board had projected an annual revenue requirement of Rs.3826 crores including statutory surplus of Rs.99 crores @3% for 2003-04. The revenue from tariff and non-tariff income had been projected as Rs.2884 crores thus leaving a revenue gap of Rs.942/- crores. The Board proposed to cover this gap by Government subsidy of Rs.557/- crores and regulatory asset of Rs.385/- crores. Subsequently on 16.9.2003, the Board submitted an application for additional revenue requirement of Rs.423 crores to meet the expenses for purchase of additional thermal energy to compensate for the reduction in hydro generation to the extent of 1343 MU due to failure of monsoon. The Commission notified the ARR & ERC of the Board and invited response from the various stakeholders and the public. Simultaneously, certain clarifications on the ARR & ERC were sought from the KSE Board. In response, on 10.11.2003 the Board submitted a reverse ARR covering a total expenditure of Rs.3850 crores including a statutory surplus of Rs.92 crores. The total revenue was projected at Rs.2924/- crores by increasing the non-tariff income to 240 crores from the previously projected level of Rs.200/- crores. As per this latest projection, the revenue gap stood at the level of Rs.926/- crores after allowing for increased expenditure due to purchase of additional thermal power of 1343 MU as projected in the supplementary ARR submitted on 16.9.2003.

Chairman stated that these facts regarding the ARR & ERC were placed before the Committee for information and the discussion in the Committee should be essentially on the issues arising out of the ARR & ERC which were listed in the agenda note circulated.

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

1. Energy Requirement projections:

Chairman stated that the energy requirement projections in the ARR & ERC for 2003-04 were based on an AT&C loss of 26.5% and projection of total energy consumption by the various consumers at 9080 MU. On this basis the total energy input into the system was projected at 12353MU. The AT&C losses for 2001-02 and 2002-03 were estimated at 30.9% and 30.23% respectively. Thus, during 2003-04, a loss reduction of 3.7% was expected from the level of that obtaining in 2002-03. Chairman felt that a target for energy saving of 450MU during the current year was quite significant, but it was necessary to take concrete steps to achieve this target. He wanted the KSEB to indicate the details of the programmes to achieve the target and stated that non-realization of the target would further widen the revenue gap.

Shri.C.Abdulla, Member, Distribution, KSEB stated that the loss in the KSEB system had been increasing from 1947 up to 2001 and this trend had been arrested by the various measures taken by the KSEB. The energy loss had been brought down from the level of 32.2% during 2001-02 to 30.2% (including external losses) during 2002-03 which would be further brought down to the level of 28.02 during 2003-04. Various measures for loss reduction covered replacement of faulty meters, construction of 33 kV lines and substations and construction of more 11 kV lines so as to reduce the HT-LT ratio. It was proposed to bring down the HT-LT ratio from the present level of 1:6 to 1:5 within a year and ultimately to 1:1 in a phased manner. To start with, the programme was being implemented in 3 cities and 7 towns. Various measures were also being taken to detect theft of energy and thus reduce commercial loss. Presently, energy was being measured at the generation level, transmission level and distribution level (covering 11kV and LT) and it was possible to estimate the energy loss taking place in transmission and distribution separately. Steps were also being taken to measure energy loss at each voltage level and would be completed in 2-3 months. Shri.Abdulla stated that the overall energy loss at present was being calculated on the basis of billed energy and the energy input into the system. Due to staggering of monthly billing there could be some variation in the monthly energy loss calculations. He stated that for the year 2004-05 also a loss reduction of 2% could be expected.

Chairman stated that the progress on reduction of HT-LT ratio had not been satisfactory in the past. Although the programme aimed at this, in actual practice the achievement on 11 kV side was far below the targets, while the achievement on LT was in excess of the targets. He sought for effective steps by KSEB to reverse this trend through periodic monitoring. He suggested to undertake a review regarding loss reduction as early as practicable after 31st March 2004. He also felt that since losses accounted for a substantial portion of the drain on the expenditure side, the target for loss reduction for next year should at least be 3%.

Shri.S.Jayathilakan, President of the HT & EHT Electricity Consumers Association stated that there was inconsistency in the figures provided by KSEB for T&D

losses. While the ARR projected a loss reduction of 3.7%, the present indication was 2%. He expressed the hope that at least 2% loss reduction would be achieved. As regards the additional requirement of Rs.442/- crores projected by the Board for purchase of additional Thermal Power to compensate for the loss hydro generation, he stated that the figure should be reworked after taking into account the good rains during the last few days. He also stated that proper measurement systems to accurately calculate the available hydro generation should be introduced. Shri.Jayathilakan also suggested that it was important to measure the energy input into each 11 kV feeder in order to reduce system losses, as most of the losses were taking place in distribution. He called for replacement of all faulty meters on war footing and suggested meter reading of HT and EHT consumers on 1st of every month. He also stated that there were reports of failure of recently installed electronic energy meters in some of the electrical sections in Kochi area. Shri.Jayathilakan also stated that computerization of billing had not been completed even in respect of all HT&EHT consumers and the progress of computerization was rather slow.

Shri.Abdulla, Member Distribution stated that metering of feeders was being done in a phased manner and even energy measurement on distribution transformers would be taken up in three circles covered under APDRP scheme. He stated that the Board had not received any report regarding failure of electronic meters. If there was some problem in certain cases, it could be due to damage during transport. As regards computerization of billing he stated that the software for the purpose was ready and the computerization in Thiruvananthapuram, Kollam and Kozhikode had been completed. In 88 more sections hardware had been purchased and data entry completed. Data entry was the major task in other sections, which was expected to be completed by December, 2004.

Shri.C.Balakrishnan, Member of the Commission and the Advisory Committee suggested that the Board should monitor the performance of the recently installed electronic meters. He also felt that the consumers should be given the option to replace faulty meters with good quality electronic meters.

The committee took note of the advancement made by APCPDCL, Hyderabad in computerization, remote metering, *etc.* Member, Distribution KSEB stated that KSEB had deputed three Officers to Hyderabad to study the matter in detail.

Dr.Dharamveer, Secretary, Department of Food & Civil Supplies stated that the data regarding the number of consumers possessed by the Department of Civil supplies was different from what the KSEB had projected in the ARR and there was a need to reconcile the figures.

Shri.R.Mohan Doss, Chief Electrical Engineer, Southern Railway felt that apart from assessing losses in the system at various voltage levels, it was necessary to assess losses region-wise and district-wise. It would be easy to reduce losses after identifying areas and regions having huge losses. He also felt that accuracy of meters should be ensured.

Shri.R.Ramachandran Pillai, Chief Electrical Inspector, suggested that it would be handy for each company to pay attention in the area of loss reduction after the Board had been converted into different companies. He also felt that realistic assessment of faulty meters should be made and quality of meters ensured.

Shri.Ratna Kumar, General Secretary, Energy Conservation Society suggested that adequate safeguards should be made against tampering of electronic meters and quality of meters ensured.

Shri.M.G.Rajagopal, Director, Energy Management Centre felt that a major portion of the loss was taking place in the distribution side and there should be adequate monitoring to detect and reduce the loss in medium voltage and low voltage system. He also suggested that adequate attention should be given to installation and maintenance of LT lines, service connections, *etc*.

Shri.C.Balakrishnan, Member of the Commission stated that there was practically no maintenance after the service connection was made and suggested that dedicated teams should be set up to take care of maintenance of distribution lines and service connections by which losses could be reduced substantially in a short time.

Shri.M.P.Ayyappan, MD, Kerala Power Finance Corporation stated that there should be some method by which technical losses and commercial losses due to theft, *etc*, could be segregated.

Smt.T.R.Indira, MD, Kerala Water Authority stated that there was similarity to the way the losses were taking place in the electric supply system and water supply system and both could learn each other from their experience.

Shri.M.Abdul Majeed, Vice President, Centre for Consumer Protection & Research stated that most of the statements made by KSEB were qualitative and not quantitative. He suggested that in the area of loss reduction, energy meter replacement and computerization, there should be concrete programs on time bound basis. There should be quality control for the purchase of energy meters and accountability should be ensured in all areas including control of energy losses. He stated that implementation of APDRP schemes should be accorded top priority and progress monitored at the highest level.

After further discussion on the subject, the Committee recommended that the KSE Board should be more explicit in the detailed programme in respect of each area of loss reduction such as faulty meter replacement, theft detection and system improvement. The commission would undertake a review of the realization of loss reduction during 2003-04 as early as practicable after 31st March 2004. It was decided to keep a target of further reduction of loss by 3% during 2004-05. The KSE Board should take necessary steps for estimation of voltage level losses by December, 2004. Computerization of billing should be completed latest by March 2004 and replacement of faulty meters by March, 2004.

The Board should accord top priority for implementation of the APDRP schemes and periodic monitoring of progress at the highest level. The Board should frame more schemes to be covered under APDRP with a view to availing increased central assistance as this would help the Board to a certain extent in resource mobilization. The Committee recommended that the Board should take appropriate action on all the above issues and the Committee should review the progress in the next meeting.

2. Revenue Realization:

Shri.C.Balakrishnan, Member of the Commission and the Advisory Committee stated that the Board had estimated an income of Rs.2684/- crores from tariff during the year 2003-04. Since this amount was far less than the expenditure it was essential to ensure about 100% collection. Presently, the collection efficiency of the Board was in the range of 86-87%. This had to be improved at least to 98%. There was deficiency even in the area of billing. This could be improved only through computerization of billing and collection. The consumers should be in a position to remit payment against the bills from any bill collection centre of their choice. This could be achieved through the use of optical lines. This would enable instantaneous data transfer through which the head quarters would receive the up to date position. He stated that there was a tendency for the consumers to use more energy if the meter was found faulty. He suggested that if there was financial constraints for the Board to replace faulty meters, the consumers should be allowed the freedom to replace them with good quality meters. The use of prepaid meters should also be encouraged by consumers who could afford to pay for such meters. The consumption by HT &EHT consumers should be closely monitored as Increase of loss in the area would adversely affect the revenue.

ShrI.BalakrIshnan cited many discrepancies in the data furnished regarding the number of consumers and their consumption In respect of different categories of domestic and commercial consumers. Chairman stated that the problem could be overcome only through computerized billing and collection. He suggested that the ARR should be reworked based on corrected data.

ShrI.Abdulla, Member, Distribution, KSEB stated that receivables were mostly due from Govt.Departments including Govt. Departments, Police Stations, Medical Colleges, Hospitals, KWA and other Public Sector Undertakings *etc.* He suggested that the matter should be taken up with the Govt. He admitted that certain amount was due from HT & EHT Industries. The Industries, which were closed down, were not paying. In these cases, revenue recovery action was being taken. At present, there were about five lakh faulty meters. The replacement of these faulty meters would be completed by 31st March, 2004.

As regards discrepancies in the data, he stated that category-wise information was as per actuals for the last 2 years where as the slabwise details were based on sampling. Computerization of billing in 88 sections already completed and the remaining sections would be completed by December, 2004. Steps had also been initiated for automation of spot billing and phased introduction of remote metering for EHT and HT consumers.

Chairman stated that as on date, a staggering amount of Rs.1,000/- crores was outstanding out of which an amount of Rs.400 crores was stated to be from Govt. Departments. As regards Govt. Departments, the matter was required to be taken up with the Government, as the Board could not survive with the present level of outstandings. As regards outstandings from private consumers, the data furnished by the Board contained neither the details nor the action taken/proposed to be taken to retrieve the arrears.

Dr.Dharamveer stated that the matter regarding arrears by Government Departments was proposed to be discussed at the Ministers' level. But the meeting was postponed.

Shri.Rama Rao, General Manager, NTPC, Kayamkulam stated that NTPC had recently taken over distribution in Kanpur area of U.P and had worked out a scheme for liquidation of arrears. He said that he would share the NTPC experience with the Committee in due course.

Shri.Jayathilakan stated that the data given by the Board on revenue realization and the number of consumers in certain slabs of domestic category was not factual. He stated that one reason for mounting arrears was wrong billing by the KSE Board. He cited the example of Cochin Port Trust and FACT. He said that the number of court cases was increasing on account of this. He also stated that while there was no interest on the security deposit made by the consumers the Board charged an interest of 24% on delayed payment. For delay of two days which fell on the last day of a particular month and the first day of the succeeding month the interest charged was for two months. He suggested that as regards penalty for delay, Govt. departments and private consumers should be treated equally.

Shri. Mohan Doss, Chief Electrical Engineer, southern Railway stated that private organizations must be engaged for collection which could improve the collection efficiency.

Shri.Ramachandran Pillai Chief Electrical Inspector stated that quality of meters should be improved through establishing more number of testing centres.

Shri.Ratnakumar, General Secretary of the Energy Conservation Society stated that energy charges must be made as packages for the PSUs and the Industry Department could be contacted for the purpose. He called for aggressive action by the Board in dealing with defaulters while ensuring equal treatment to all. He suggested for conducting awareness programme for the consumers especially for reducing consumption during peak periods. By this way, consumption of costly thermal power could be reduced. He also suggested for publicity on advantages of energy conservation through electronic and print media.

Shri.Rajagopal stated that the guidelines regarding publicity had already been issued by the Government through an order of the Power Department.

Chairman suggested that the KSEB might move a note to the Cabinet on defaulting Govt.Departments through the Power Department.

Smt.Indira stated that KWA was a major defaulter in clearing electricity charges. She stated that the major difficulty was due to KSEB classifying KWA under HT-I, LT-IV and LT VI (C) categories. She wanted KWA to be classified under HT III and LT V categories applicable to agricultural consumers.

After further discussions on the subject, the Committee came to the conclusion that KSEB should accord top priority for computerization, collection and automation of spot billing as a prelude to improving of collection efficiency. The KSEB should furnish details of category wise data on receivables and work

out a concrete action plan for retrieving the arrears. All our efforts should be made to arrive at out of court settlements in respect of cases challenged in the courts. Disputes due to wrong billing should be settled through Adalats in a time bound manner. As regards Govt. Departments, the KSEB should take up the matter at the State Cabinet level through the Power Department bringing out clearly the implications of non-payment. The Board should also evolve suitable action plan for improving the concurrent collection efficiency to the level of at least 95% immediately. The KSEB should take immediate steps to correct the discrepancies in the data regarding revenue realization for 2003-04 and rework the expected revenue from tariff.

Prepaid card system should be introduced on a pilot scale in selected areas and response monitored. The Board should work out the financial implication of introducing prepaid card system.

It was decided to review the progress on all the above matters in the next meeting.

3. Power Purchase:

Chairman stated that more than 50% of the expenditure outflow of KSEB was due to power purchase cost and all out efforts should be made to optimize power purchase. He stated that the present practice of scheduling hydro generation based on last year's actuals would not bring in the required results as the water availability varied significantly, from year to year. He therefore suggested detailed schedule for hydrogenation and power purchase based on projections for hydro availability at any point of time. This called for regular updating and revision of the schedules. The exercise would involve annual, quarterly, monthly, fortnightly and daily scheduling which would be subjected to daily and fortnightly updating and revision. He called for appropriate response from the KSEB in the matter. He stated that the long-term issues were expansion of hydro generation and fuel conversion of existing stations from Naphtha/Diesel to Natural Gas/L.N.G. He stated that the ills plaguing the power supply Industry in the State could be resolved only through concerted efforts in these areas.

Shri.Abdulla, Member, Distribution, KSEB stated that scheduling was being done on daily basis taking into account the hydro availability.

Shri.Rama Rao, General Manager, NTPC, Kayamkulam stated that Kayamkulam power station would be expanded using either LNG or Natural Gas. The bid for LNG was likely to be opened shortly. The price of LNG would decide the price for Natural Gas from Godawari basin. If LNG option was resorted to, it might take at least three years before change over from Naphtha where as in the case of natural gas, laying of pipe line would not take more than 1-1½ years. He also stated that NTPC were negotiating with some foreign suppliers for supply of Naphtha at a stabilized prize for two years. Shri.Rama Rao also stated that NTPC had shown interest to take up some hydro projects in the State and the matter was held up for want of some clearances from the State Government.

Shri.Jayathilakan wanted to know the reason for running costly KPCL plant. He stated that changeover to natural gas was the only solution and if natural gas was made available, the industries like FACT in the Kochi belt might also convert to natural gas.

Shri.Abdulla, Member, Distribution, KSEB stated that efforts had been made to obtain reduction of excise duty on Naphtha and exemption from ST. ST had been exempted with effect from 1.11.2002. He stated that KPCL was required to be run in order to overcome low voltage problem in the northern most areas. The cost of generation from BDPP & KDPP was high since there was no waste heat recovery in these plants.

Chairman stated that a co-ordinated approach was necessary among KSEB, Govt. of Kerala and the NTPC in the area of fuel conversion. The effort should be to achieve fuel conversion in Kayamkulam, BSES, KPCL, BDPP and KDPP as quickly as possible. He requested NTPC to intimate the position regarding tenders for LNG and Natural Gas. He offered full support from the Commission for co-ordinating the efforts in the area by NTPC and KSEB.

After further discussions on the subject the Committee recommended that the KSEB should make necessary proposals for fuel conversion of BSES, KPCL, KDPP and BDPP in co-ordination with NTPC. It was decided to review the matter in the next meeting of the Committee.

4. Debt Service:

Chairman stated that the main concern was the increasing debt burden. The interest charges projected for 2003-04 in the original ARR was an amount of Rs.742 crores, which had been reduced to Rs.722 crores in the revised ARR.

Members felt that the interest rates were high and wanted to know the action taken by the Board for swapping the loans.

Shri.Abdulla stated that KSEB issued non-SLR bonds during 2002-03 for Rs.189.16 Crores @11.4% and Rs.1.45 crores @PLR +5% (*i.e.* 6.5+5% at the time of issue). In addition, the Kerala Power Finance corporation raised two series of bonds (Rs.200 crores and Rs.307.74 Crores) for KSEB on which KSEB was to pay interest at 11.75% and 10.91% respectively. The Board raised further Bonds/Loans totaling Rs.1000 crores during 2003-04 at interest rates ranging from 9.06% to 13.5% The Board was not in a position to borrow from Commercial Banks, resulting in high cost borrowing through Bonds. Shri. Abdullah stated that by swapping high interest loans taken during the earlier periods, the Board was able to save an amount of Rs.63.64 crores, after allowing a premium of Rs.36.56 crores, which worked to a net gain of Rs.7.15 crores per annum. He stated that an amount of Rs.224 crores had been repaid against principal during the year 2003-04.

Members felt that there was no justification for borrowing money at 11.5% interest when the prime lending rates had drastically come down. It was decided that the Commission should hold a separate meeting with the Board on the subject.

5. Employee cost:

Members generally felt that the employee productivity in KSEB was low as compared to similar organizations. Shri.Rajagopal, Director, EMC stated that there was wide disparity in the deployment of staff between South and North and this disparity should be rectified as early as possible.

Shri.Abdulla stated that the sanctioned strength of staff in the Southern areas was more than that in the Northern area. He also stated that while KSEB was below Andhra Pradesh in the area of productivity of employees, the Board was much better in this respect than many other States.

Shri.Abdul Majeed stated that Board should make efforts to reduce expenditure towards administration charges. He felt that most of the guesthouses under KSEB was a liability and they should be either leased out or sold.

The Committee felt that there was a steep rise in the employee cost during the year 2003-04 and the Board should find out ways and means of smoothening the burden on employee cost.

6. Capital Works:

Chairman stated that lack of forward planning and monitoring resulted in cost and time overruns in the case of capital works. He stated that even in the case of APDRP schemes, the progress was tardy. The external agency monitoring the progress had expressed dissatisfaction over the progress. He stated that in many cases physical progress did not correspond to financial progress.

Shri.Abdulla, Member, Distribution, KSEB stated that out of total outlay of Rs.350 crores for APDRP schemes, an expenditure amounting to Rs.65 crores had been incurred so far. About 80% of the outlay were towards procurement of materials and efforts were being made to expedite procurement process. He stated that total outlay for normal capital works during 2003-04 was Rs.500 crores out of which an expenditure of Rs.168 crores had been incurred so far - Generation - Rs.31 crores, Transmission Rs.71 crores and Distribution Rs.66 crores. On the distribution side 4 lakhs service connections had been targetted during the year. He also stated project teams had been set up under Deputy Chief Engineers for implementation of small hydro projects.

The Committee noted that the progress on generation, which mostly covered small hydro schemes, was tardy and recommended to the Board to take necessary steps to overcome the slippage in order to complete the projects as targeted.

7. Inventory control:

Chairman stated that as per the information furnished by the KSEB huge stocks of materials were lying at construction sites. There was also piling up of materials at the Transmission Stores. It was necessary to reduce these stocks either through disposal or through redeployment, wherever feasible. Once the piled up dead inventory is reduced, the next step should be towards computerization of inventory control. The Board was found to be lacking in action in both these areas.

Shri.Abdulla, Member, Distribution, KSEB stated that vendor rating system was being introduced in the Board. After finalisation of vendors, the field officers would be in a position to receive the materials directly from them for immediate use without any lead-time. This would significantly reduce inventory. All stores had taken action to reduce piled up inventory by utilizing old stock wherever possible.

Shri.Jayathilakan stated that the purchase procedures were required to be simplified and streamlined so as to ensure smooth flow of materials avoiding lag time. He suggested that the Board should utilize the services of public sector scrap disposal agencies for disposal of unwanted stores.

After further discussion on the subject, the committee recommended that the Board should take immediate steps to reduce the dead inventory especially at the construction sites. The Board should also take necessary steps for computerization of inventory control within a short period of time.

8. Shri.K.O.Habeeb, General Secretary, Kerala State Electricity Workers' Association who had sought leave of absence had forwarded a note containing his views, which was circulated in the meeting. Shri.Habeeb stressed the need for computerization of billing and collection on top priority. He suggested that spot bills should be numbered on the basis of walking order, as this would avoid omission of any consumer. He also advocated for introduction of pre-paid card system on an experimental basis. Shri.Habeeb called for co-ordinated scheduling to achieve maximum utilization of secondary hydropower and proper maintenance of hydraulic structures. In this connection he pointed out the defective operation of Sholayar Power Station by not operating the Station before September and February so as to take advantage of the committed supply from Tamil Nadu. Shri.Habeeb disputed the claim of the Board regarding increased employee cost during 2003-04. He also stressed the need for computerization in the area of inventory control.

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 IV

LIST OF PARTICIPANTS IN PUBLIC HEARING ON 28.11.2003

1 Col.V.K.Bhatt, Chief Engineer (Naval Works), MES, Kochi.
2 Suresh Singh, GG (I), R/M, Naval Base, Kochi.
3 K.V.Nair, Executive Engineer, CE (Navy), Kochi.
4 T.M.Manoharan, Chairman, KSEB.
5 M.N.V.Nair, Chairman, Public Affairs Forum.
6 S.Karthikeyan, Sr. Sec. Engineer/TRD/HE, Southern Railway.
7 Bipin Sankar, Assistant Executive Engineer, KSEB.
8 M.Raveendran Nair, Executive Engineer, TRAC, KSEB.
9 S.Prasad, Assistant Engineer, TRAC, KSEB.
10 P.V.Sivaprasad, Asst. Executive Engineer, TRAC, KSEB.
11 Y.Gheevarghese, Chief Engineer, Distribution (South), KSEB
12 P.Parameswaran, Chief Engineer, System Operations, KSEB, Kalamassery.
13 P.N.Mohanan, Member (Generation & Transmission), KSEB
14 S. Murugiah, Member (Finance), KSEB
15 Jacob John, Payyannur Chamber of Commerce & KSSIA
16 Mohammed Rafiq, Advocate,representing All Kerala Ice Manufacturers Association.
17 K.Uthaman, General Secretary, Kerala State Ice Manufacturers Association.
18 Annie Stella, Executive Engineer, KSEB
19 A.G.Ganga Prasad, Finance Officer, KSEB
20 C.Abdulla, Member, KSEB
21 Tanmay Bhargav, CRISIL
22 Satheesh Kumar.G, Asst. Executive Engineeer, TRAC, KSEB
23 B.Jalajakaran, Dy. Chief Engineer, TRAC, KSEB
24 P.Devapalan, Asst. Finance Officer, TRAC, KSEB.
25 Muhammed Ali Rawther.M., Executive Engineer, APDRP
26 C.G.Jolly, Chief General Manager, INDAL, Kalamassery.
27 V.Sreekumar, Manager/Mechanical, Indian Aluminium Co., Kalamassery.
28 D.Lal, Special Officer (Revenue), KSEB
29 A.A.M.Nawaz, Asst. Vice President (E&I) Binani Zinc, Binanipuram.
30 A.R.Satheesh, Manager, Energy Management Carborandum Universal, Kalamassery.
31 Len Varghese George, Consultant, Price water housekeepers, Hyderabad.
32 K.V.Nair, Executive Engineer, SO II, CE (DW), Kochi.
33 Philip Koshy, Member, Kottarakkara Pourasamithi
34 Abdul Majeed, Member, COINPAR.

35 K.Sukumaran Nair, Joint Secretary (Law), KSEB.
36 K.N.Pillai, President, Kottarakkara Pourasamithi.
37 G.Radhakrishnan Nair, General Secretary
38 Gigy Elsy John, Assistant Engineer, KSEB.
39 Meharunnisa.M, Asst.Executive Engineer, KSEB.
40 M.Sivathanu Pillai, Chief Engineer (Corporate Planning), KSEB.
41 C.Raju, Convenor/Infra Confederation of Indian Industry
42 G.Anand, Deputy Director, Confederation of Indian Industry
43 K.K.George, Treasurer, Kerala High Tension & Extra High Tension Consumers Association.
44 George Thomas, Vice President, Kerala HT & EHT Industrial Electricity Consumers Association.
45 K.M.Pillai, Chief Electrical Inspector to Govt. of Kerala (Retd.)
46 M.K.C.Panicker, Sr. Citizens club, C/0. Chaithanya Nursing Home,North Paravur.
47 K.R.Mahijan, Sr. Citizens Club, C/o. Chaithanya Nursing Home, North Paravur.
48 P.Sabu Mohan, General Manager, Binani Zinc, Binanipuram.
49 M.S.Shajahan, Deputy Director, MIS, KSEB
50 V.Ramesh Babu, Joint Director, MIS, KSEB
51 Xavier Thomas Kondody, State President, KSSIA, Kochi.
52 P.C.John, KSEB Engineers Association.
53 N.Vijayakumar, Senior Finance Officer, KSEB.
54 Namdeo Rabade, Div. Electrical Engineer, Southern Railway
55 Surendra Yadav, Div. Electrical Engineer, Southern Railway.
56 Narendra Kumar, Dy. Chief Ele. Engineer, Traction Distribution, Southern Railway.
57 Johnson Jacob, Director, MIS, KSEB.
58 N.Babu, Deputy Chief Engineer, KSEB.
59 P.C.Abraham, General Manager, Copy Tiger Cons.No.2038, Kottayam.
60 P.Sivasankaran, representing M/s. Copy Tiger, Kottayam.
61 C.P.Thomas, Retd.Chief Engineer, Chirakandath, Kodimatha, Kottayam.
62 K.Vijayadharan, Deputy Chief Engineer (TC&M), KSEB.
63 S.K.Yesodharan, General Secretary, KSEB Engineers Association.
64 M.Abdul Kalam, Asst. Executive Engineer, (Planning), KSEB
65 Dominic J.Mechery, Secretary, Association of Planters of Kerala, Pattom.
66 B.Sakthidharan Nair, Standing Counsel, KSEB.
67 M.S.Iyer, Consulting Engineer, Cheriyan Complex, Kalady South, TVM.

Annex V

VIEWS EXPRESSED BY THE PARTICIPANTS DURING THE COMMISSION'S PROCEEDINGS ON PUBLIC HEARING ON ARR & ERC FOR 2003-04 HELD ON 28.11.2003 AT GOVT.GUEST HOUSE, THIRUVANANTHAPURAM

Chairman, Public Affairs Forum, Trivandrum	The Govt. of Kerala is not fulfilling the commitment regarding payment of subsidy to the Board. Arrears are not collected by the Board in time. Board has to take effective steps to collect accumulated arrears and tackle legal problems effectively. Commission should take steps to see that the autonomy of the Board is maintained. Strict procedure should be followed for appointing Chairman and Members of the Board and they should be given fixed tenure, to ensure that both commercial and social obligations are fulfilled effectively. The Board should be reorganised into autonomous centres of profit. Modern Management system should be introduced to fully exploit the human resource potential. Improvement is required in project management. The Board is unable to monitor the losses. The Commission should monitor the performance. In Pvt. Companies, T&D loss is very low. Quality of Power should be improved. Employees should be effectively utilised and employee cost reduced. Number of Chief Engineers should be reduced. An innovative pension scheme should be introduced to tackle increased pension expenses. The retirement age should be enhanced to 60. Modern Inventory Management System should be practised. As a measure of expenditure reduction, number of guest houses should be reduced. Car allowance should be introduced to replace staff cars. Computerization of billing should be given priority. Prepaid meters should be introduced.
Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association Ernakulam.	The ARR is characterised by high network cost and inefficiency in operation of hydel power. The efficiency levels achievable in other States should be adopted in Kerala also. Sanctity of variable cost projected by KSEB needs regulatory check. There could be savings in power purchase cost to the extent of Rs.193 crores and Rs.251 crores based on worst year of hydro generation and worst year of inflow, respectively. The Inflow-MU computation basis for last 10-years may be made public along with rainfall data and reservoir levels. Inflow-MU estimation for 2003-04 may be provided along

	with rainfall data for April-August 2003. Skewed load curve leaves generation capacity idle. The reasons for low PLF in KSEB's thermal stations and means to address the same should be explored. Power purchase agreements should be made available to public for scrutiny. Merit order despatch followed by KSEB needs scrutiny. Frequent variations in purchase cost should be borne by the Board. Commission should not allow R&M cost on new investment. The Uttaranchal ERC has disallowed R&M cost on new investment. Investments should be optimised through proper Investment Plans. Other States have achieved significant reduction in interest cost. Loans to meet revenue deficit should not be to the customers' account without assigning any reason. Outstanding subsidy payment should be processed separately as per Electricity Act. Cost of loan incurred on account of Govt. delays should not be charged to the consumers. Billing should be improved through computerisation. Employee cost should be reduced. There is inconsistency in the loss figures between KSEB's own statement and those filed in the ARR. The Commission should direct KSEB to achieve loss reduction on a time bound basis. Re-negotiation of loans, disallowing of unjustified allowance, *etc;* may be given priority. ARR should be reduced.
Confederation of Indian Industry	Areas such as collection of subsidy, redemption of electricity duty and further funding from Govt., *etc;* should be given priority. Efficiency improvement should come into the first place. Energy Management has to be done. T&D loss should be reduced. A target of 10% may be fixed for loss reduction during 2003-04. Daytime consumers are mostly industries. Therefore, daytime power cuts should be discontinued. 3 months inventory for KSEB is on the high side. Major industries have only 24 hours' inventory. Inventory should be reduced to 30 days during this year and 15 days during next year. Stores should be computerized. Cost of Service is varying in different categories. Small Scale Industries with less cost of service are paying more. Meter reading and billing should be done on monthly basis for improving efficiency of revenue collection. Meter readers can be authorised to collect payment against bills.

Paravur Senior Citizens Forum	Availability of Power System is poor. T&D loss in KSEB is very high. EL surrender is stated to have been discontinued but at the same time, it finds a place in the ARR. R&M cost has been projected at Rs.102 crores, which is on the high side. For reducing T&D loss, T&D loss measuring system should be introduced. KSEB is getting loan @11.5% interest, which is on the high side. Collection of meter charges from consumers should be stopped since the consumers paid for the same. The Board should adopt a positive approach towards the consumers. KSEB should be reorganised on profit centre basis and statutory audit conducted. Discipline should be maintained. Contributory retirement benefit scheme should be introduced. Work appraisal and reward system should be introduced and VRS encouraged. Number of domestic consumers is on the increase while HT & EHT consumers are decreasing. Industries are not working due to non co-operation of KSEB. By changing the billing cycles, substantial increase in supplementary income is possible. In a working day, actual working hours is only 5 hours 35 minutes. KSEB may give more work load to employees. Efforts should be made to avoid delays in implementation of Athirappalli project.
Chalakudy Puzha Samrakshana Samithi.	Debt service is the major problem of KSEB. Borrowings by KSEB are on the increase. Regarding redemption of debt burden, KSEB is giving only a vague reply. Commission should give target oriented direction to monitor this. Scientific method to calculate T&D loss should be introduced and peak-hour T&D loss reduced and overall efficiency improved.
Southern Railway	Tariff for Railway Traction should be reduced from the present level and a single part tariff of about Rs.2/- p.u. be fixed considering the cost of energy to KSEB and cost of energy from alternative sources. Suitable incentive for high power factor should be introduced. Time limit for payment of HT &LT monthly billing for Railway should be increased to 30 days in view of the large number of consumption points. Belated payment surcharge be reduced to 0.5% p.m. (6% p.a.)

	NLC has expressed willingness to supply power directly to Railways. Tariff should be decided by the Commission considering all parameters. Energy charges for level crossings work out to Rs.10 /- to Rs.11/- per unit. This should be reduced to reasonable levels.
Kottarakara Poura Samithi	Formerly KSEB was Electricity Dept. Culture of working has to be changed from that of the Electricity Dept. Appropriate inventory control methods should be introduced. T&D losses should be progressively reduced.
Chief Engineer, Navy	Transparency of KSEB with consumer should be improved. Work culture of the Organisation should be improved, basically that of employees. Correct billing should be ensured. Energy Adalats should be held for resolving disputes. T&D losses should be brought down. Efficiency should be improved. Consumers should be given incentives, for timely payments.
C.P.Thomas, former Chief Engineer, KSEB.	Commission should direct the Board to rectify the defects in the ARR regarding no. of consumers and consumption in each category. The furnished figures are not matching. In 2001, domestic energy consumption was 468 crores while in 2002 it is 370 crores. This requires serious attention. This difference is due to pilferage or theft by domestic consumers. Detailed study is required. Increased projection of T&D loss is due to theft and pilferage of energy. Losses have actually come down. Sealing of meters is not properly done. As sealing pliers are easily available with licensed contractors or electrical shops, separate sealing pliers may be manufactured by the Board and kept under the safe custody of responsible officers. It may be ensured that all the meters are sealed in a month or two. By this, revenue will increase and energy loss will reduce by about 10%. The Board revised tariffs six times from 1997 onwards. The outstanding amount due from consumers is 840 crores. If the Board gets this amount, further tariff revision can be avoided. Commission should take proper action to direct the Government to pay the amount due to Board or at least bear the interest cost. The Transmission loss for supply to EHT Industries is less than 5% and therefore their tariff should be reduced by at least Re.1/- per unit.

Chamber of Commerce, Payyannur	Board should progressively reduce cross subsidies. The action of the Board in enriching itself through huge levy of security deposit is unjustifiable. Revisions periodically made are totally unjustifiable. Regulatory asset should be recovered only from subsidised consumers. Interest should be paid on security deposits. Tariff should be reduced.
Indian Aluminium Company, Alupuram	Indal was the largest consumer, paying revenue of Rs.80/- crores p.a. Maharashtra provides special tariff to industries. KSERC should reduce the tariff levels to bulk consumer industries so that they can be retained in the State. Incentives should be provided to the deserving industries. In AP Industries are being given power at Rs.2.12 p.u.
Kerala State Small Industries Assn.	Small scale industry is consuming just 6% of the electricity and is one among three categories of consumers who contribute profit to the Board. Board is unable to give electricity during 50% of the day hours. Interest should be paid on security deposit. On account of shortage of materials, connections to industries are delayed. Quite often, the industries provide materials for connection, when new connection is given. Power allocation system has to be improved. Revenue has to be improved.
Kerala State Ice Manufacturers Assn.	Experts should check the hydro availability figures of the Board. The Commission should scrutinize the figures. Most of the figures are superficial. Consumers have no access to the records of the Board. Body of experts should be appointed before approving the ARR submitted by the Board. Nobody from the Govt. has attended these proceedings. Govt. views on the various points should be ascertained. While formulating the principles for regulatory assets, provision should be made for those who are contributing surplus over cost. There must be a reduction in tariff for LT Industrial consumers since they are the backbone of Kerala Industry. Since they are subsidising others, they should be given incentives.

	Government is not willing to discharge their statutory obligations. Affidavit must be called for from the Government particularly on the subsidies and budget provisions.
P.C.Thomas, Copy Tiger	Establishment charges should be reduced. Civil and electrical wings should be abolished and transferred to a single unit. Management Information System (MIS) in KSEB should be organised from Sub Division onwards. Public Relation function should be strengthened. District Level Co-ordination Committees for advising the Commission should be set up without delay. Energy statistics on Thermal Power Stations should be furnished.
Assn. Of Planters of Kerala	17% of the total population of Kerala is directly involved in the plantation activity. They should be considered as HT-III. Swaminathan Committee Report on WTO on agriculture should be implemented.
Shri.Abdul Majeed, Vice-President, Centre for Consumer Protection and Research.	High Terminal benefits, high debt burden, and poor work culture are some of the major problems of KSEB. Leasing out of Guest Houses, enhancement of superannuation age, promotion of Hydel Tourism, *etc;* are some of the measures to improve the financial position of the KSEB.
Shri.M.S.Iyer, Consultant.	Mini hydel projects of less than 20 MW should be entrusted to private agencies. The cost of power from these stations can be contained within Rs.2.50 per unit. Import of power by bulk consumers should be allowed. Retirement age should be increased to 60.
KSEB Engineers Assn.	KSEB has not requested for tariff revision. The Statement regarding excess Chief Engineers is not correct. Productivity of staff is not low as compared to other States.
Shri.K.K.George, Consultant	The Board has not requested for tariff increase. Even if the Board is not revising the tariff, the Commission should take initiative and revise tariff rationally so that anomalies already been practiced by the Board is sorted out.
Reply by Chairman, KSEB	KSEB has not been functioning as a fully commercial organisation. It was partly a service organisation meeting the energy needs of all sections of the population and all areas of development. KSEB has been providing cheapest power when compared to other States for several decades. KSEB has not been receiving any subsidy on account of this. KSEB has also achieved 100% rural electrification. KSEB is not in a position to disconnect hospitals, police stations, religious institutions and areas like Marad, on account of default. This is due to the social commitment of a Public Sector organisation. Kerala is the only State

	supplying energy for 23½ hours. In many States like MP, load shedding is carried out for several hours. KSEB is not in a position to get rid of unprofitable consumers. Inventory Control will be computerised and inventory kept at minimum. Electrical equipment cannot be purchased from the open market. In view of the lead-time for delivery of many items, certain quantity should be kept as reserve. When the KDPP project was commenced, the fuel rate was Rs.6000/- per MT. It has gone upto Rs.15000/-per MT. Therefore generation is restricted to the minimum required level. As cheaper power is availed from other sources, high PLF cannot be achieved at KDPP. Last year was one of the worst years, for hydel power. This year is still worse. This was one of the causes for revising the ARR. Inspite of this, power purchase is kept at minimum Employee cost and terminal benefits have been projected as per actuals. Overtime has been restricted. In order to improve productivity, redeployment of staff is being done. Certain benefits to staff has also been reduced KSEB will be happy to introduce prepaid meter, provided all the consumers are ready. 71 lakhs consumers' meters have to be purchased. It cannot be executed in 1-2 years. T&D loss was earlier being computed based on connected load. Now, it is done on the basis of actual consumption. Presently, the data is more accurate. KSEB has gone in for 11kV line metering and for the first time in India distribution transformer level metering has been introduced. Tenders have been called for meters to be installed on distribution transformers. Accelerated RE programme has increased the HT-LT ratio, which is presently at 1:6 as against the norm of 1:1. Huge investment is required for construction of additional 11kV lines. The Board has been trying its best to restructure the loans. Majority of loans was raised by public bond. For restructuring, prepayment

	has to be made. As regards thermal power, there are three IPPS *viz;* NTPC, Kayamkulam, BSES, KPCL and KSEB's two diesel projects *viz.* KDPP & BDPP. All of them are facing the same problem because of the high cost of fuel. Utilization of these stations will be regulated based on merit order after taking into account the cost from other sources. As regards Guest Houses, there is only one IB at Trivandrum. As regards collection of arrears, most of the EHT and few HT consumers have gone for litigation in respect of arrears. A strategy will be worked out to settle the cases. Railways have been given many concessions for the sake of electrification. Railway freight charges are exorbitant for fuel transportation and Railways are not giving any concession to the Board on this. Boards accounts are authentic and transparent. Three months average energy cost is taken as security deposit, since the payment is made after consumption. The Industrial tariff is low as compared to the other States. The KSEB is taking necessary steps for improving MIS. KSEB has also embarked on a programme for Hydel tourism. As regards project construction, Kuthungal and Maniyar projects have been completed at low cost. The Board is maintaining almost 100% billing efficiency and 92% collection efficiency. The Board is negotiating with Government for giving budgetary allocation to the Departments for paying the outstanding dues. The Board has started getting money from Government Departments such as Water Authority. As regards reduction of staff strength, the number of field staff is depending on the number of consumers. For 1000 consumers there is one lineman. While staff strength is reduced on one side, there is increase on the other side due to this.