



KERALA STATE ELECTRICITY REGULATORY COMMISSION

ORDER ON

ARR & ERC OF KSEB FOR 2010-11

Petition No. TP 70/2010 of KSEB

May 17, 2010

KERALA STATE ELECTRICITY REGULATORY COMMISSION
Thiruvananthapuram

Present : Shri. K.J.Mathew, Chairman
Shri. C. Abdulla, Member
Shri. M. Aiyappan, Member

Petition No. TP-70 of 2010

In the matter of
ARR & ERC of the Kerala State Electricity Board for 2010-11

May 17, 2010

Kerala State Electricity Board : Petitioner

O R D E R

The Kerala State Electricity Regulatory Commission having scrutinized the petition on ARR and ERC for 2010-11 (TP-70 of 2010) filed by the Kerala State Electricity Board *vide* letter KSEB/TRAC/TF-08/863 dated 24-12-2009, considered the written objections filed by the stakeholders, consulted the State Advisory Committee on 18-2-2010, considered the subsequent written and oral submissions of the KSEB, heard the views of objectors on 4-3-2010 at Kalamassery, and on 6-3-2010 at Thiruvananthapuram, 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, on this behalf.

Sd/-
M.P. Aiyappan
Member

Sd/-
C. Abdulla
Member

Sd/-
K.J. Mathew
Chairman

Authenticated copy for issue

Secretary

CONTENTS

| Chapter | Description | Page No. |
|----------|--|----------|
| 1 | INTRODUCTION | |
| 1.1 | Preamble..... | 1 |
| 1.2 | Procedural Overview..... | 3 |
| 1.3 | Public Hearing..... | 6 |
| 1.4 | Deliberations in the Advisory Committee..... | 6 |
| 2 | PERFORMANCE OF THE BOARD | |
| 2.1 | Compliance of Directives..... | 7 |
| 2.2 | Reduction in T&D loss..... | 16 |
| 2.3 | Management of receivables..... | 17 |
| 2.4 | Performance of Generating Stations..... | 20 |
| 2.5 | Capital Expenditure programme and Project Execution. | 22 |
| 2.6 | Compliance to Performance Standards..... | 33 |
| 3 | REVIEW OF CAPITAL EXPENDITURE | |
| 3.1 | Introduction..... | 35 |
| 3.2 | Objections of Stakeholders..... | 36 |
| 3.3 | Analysis & decision of the Commission..... | 37 |
| 4 | ENERGY SALES PROJECTIONS | |
| 4.1 | Sales projections..... | 42 |
| 4.2 | Objections of stakeholders..... | 49 |
| 4.3 | Analysis of the Commission..... | 43 |
| 5 | TRANSMISSION AND DISTRIBUTION LOSS | |
| 5.1 | Introduction..... | 47 |
| 5.2 | Objections of Stakeholders..... | 49 |
| 5.3 | Analysis and decision of the Commission..... | 50 |
| 5.4 | AT& C loss..... | 56 |
| 6 | ANALYSIS OF ANNUAL REVENUE REQUIREMENTS | |
| 6.1 | Introduction..... | 57 |
| 6.2 | Generation and Power purchase..... | 57 |
| 6.3 | Interest and financing charges..... | 72 |
| 6.4 | Depreciation..... | 79 |
| 6.5 | Employee cost..... | 82 |
| 6.6 | A&G Expenses..... | 94 |
| 6.7 | Repair and maintenance Expenses..... | 96 |
| 6.8 | Other Expenses..... | 99 |

| | | |
|----------|---|------------|
| 6.9 | Return on Equity..... | 101 |
| 6.10 | Expenses and interest capitalized..... | 105 |
| 6.11 | Aggregate Revenue Requirements..... | 106 |
| 7 | REVENUE FROM TARIFFS AND NON TARIFFS | |
| 7.1 | Introduction..... | 107 |
| 7.2 | Non-Tariff Income..... | 107 |
| 7.3 | Analysis and decision of the Commission..... | 108 |
| 8 | SUMMARY OF ARR & ERC FOR 2010-11..... | 109 |
| 8.1 | Bridging the Revenue gap | 110 |
| 8.2 | Orders of the Commission..... | 112 |
| 9 | DIRECTIVES..... | 113 |
| | ANNEXURE | |
| I | List of persons who have filed written objections | |
| II | Reply of KSEB on the Objections filed by stakeholders | |
| III (A) | List of persons attended the public hearing held at Thiruvananthapuram | |
| III (B) | List of persons attended the public hearing held at Kalamassery | |
| IV | Minutes of the State Advisory Committee Meeting | |

CHAPTER - 1

INTRODUCTION

1.1 Preamble

The Kerala State Electricity Board (*hereinafter referred to as KSEB or the Board*) in accordance with the KSERC (Tariff) Regulations 2003, filed the Aggregate Revenue Requirements (ARR) and the Expected Revenue from Charges (ERC) for FY 2010-11 before the Commission on 24-12-2009. Prior to filing of the petition, the Board had sought extension of time for filing the petition till 31-12-2009, and the Commission after considering the request had allowed time till 24-12-2009. In the petition the Board has proposed a record revenue gap of Rs.2219.60 crore and no proposal was made for bridging such a large revenue gap. The Commission directed the Board to file the proposal for bridging the revenue gap and the Board expressed reluctance raising certain reasons. Therefore the Commission admitted the petition on 15-1-2010 to avoid further delay.

The Commission so far has issued six Orders on ARR & ERC of the Board starting from 2003-04 as shown below:

Details of ARR&ERC of KSEB approved by the Commission

| Year | Date of submission of ARR&ERC | Revenue Gap proposed by KSEB (Rs. Crore) | Approved ARR (Rs. Crore) | Approved Revenue (Rs. Crore) | Approved revenue (gap) /surplus (Rs. Crore) | Date of order |
|---------|-------------------------------|--|--------------------------|------------------------------|---|---------------|
| 2003-04 | 1-8-2003 | 926.08 | 3,697.37 | 3,141.37 | (556.00) | 31-12-2003 |
| 2004-05 | 15-12-2003 | 854.19 | 3,492.46 | 3,196.00 | (296.46) | 16-4-3004 |
| 2005-06 | 15-11-2004 | 492.25 | 3,367.32 | 3,316.01 | (51.31) | 23-3-2005 |
| 2006-07 | 30-11-2005 | 302.78 | 3,680.43 | 3,865.05 | 184.62 | 30-3-2006 |
| 2007-08 | 11-12-2006 | 430.11 | 4,074.22 | 4,403.95 | 329.73 | 26-12-2007 |
| 2008-09 | 21-12-2007 | 754.69 | 4,983.27 | 4,979.34 | (3.93) | 19-4-2008 |
| 2009-10 | 29-12-2008 | 1,099.28 | 5,316.30 | 4,981.00 | (335.30) | 17-4-2009 |

The revenue gap of Rs. 556.46 crore for the year 2003-04 arrived at by the Commission was recommended to be bridged by way of exemption from payment of Electricity duty amounting to Rs.182.56 Crore and by availing a subsidy of Rs. 375 Crore from Government. The revenue gap for the year 2004-05 was to be filled up by exemption from paying electricity duty under Section 3(1) and Section 4 of Kerala Electricity Duty Act, 1963 to the tune of Rs.200 Crore and by providing the balance amount of Rs.96 Crore by way of revenue subsidy by Government.

The truing up petition for 2003-04 & 2004-05 filed by the Board was disposed of together by the Commission by allowing an amount of Rs.360.06 Crore. This was adjusted against the revenue surplus of Rs.329.73 Crore arrived at in the ARR&ERC for 2007-08 resulting in a net deficit of Rs.30.34 Crore for 2007-08. Based on the petition filed by the Board for revision of tariff, the Commission in the order dated 26-11-2007 revised the tariffs with effect from 1-12-2007. The increase in revenue due to tariff revision was estimated as Rs.69.79 Crore for a full year and Rs.23.26 Crore for the balance four months of 2007-08.

Against the revenue surplus of Rs.184.64 crore fixed in 2006-07, the Commission directed the Board to file tariff revision proposal, however, the Board did not file the same. The Commission finalized truing up for the year 2005-06 by approving the revenue surplus of Rs.181.36 crore, which was adjusted against the revenue gap of Rs.335.30 crore approved for the year 2009-10. The Commission directed the Board to file appropriate proposals for tariff rationalization for 2009-10 and accordingly KSEB filed a tariff petition on 24-07-2009, for an additional revenue of Rs.150.86 crore on a yearly basis. Other major highlights of the proposal were (a) introduction of non-telescopic tariff for domestic consumers, (b) 15% & 20% increase in demand and energy charges respectively for HT Commercial class, (c) 25% increase in tariff for Bulk supply (BST) to Licensees and (d) reduction to the tune of 10% of the tariff applicable to Kerala Water Authority (KWA). KSEB also proposed to rationalize the ToD tariff applicable to HT/EHT consumers and proposed a new ToD tariff for LT industrial consumers. The Commission in its order dated 2-12-2009 rejected the proposal on rationalization/revision of tariff proposed by KSEB for LT-I A(Domestic) and HT-IV (Commercial) since the proposals were against the provisions of the Act and would entail a tariff shock for certain group of consumers. Besides the Commission noticed that after the completion of pending truing up proposals from 2006-07 onwards, the picture of deficit might change. The Commission deferred the proposal on Bulk Supply Tariff to licensees. The Commission revised the Time of Day Tariff for HT-EHT consumers to be effective from 1-1-2010. Maximum demand based tariff was introduced for LT Industrial and LT VII (A) & (C) consumers having connected load of 20 kW and above as an optional scheme. With a view to staggering the peak time load demand, an optional Time of Day tariff was also introduced for LT Industrial consumers who have opted for a maximum demand based tariff and having 30 kVA contract demand or above.

1.2 Procedural overview

In the ARR for FY 2010-11, the Board has projected a revenue requirement of Rs.7503.98 Crore and a revenue receipt of Rs. 5284.38 Crore thereby leaving a revenue gap of Rs.2219.60 Crore. Since such a gap would entail increase in existing tariff by about 46%, before admitting the petition, the Commission vide letter dated 2-1-2010 directed the Board to provide a detailed proposal on bridging the revenue gap. The Commission also directed the Board to ascertain from the Government whether subsidy if any is intended by the Government to avoid a steep tariff increase. The Board in its reply stated that, filing a proposal on the revenue gap projected by Board would be a futile exercise since in the past, the Commission had substantially reduced the ARR proposed by the Board. Hence, appropriate measures like filing tariff petition or seeking subsidy from the Government or to keep the revenue gap as regulatory asset will be taken once the ARR&ERC is approved by the Commission. The Board also informed that, they had requested the Government to communicate the decision if any on the provision of subsidy to the consumers. In the letter dated 29-1-2010, the Board further attempted to apprise the Commission on the issues on revenue gap. According to the Board, the accounts of the Board are still being prepared under Electricity (Supply) Annual Accounts Rules (ESAAR), 1985 which are being audited by C&AG. The actual revenue gap for various years have been substantially higher than what has been approved by the Commission. It would be difficult for the Board as a distribution licensee, to limit expenses especially for power purchase cost. The Board further stated that it cannot propose on its own tariff proposals under the provisions of the Act and conceded that they did not possess necessary expertise to conduct studies on T&D loss reduction, improving efficiency of generating stations, man power utilisation etc., as directed by the Commission.

Before taking up the ARR&ERC for 2010-11, the Commission would like to express its views on the reply given by the Board, which were communicated to the Board vide letter dated 15-1-2010. The Commission is not in agreement with the contentions of the Board on major issues such as proposal on bridging revenue gap and various directions issued to the Board. According to the Commission, KSEB is a responsible public entity entrusted with the task of providing electricity at a reasonable cost to the public. The Government at all levels is taking maximum effort to keep the entity under public ownership. The Board has inherent obligation and duty to optimally plan, develop and maintain the electricity system, and is expected to exercise such functions in the most reasonable and efficient manner. KSEB has been consistently projecting expenses more than what is optimally required for

efficient service. Such projections are placed before the public, without serious concern on its impact, thereby revealing an unwholesome aspect of cost plus regime. In the absence of proper and reliable estimates from KSEB, the Commission in the past was forced to exercise its regulatory scrutiny to optimize, control and prune certain expenses. The Commission is of the firm view that it is not bound to accept all the projections of the Board without scrutiny. It is not the intention of the regulatory scrutiny to scale down the expenses which are over projected by the licensee. In actual terms, KSEB has failed to control the expenses at the approved level notably in areas where restraints have to be observed such as many items of revenue expenditure, and reduced the expenditure were much below the desired level in areas where it is very much needed such as capital expenditure. Even after seven years of regulatory regime in the State, the Commission has received no material on record to establish that a professional body like KSEB has an internal mechanism to limit the various expenses at the approved level and implement the capital programmes as proposed. The Commission is of the view that, such an approach of the licensee in not having a system or initiative to optimize the operations may renders the regulatory regime less effective.

The Commission insisted on having proposals for filling up the revenue gap of Rs.2219.60 Crore projected by the Board mainly on the reason that KSEB should visualize and 'gauge' the impact of such a huge revenue gap on 97 lakh consumers in the State. According to the Commission, if KSEB proposes such a huge revenue gap, it cannot shy away from its responsibility of proposing the means to bridge the revenue shortfall through tariff revision or efficiency improvement or direct subsidy from the government or a combination of all of these. As per the ARR&ERC for 2010-11 projected by the Board, the average cost of supply is estimated to Rs.5.06/kWh, which is much higher than the levels existing elsewhere. It is not an acceptable practice to project such a high level of expenditure, without proposals or attempts to plan and control the expenses. Cost plus regulatory regime is not about passing on all costs incurred by the utilities, but about prudently optimal and efficiently managed costs being loaded on to the consumers.

Regarding the lack of expertise for the conduct of various studies, the argument of the Board is surprising. If in a particular domain, expertise is not available, either the expertise should be acquired or the resorted to outsourcing. The Board is not the only one electric utility in India and is not forced to reinvent the wheel. It can emulate the best practices adopted elsewhere in the Country. There are several success stories reported on the achievements in the power sector in India especially under

public management. Further, there is no dearth of expertise in the country. Already M/s.PFC Consulting and others are helping the Board on re-organisation. In the past also Board has benefited from the services of consultants. It is astonishing to note that it took nearly seven years since the directions have been issued, to understand its own the limitations. The Board has to realize the cost of time and should speed up the efforts. The Commission after considering all these aspects and also the fact that the ARR&ERC for the year 2010-11 was delayed, decided to admit the petition on 15-1-2010.

After admitting the petition, the Commission sought clarifications on various issues on the petition from the Board vide letter dated 15-1-2010. The Board provided its reply on 5-3-2010 after some delay. The Commission directed the Board to publish the summary of the petition by giving time till 1-3-2010 for providing comments by the Public and stakeholders. The Board published the summary of the petition in the following dailies.

- Kerala Kaumudi dated 14-2-2010
- Deshabimani dated 12-2-2010
- The New Indian Express dated 15-2-2010
- The Hindu dated 13-2-2010

The Commission placed the petition on its website for the information of the public. The list of persons who filed objections on the petition is shown as Annexure –I. The Commission vide its letter dated 10-3-2010 forwarded copies of objections filed by the public for obtaining reply from the Board. The Board forwarded the reply to the objections vide letter dated 20-4-2010 which is given as Annexure – II

In the meanwhile, the Commission vide letter dated 10-1-2010 directed the Board to submit truing up petitions for the years from 2006-07 to 2008-09. On the request of the Board the Commission allowed time till 20-1-2010 for filing the Truing up petition for 2006-07 and for other years till 31-1-2010. Further extension of time was also given. As on date of this order, the petition for 2007-08 and 2008-09 are not yet filed. In its absence, the Commission could not take a considered view on the exact position of revenue gap/surplus for the years till 2008-09. Hence the present order on ARR&ERC 2010-11 will be subjected to the outcome of truing up exercise for the years 2006-07 to 2008-09.

1.3. Public Hearings

Public hearings in the matter were held at Municipal Hall, Kalamassery on 4-3-2010 and at the Commission's Office, Thiruvananthapuram on 6-3-2010. The lists of persons who attended the Public Hearings are given in Annexure III(a) and III(b).

In the public hearing several consumers and associations objected to the validity of ARR&ERC filing of KSEB since the petition is not as per MYT format and as per the terms and conditions for determination of tariff for distribution licensees. Objections have also been raised on absence of proposals on bridging the revenue gap. The objectors have argued that in the absence of such proposals, the petition should be treated as incomplete. Many objectors have stated that, the Board did not segregate the ARR along the functional basis as directed by the Commission. Therefore the petition deserves to be rejected. According to Southern Railway, by not segregating the accounts, Board in deliberately avoiding transparency in the system.

1.4 Deliberations in the Advisory Committee

The Commission forwarded a copy of the petition to the members of the State Advisory Committee for their comments. The Advisory Committee discussed the ARR&ERC of KSEB for the year 2010-11 in detail in the meeting held on 18-2-2010. The minutes of the meeting of the State Advisory Committee is given as Annexure – IV. The Committee in general expressed concern over the considerably high revenue gap, which was mainly contributed by the increase in employee cost and power purchase cost. The suggestion of Member (technical) that in the event of high cost of power, the scope of introducing power restrictions may be thought of was welcomed by the Committee in general.

As per para 5(1) of the Kerala Electricity First Transfer Scheme, 2008 issued by Government of Kerala vide Order dated 25-10-2008, all interests, rights in properties, all rights and liabilities of the Board vested in the State Government shall be administered by the Government in the name as 'Kerala State Electricity Board' by appointing a Special Officer and a Managing Committee for this purpose till the date of re-vesting, to be notified by the State Government as provided in sub-section (2) of section 131 of the Act. Considering this, for the purpose of this order, the Commission refers to the 'Government' as 'the Board' or 'KSEB'

After considering all the statutory provisions and going through all the steps envisaged under the Act and the Regulations, after considering the views of the

State Advisory Committee, after giving sufficient opportunity to all stakeholders, the Board and the stakeholders, the Commission has taken the decision on the ARR & ERC of the Board for 2010-11 as detailed in the subsequent chapters.

CHAPTER 2

PERFORMANCE OF THE BOARD

This section evaluates the performance of the Board so far on various aspects such as compliance of directives, Transmission & Distribution loss, Management of receivables, performance of generation, transmission and distribution functions, and capital expenditure programme and project execution.

2.1 Compliance of Directives

The Commission has issued several directions in the previous ARR&ERC orders. The status of compliance reported by the Board and the views of the Commission are given below:

1. Assessment of Transmission and Distribution loss

- a. *Separation of Transmission and distribution loss: The Board shall provide separate estimates of transmission losses and distribution losses at different voltage levels with the ARR & ERC filing.*
- b. *Board shall initiate a study for assessing loss levels in 33kV/11kV system and LT system separately. Study shall be conducted for a representative urban and rural circle. The preliminary results shall be filed within 3 months from 17-4-2009*
- c. *Separation of technical and commercial loss : The Board shall submit along with ARR & ERC separate estimates for technical and commercial losses*

Compliance reported by the Licensee

The Board has made an attempt to find out the Transmission & Distribution losses through Load Flow analysis. But the attempts failed on account of technical reasons and lack of accurate database, mismatch in the accuracy of meters in the EHT & Control panels, and the large number of assumptions required. It has been decided to identify the meters and other instruments which are needed to be replaced with modern accurate instruments. It was also decided to include this as part of annual plan work and to formulate a separate maintenance plan from next year onwards.

For assessing the transmission losses, accurate metered data is required. Many meters with EHV panels are of lower accuracy levels and need to be replaced with appropriate meters. The task is being undertaken by the Chief Engineers of

Transmission wing. They have also been entrusted the task of evolving a suitable methodology for segregation of transmission losses at different voltages.

In the Distribution wing, a pilot study is initiated to assess distribution losses in 33kV/11 kV and LT systems and to quantify commercial losses in urban and rural areas. Two sample electrical divisions-Neyyattinkara (rural) and Kollam (urban) with comparatively minimum faulty meters were identified for the pilot study and it is targeted to complete the study by 15th February 2010.

One of the prime objectives of the R-APDRP scheme initiated by the Government of India is the assessment and segregation of technical and commercial losses of utilities and conducting energy audits. This has been included in the project reports of R-APDRP. Part-A of the R-APDRP scheme includes projects for establishing baseline data and evolving IT applications for energy accounting/auditing including IT based consumer service centers. The Part-B includes various distribution strengthening projects. In addition to this, the Board is in the process of replacing all faulty energy meters in the State in a phased manner. Once the above works are completed, it would be possible to quantify the AT&C losses more accurately.

Commission's Comments

Even after 7 years of regulatory regime and repeated directions by the Commission in various ARR&ERC orders, KSEB did not earnestly take up any study to assess loss levels in the system, even on a pilot basis. Though 33/11kV study report was committed in February, 2010. Segregation of losses through Load flow study needs to be undertaken by the utility on a routine basis. No justification for non-compliance in this front is acceptable as it is a day to day business for any utility. **The Commission views that the failure of the Board is an example of inefficiency and indifference to system improvement.**

2. Replacement of Faulty meters

The Board shall prepare a plan for replacement of faulty meters and the compliance should be closely monitored with report to the Commission. While replacing faulty meters oldest faulty meters should be replaced first:

Compliance by the Licensee

Vide the letters dated 13-8-2009, 10-11-2009 and 21-11-2009 KSEB has communicated the action taken on faulty meter replacement before the Commission.

The details submitted include total number of faulty meters, meters replaced and also the plan for meter procurement to replace the remaining faulty meters.

Comments of the Commission

The performance of the Board in replacement of meters is not at all satisfactory considering the targets given by the Board itself. Every year considerable number of meters are becoming faulty including the recently replaced ones, which point out towards the need for ensuring quality of the meters being procured.

3. Rationalisation of ToD Tariffs for HT-EHT consumers

The Board shall file a proposal on rationalization of ToD tariffs for the HT-EHT consumers within 2 months from this order.

Compliance by the Licensee

The Board submitted a proposal vide petition dated 24-07-2009 and Commission in its order dated 2-12-2009 had approved the same with some modifications.

Comments of the Commission

The Commission notes the compliance. As directed in the order, KSEB shall study and report on the impact of the revised ToD scheme.

4. Incentive linked Energy efficiency programmes

The Board shall file a proposal for incentives linked energy efficiency programme aiming at reducing the peak load in the system within two months from 17-4-2009

Compliance by the Licensee

KSEB has proposed a non-telescopic tariff for domestic consumers with the intention of reducing peak consumption. However, the Commission has rejected the proposal.

Comments of the Commission

The reply by the Board is not satisfactory since the proposal filed by KSEB was not an incentive linked energy efficiency programme. The Board shall comply with the directive in a time bound **manner ie., within 2 months from the date of this order and inform the Commission whether the Board has any difficulty in implementing such a programme calling for a review..**

5. Implementation plan for Capital projects

The Board shall prepare an implementation plan including procurement plan for all the important capital projects under generation, transmission and distribution with information to the Commission

Compliance by the Licensee

KSEB is in the process of implementing Supply Chain Management System (SCMS) and it is in the final stage. Once it is implemented, the time delay in the procurement of materials can be reduced. When the SCMS become fully operational, KSEB shall submit the report. Now the average lead time through the manual system takes about nine months for the procurement. In order to avoid delay due to the procurement of materials and also to make materials available for the regular maintenance works, Board propose to start procurement of 75% of the quantity consumed in the previous year.

Comments of the Commission

The Commission noted the response and directs that the complete programme shall be operational within 6 months.

6. Collection of Arrears

A detailed plan for realisation of the huge amount of arrears of electricity charges shall be prepared and submitted to the Commission

Compliance by the Licensee

A status report on the outstanding arrears as on 30-06-2009 was communicated to the Commission vide KSEB letter dated 7-11-2009. An age wise analysis of the arrears will be submitted by the end of January-2010.

Comments of the Commission

Based on the reply filed by KSEB and the records before the Commission it is seen that KSEB is not taking any special efforts for collection of arrears. The reason for reduction in arrears in 2008-09 is mainly on account of the write off of arrears of KWA. The task force formed for segregation, analysis and collection of arrears has been wound up. The age wise analysis has not been filed so far. Board's performance on collection of arrears is not satisfactory. Rs.1922.09 crore remains to be collected of which Rs.157.08 crore is from Government departments and

Rs.1123.16 crore from Government undertakings. This is a matter of severe criticism by all objectors at the time of public hearing.

7. Proposal for ToD tariff for LT consumers

A proposal for introducing ToD tariff for LT industrial consumers may be submitted considering the revenue implication and reducing the peak demand.

Compliance by the Licensee

The Board submitted a proposal vide petition dated 24-07-2009 and the Commission had approved the same as an optional scheme for LT industrial consumers with contract demand 30 kVA and above.

Comments of the Commission

Commission notes the compliance with satisfaction

8. Incentivising Off-peak consumption

A proposal for incentivizing the off peak consumption shall be filed by the Board within two months.

Compliance by the Licensee

KSEB has filed a proposal on rationalizing the ToD tariff of HT & EHT consumers and a proposal for introducing ToD tariff for LT consumers with the ultimate objective of incentivising the peak consumption

Comments of the Commission

The Commission notes the compliance

9. Plan for Energy Audit

A Plan for Energy Audit shall be filed within two months from 17-4-2009.

Compliance by the Licensee

The R-APDRP scheme formulated by Central Government, proposed to be implemented in the State addresses the energy audit also.

Comments of the Commission

The Commission is not satisfied by the reply of KSEB since the direction was issued long back. Further 52 schemes as part of APDRP were implemented so far for

energy audit. KSEB could have initiated steps for energy audit with the facilities already created in the APDRP. This also shows the lukewarm approach of the Board towards system improvement.

10. Casewise progress of capital investment projects

The Board shall file scheme wise details of investment proposed for approval

Compliance by the Licensee

The details are furnished to the Commission vide the letter dated 10-11-2009

Comments of the Commission

The report filed by KSEB is incomplete and not in a comprehensible form. The Commission directed KSEB to provide detailed reports and financial viability of capital projects. Though KSEB mentioned that it would be submitted in February, 2010, but finally submitted on 24-4-2010 which are yet to be evaluated.

11. Promotion of renewable sources of energy

The Board shall invite proposals from developers of non-conventional energy sources such as small hydro, wind, solar, and co-generation urgently so as to draw at least the 5% of energy earmarked from such sources

Compliance by the Licensee

A status report on the energy procured from renewable sources during the year is already reported to the Commission vide this office letter dated 12-10-2009. KSEB is implementing SHPs with the ultimate objective to meet the quantity earmarked from renewable sources. KSEB is in the process of inviting competitive bids to procure balance quantity from developers of renewable energy.

Comments of the Commission

The Commission noted the reply

12. Constitution of pension fund

Proposals for pension fund and productivity linked employee cost reduction programme to be submitted

Compliance by the Licensee

The Board has appointed M/s.PFC Consulting Ltd as the consultant to assist KSEB in the restructuring process including recommendations on pension fund and

pension related liabilities. The status will be communicated to the Commission once the same is finalized.

Comments of the Commission

The reply of the Board is not satisfactory. The Commission has sought the reports of the Consultant on number of occasions, which was not provided by the Board stating the reason that the report is at various stages of discussion in Government. **The Board must furnish a copy of the final reports within one month.**

13. Writing off of dues

The write off of dues from KWA and others if any shall not be approved unless it is as per the provision of Section 65 of the Act.

Compliance by the Licensee

As directed by the Government vide the order No. G.O (Ms) No. 45/08/WRD dated 26-09-2008, KSEB has written-off Rs 524.00 crore during the year 2007-08. Since the Commission has declined to approve the proposal, KSEB has further accounted this amount as prior period income for the year 2008-09. Thus, the revenue gap for the year was reduced to Rs 749.17 crore.

Comments of the Commission

Commission noted the reply

14. Plan for Reduction in Breakdowns and Accidents

The major accidents and breakdowns which occurred during the last two years is a grim warning and reminder for time bound maintenance and replacement of plants and equipment whose useful and efficient life span is almost over. KSEB shall urgently take up steps for preparation and execution of a programme for the repair/replacement of these plants and equipments with the approval of the Commission to avoid future mishaps

Compliance by the Licensee

KSEB had prepared the R&M plan for the year 2009-10 and 2010-11 considering these aspects.

Comments of the Commission

In the absence of data on breakdowns, evaluation is not possible. The Commission in any case would specify the performance targets for the Board in generation and

transmission. The Board shall provide the related information in a time bound manner.

15. Directives under National Electricity Policy

Licence wise separation of ARR&ERC, filing of transmission tariff proposals, separation of SLDC, and proposals and methodology on open access charges.

Compliance by the Licensee

Commission notified charges for open access based on the approved ARR.

Comments of the Commission

The Commission notes that the Corporatization of KSEB is not yet complete. However, based on the information available in the Annual Statement of Accounts, licensee wise filing of ARR&ERC is possible. Hence, from 2011-12, separate ARR&ERC shall be filed. In case corporatisation is complete during this year split up ARR&ERC for the year based on the approved figures shall be filed. **The Board shall file the proposals for SLDC charges and other open access charges in a time bound manner.**

16. New bill payment systems

The Board shall introduce new bill payment systems in a time bound manner

Compliance by the Licensee

Not complied so far.

Comments of the Commission

The consumer satisfaction can be improved to a great extent by improving the billing and collection methods. Computerization is an integral part of introducing new methods of billing and collection system.. KSEB has not yet implemented the provisions in the Supply Code on billing/contents of the bill. The Commission notes that the bills are issued with customary disconnection notice, which is against the provisions of the Act/supply code.

17. Performance evaluation of generating stations

KSEB shall provide performance evaluation/Operational details and Availability of machines for BDPP, KDPP

Compliance by the Licensee

Fuel consumption details have been provided. No specific proposal for determining operational parameters provided so far.

Comments of the Commission

Commission needs to decide on the performance of BDPP/KDPP since the cost of power from these plants is high. This will be separately monitored to improve efficiency.

18. Schedules for optimizing internal generation

Compliance by the Licensee

No separate proposal filed

Comments of the Commission

KSEB needs to study and optimize hydro generation. Water management cell needs to be strengthened

2.2 Reduction in T&D Loss

Transmission and distribution loss is one of the major performance parameters monitored by the Commission. The Board has stated in the petition that loss levels have been reduced by about 11.93% between 2001-02 and 2008-09. However, as the following table shows the actual loss levels as well as the loss reduction are always lower than the approved levels.

T&D Loss targets proposed, approved and actuals

| Year | Proposed in the ARR | Approved level | Actual |
|---------|------------------------|-------------------|--------|
| | (%) | (%) | (%) |
| 2003-04 | 26.60 | 26.60 | 27.45 |
| 2004-05 | 24.77 | 24.50 | 24.95 |
| 2005-06 | 22.59 | 21.89 | 22.96 |
| 2006-07 | 21.58 | 20.45 | 21.47 |
| 2007-08 | 19.72 | 19.55 | 20.02 |
| 2008-09 | 18.49 | 17.92 | 18.83 |
| 2009-10 | 17.43 | 16.92 | |

Loss reduction proposed, approved and actual

| Year | Proposed in the ARR (%) | Approved by the Commission (%) | Actual achieved by KSEB (%) |
|--|-------------------------|--------------------------------|-----------------------------|
| 2005-06 | 2.72 | 2.72 | 1.99 |
| 2006-07 | 1.76 | 2.50 | 1.50 |
| 2007-08 | 1.83 | 2.00 | 1.45 |
| 2008-09 | 1.63 | 1.63 | 1.19 |
| 2009-10 | 1.27 | 1.00 | 1.13* |
| *proposed to be achieved as per ARR petition | | | |

Based on the data from KSEB, the Commission notes that the non-achievement of the loss targets proposed by the Board is mainly on account of the shortfall in capital investment and failure in replacing faulty meters. Since no scientific studies are carried out to estimate or cross check the data, the reliability of the loss levels reported by the licensee cannot be vouched for. A detailed analysis of failure in achieving T&D loss targets is presented in Chapter 5. **The reply dated 15-3-2010 from the Board on loss estimation, establishes that there is no internal mechanism established in the Board to verify transmission and distribution losses. This is an unsatisfactory scenario.**

2.3 Management of Receivables:

The Commission has given directions for time bound action for collection of arrears by KSEB. As part of ARR, the Board has given the following table on the status of arrears. It shows that the receivable position is about 86 days of revenue. It is to be mentioned that most of the LT consumer categories such as domestic, commercial, irrigation, industrial LT, etc., the receivables position is better.

Receivable position as on 31-3-2009

| Category | Receivable as on 1-4-2008 | Demand (2008-09) | Collection (2008-09) | Closing balance as on 31-3-2009 | No. of days of revenue |
|-------------------------|---------------------------|------------------|----------------------|---------------------------------|------------------------|
| Domestic | 2.37 | 1135.91 | 1137.31 | 0.97 | 0.07 |
| Commercial | 57.39 | 1116.66 | 1119.10 | 54.95 | 4.10 |
| Public Lighting | 6.60 | 58.95 | 58.98 | 6.57 | 0.49 |
| Irrigation & Dewatering | 23.00 | 30.48 | 34.57 | 18.91 | 1.41 |
| Public Water Works | 578.66 | 136.50 | 330.86 | 384.30 | 28.67 |

| | | | | | |
|---------------------|----------------|----------------|----------------|----------------|--------------|
| Industrial L T | 42.95 | 420.01 | 420.56 | 42.40 | 3.16 |
| Railway Traction | 0.22 | 67.60 | 66.07 | 1.75 | 0.13 |
| Bulk Supply | -3.84 | 144.68 | 140.54 | 0.30 | 0.02 |
| Miscellaneous | 6.67 | 0.00 | 2.43 | 4.24 | 0.32 |
| Industrial (H. T) | 127.07 | 943.56 | 933.41 | 137.22 | 10.24 |
| Industrial(E. H. T) | 517.69 | 399.88 | 411.02 | 506.55 | 37.79 |
| NVVN/Other Traders | 21.01 | 438.79 | 461.53 | -1.73 | (0.13) |
| Inter state | 8.32 | 0.00 | 0.83 | 7.49 | 0.56 |
| Total | 1388.11 | 4893.02 | 5117.21 | 1163.92 | 86.82 |

Based on the above, the collection efficiency for the year 2008-09 works out to be 105% including arrears collected. Accordingly the AT&C loss for the year 2008-09 is worked out as follows

| | 2008-09 |
|-----------------------|----------------|
| T&D loss | 18.83% |
| Collection efficiency | 104.58% |
| AT&C loss | 15.11% |

Since, KSEB has stated that major defaulters are the Government departments and HT-EHT consumers, the Commission has sought further details. The Board has provided status of receivable as on 30-6-2009, as Rs.1922.09 Crore, which is inclusive of the amount receivable from KWA. KSEB has made adjustment of Rs.819.51 Crore on account of receivables from KWA (ie., Rs.250 Crore received from KWA as one time settlement, and balance Rs.569.51 Crore is taken up with Government to provide as subsidy under Section 65) and the net receivable is presented as Rs.1102.58 Crore. The details are given below:

Receivable position as on 30-9-2009

| Particulars | Rs.Crore | % of total |
|--------------------------------------|-----------------|--------------|
| State Govt Departments | 157.08 | 8.2% |
| Agriculture Dept (incl. free supply) | 62.87 | |
| Home dept | 75.38 | |
| Health Dept | 8.49 | |
| Irrigation dept. | 5.70 | |
| Other depts. | 4.64 | |
| State PSUs | 1,123.16 | 58.4% |
| Kerala water authority | 902.77 | |
| M/s Travancore Cochin Chemicals | 83.71 | |

| Particulars | Rs.Crore | % of total |
|--|-----------------|--------------|
| M/s Steel Complex Limited | 60.12 | |
| Others | 76.56 | |
| Local bodies | 13.21 | 0.7% |
| Central Govt. Depts | 0.39 | |
| Central Govt. PSUs (incl.FACT) | 44.50 | 2.3% |
| FACT | 30.26 | |
| Others | 14.24 | |
| Interstate | 4.23 | 0.2% |
| Private Sector | 579.52 | 30.2% |
| Binani Zinc limited | 53.94 | |
| INDAL | 45.91 | |
| Hitech Electro thermals & hydro power | 45.53 | |
| Others | 434.14 | |
| Total | 1,922.09 | 100% |
| Less received from KWA as OTS | 250.00 | |
| Less taken up with Govt under Section 65 | 569.51 | |
| Net outstanding as on 30-9-2009 | 1,102.58 | |

Hence, the comparatively low level of receivable reported was due to removal of dues from KWA. Including this, about 142 days of revenue is blocked as receivables. About 2/3rd of the receivables are from Govt. sector (Rs.1338.34Cr) & about 30.2% of the receivable are from private sector (Rs.579.52 cr). Of the total receivable from Govt. sector, Rs.157.08 Cr are from Govt Departments and Rs.220.39 cr are from PSUs other than KWA. **The Commission directs that following steps be taken immediately to address the issue**

Revive the functioning of Task Force and entrust the following

1. ABC analysis and Age wise analysis of receivables by suitably segregating into into Pvt/Govt sector, litigation/RR cases etc.,
2. Cases held up in litigation to be analysed based on the probability of collection/settlement through negotiation/out of court settlement.
3. Separation of receivables which are completely bad & steps to be taken to write off
4. Receivables from the Govt dept./PSUs may be realised by taking up with the Govt. for additional budgetary allocation of funds.
5. Devise schemes for collection by giving incentives such as write off of excess surcharge etc.,

Action taken should be reported on a quarterly basis to the Commission.

2.4 Performance of Generating Stations

I. Hydro Stations:

In the case of hydro stations, plant availability and auxiliary consumption are generally taken as the benchmark parameters for performance evaluation. The availability achieved by the storage hydro stations of the Board in 2008-09 is given in the following table. The availability is estimated based on the planned shutdown hours and forced shutdown hours i.e., $[1 - (\text{planned shutdown} + \text{forced shutdown}) * 100]$

Availability of Generating Stations

| Stations | UNIT-1 | UNIT-2 | UNIT-3 | UNIT-4 | UNIT-5 | UNIT-6 | Overall Average |
|----------------|--------|--------|--------|--------|--------|--------|-----------------|
| Idukki | 87% | 79% | 84% | 90% | 90% | 88% | 86% |
| Sabarigiri | 12% | 14% | 12% | 12% | 72% | 78% | 33% |
| Neriamangalam | 89% | 90% | 99% | 52% | | | 82% |
| Sengulam | 97% | 80% | 86% | 85% | | | 87% |
| Panniar | 0% | 0% | | | | | 0% |
| Edamalayaar | 80% | 84% | | | | | 82% |
| Pallivasal | 47% | 40% | 98% | 98% | 84% | 84% | 75% |
| Poringalkutthu | 98% | 47% | 79% | 90% | 96% | | 82% |
| Kuttiadi | 92% | 86% | 96% | 84% | | | 90% |
| Sholayar | 91% | 85% | 83% | | | | 86% |
| Lower periyar | 91% | 91% | 90% | | | | 91% |

Except few stations, the average availability is above 80%. Though overall availability is better, for some units, the availability is much below the average. As per the CERC norms, the availability for recovery of full fixed cost for storage hydro plants ranges from 85% to 90%. Going by that standard, only Idukki, Sengulam, Kuttiadi, Sholayar and Lower periyar stations have availability between 85% to 90%. The auxiliary consumption for the hydro plants are assumed as 0.5% by the Board in projecting the revenue requirements. However these numbers need to be validated using previous years data.

The Commission is of the view that there is considerable scope for improvement in the performance of all stations. The Commission would like to fix norms for each plants considering the specific conditions of each plant. **Hence, the Board shall submit a detailed comprehensive proposal including actual performance of the Stations within three month of the date of this order**

II Diesel Stations

In the case of diesel plants, in addition to availability, heat rate, auxiliary consumption, specific oil consumption, etc., should also be taken into consideration.

The availability reported for the year 2008-09 for BDPP is given below. Board did not provide the data for KDPP. Hence the data provided as part of ARR&ERC for 2009-10 (6months) was used for comparison.

Availability factor BDPP & KDPP for 2008-09

| Unit | KDPP (6months) | BDPP |
|----------------|-------------------|------|
| 1 | 93% | 54% |
| 2 | 0% | 86% |
| 3 | 87% | 67% |
| 4 | 74% | 67% |
| 5 | 66% | 70% |
| 6 | 80% | |
| 7 | 60% | |
| 8 | 89% | |
| Average | 69% | 69% |

The overall average availability reported by the Board is 69%. In comparison with the availability of similar plants (80%) elsewhere the availability achieved by the Board is lower. The Commission has sought the details of other benchmark parameters of BDPP and KDPP for 2009-10. The data provided by KSEB is as follows:

Benchmark parameters for BDPP and KDPP

| Month | BDPP | | | KDPP | | |
|----------------|-----------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|
| | Gross Generation (MU) | Heat Rate (kcal/kWh) | Cal. Value (kCal/kg) | Gross Generation (MU) | Heat Rate (kcal/kWh) | Cal. Value (kcal/kg) |
| April | 28.62 | 1,887.12 | 9528 | 41.06 | 1994.77 | 9711 |
| May | 26.34 | 1,880.16 | 9528 | 31.46 | 2019.94 | 9711 |
| June | 10.27 | 1,865.30 | 9528 | 22.56 | 2020.16 | 9711 |
| July | 15.43 | 1,899.59 | 10020 | 15.69 | 2037.61 | 9711 |
| Aug | 6.99 | 1,955.28 | 10020 | 34.32 | 2018.51 | 9711 |
| Sept | 14.91 | 1,980.65 | 10020 | 19.72 | 1981.25 | 9711 |
| October | 19.84 | 1,982.36 | 10020 | 24.17 | 2020.82 | 9711 |
| November | 17.17 | 1,966.02 | 10020 | 19.48 | 2005.92 | 9711 |
| December | 15.66 | 1,998.19 | 10020 | 28.70 | 2016.60 | 9711 |
| Average | | 1,934.96 | 9856 | | 2012.84 | 9711 |

Determination of benchmark parameters:

The Commission convened a meeting with KSEB for determining the benchmark parameters for the diesel stations on 16-4-2010.. In the meeting KSEB has proposed that while considering the plant parameters as per manufacturers specifications proper derating factors should also be considered. KSEB argued that the norms shall be fixed considering all the normative parameters rather than the

actual values and agreed to file the proposal separately. The Commission is of the view that the parameters initially shall be based on the actual values and improvements shall be considered based on that. **Accordingly the Commission directs KSEB to provide the proposal for determining the parameters within one month from date of this order.**

Possibility of Conversion of BDPP/KDPP in to Gas fired stations:

The operating cost of diesel stations have increased considerably due to increase in fuel prices. Considering the high cost of liquid fuels and the imminent availability of LNG, the Commission is of the view that these stations can be converted to gas based stations to reduce the fuel cost. Hence, the Commission would welcome any steps taken by the KSEB in this direction.

III Performance parameters for Transmission

As per the CERC norms the normative annual transmission system availability factor for AC system is 98%. The Board has not provided the availability of various transmission systems and lines. **The Commission will initiate the process of determining the availability factor for transmission in 2010-11 itself.** The Board shall provide the actual availability parameters for transmission system.

IV. Parameters for Distribution system

The parameters for distribution system shall be the standards of performance determined by the Commission along with parameters like SAIFI, SAIDI, CAIDI etc. The Commission shall determine such parameters in due course.

The Commission directs that within in three months of the date of this order, the Board shall forward comprehensive plan for operation of the generating stations and transmission system with all supporting details to the Commission. The Commission shall make suitable modifications in the CERC norms considering the actual operations, before finalizing the same. The norms decided shall be applicable for 2010-11.

2.5. Capital expenditure programme and Project execution:

The Commission has noted that there is substantial delay in the commissioning of projects by the Board. The Commission notes that the commercial operation of

Kuttiyadi Additional Extension has been delayed by nearly two years. In the ARR for 2008-09 it was reported that the plant would be operational by May 2009. However the same was extended to March 2010 in 2009-10 ARR. Even now the plant is not on stream. Similar is the case with projects such as Kuttiyadi tail race, Nariyamangalam extension, Azhutha diversion, Kuttiyar diversion, Pallivasal extension etc., This substantial delay needs to be explained by the Board. This is the case with Sabarigiri renovation also. In the ARR for 2009-10, KSEB had committed that unit 3 of Sabarigiri project would be completed by 9/2009. The Commission sought the reasons for the delay in the completion of projects. In the reply the Board has stated that there were hardly two months of delay in completing the repair works against the time frame given in ARR. According to the Board *'it is difficult to precisely estimate the time required for completing such technically complex work. However, due to the sincere and dedicated efforts of the employees of the Board, it was able to complete the works within reasonable time limit'*. According to the Board since there was no spill from the dam during the delay no loss on occurred this account.

However, such reply from a technically professional organisation is not acceptable. The Commission also notes that the Board has resorted to power purchase in the month of October 2009, without the approval from the Commission. **It can be reasonably believed that such purchase was resorted to even when internal resources are available in order to compensate for the delay in commissioning the Sabarigiri 3rd unit.**

In the case of Kuttiyadi Additional Extension substantial delay has occurred. In the ARR for 2009-10, KSEB has stated that Kuttiyadi Additional Extension (100 MW) would be operational from June 2009 and 209 MU from the project would be scheduled. In the reply dated 5-3-2010, Board stated that 93% of the work is completed and earnest efforts are taken to complete the works so as to commission the project by March 2010. The reasons for the delay given by the Board are as follows:

1. Delay in handing over of land – total delay 1039 days from November 2003
2. Heavy rain (9-10-2008 to 26-10-2008) and consequent breach of PWD road - 30 days
3. Unforeseen subsurface conditions and design change (date not mentioned) – 5 months
4. Ban on rock blasting by the Dist. Collector (16-6-2006 to 27-11-2006) – 165 days

5. Protest of local residents on blasting rocks (March 2009-Sept 2009) – 4.5 months
6. Heavy rain from 15-6-2009 to 15-7-2009 at the site - one month
7. Land slide on PWD road (18-7-2009 and 11-8-2009) – 6 days
8. Delay due to land slide, road blocks in monsoon season - 3 months
9. Unprecedented rains first week of November 2009 – 10 days
10. Severe rains during evening hours from 27-31st December

It may be noted that there are already 10 months of delay upto March 2010 on commissioning the KAE project considering the revised time frame given by the Board in the ARR&ERC 2009-10. The original target as per the five year plan was in 2007-08. In any case delay on account of *force majeure* conditions are generally anticipated in the project scheduling. Even if adequate allowance is given, the reasons given above do not substantiate 10 months delay. Further the first 5 reasons are beyond the scope of the analysis since they occurred before the committed date June 2009. It is also to be noted that due to the delay the Board had resorted to drawl of UI and purchase of energy from traders and power exchanges in June, August, September (130.56 MU), and from October to March. The cost of delay to the consumers is the cost of additional purchase necessitated and it will be a good practice if the cost is properly assessed in monetary terms and imposed on the Board considering the regular delay in execution of projects and capital programmes.

Transmission Schemes

The Commission also notes that there is substantial delay in completion of transmission projects. The Commission could not assess the time over run and cost overrun of projects since such required information is not yet made available by the Board even after repeated directions..

Distribution schemes

The major programmes in Distribution such as APDRP and RGGVY programmes for the 10th plan period is completed in 2008. Hence, the Commission has decided to evaluate the performance of the Board in this regard.

APDRP Scheme

The Central Government introduced the Accelerated Power Development programme for modernizing the distribution sector in the country. The scheme was later modified

as Accelerated Power Development Reforms Programme (APDRP). APDRP focuses on upgradation of Sub-Transmission and Distribution in densely electrified zones in the urban and industrial areas and improvement in the commercial viability of State Electricity Boards. It has two components: (a).Investment component for strengthening and upgradation of the sub-transmission and distribution system (b)Incentive component to encourage/ motivate utilities to reduce cash losses.

Under the investment component 25% of the project cost will be grant and balance has to be arranged by SEBs through own resources or from PFC/REC or other financial institutions. As a part of the incentive component, an incentive equivalent to 50% of the actual cash loss reduction by SEBs/ Utilities, is provided as grant by Government of India.

Evaluation of scheme for 10th plan period for KSEB:

From the documents available, it can be inferred that about Rs.250 crore was received as Grant by the Board under the two schemes from Government of India.

A. Incentive scheme

As per the cash incentive scheme the Board has received Rs.147.93 crore as grant from Gol. Of the 9 States which received incentives, position of Kerala is 6th thereby receiving about 5% of total Rs.2880 crore disbursed by the Government of India. Kerala could receive the incentive only for two years 2002-03 and 2004-05. The details are given below:

Cash incentives received under APDRP (Source: Govt. of India)

| State | Reduction in cash loss | Eligibility | Amount released | Claim year |
|----------------|-------------------------------|--------------------|------------------------|---------------------------------|
| Gujarat | 2078.62 | 1039.31 | 1039.31 | 2001-02,2002-03,2004-05,2005-06 |
| West Bengal | 993.48 | 496.74 | 496.74 | 2002-03,2003-04,2004-05,2005-06 |
| Madhya Pradesh | 595.22 | 297.61 | 297.61 | 2002-03 |
| Andhra Pradesh | 530.22 | 265.11 | 265.11 | 2002-03 |
| Punjab | 503.88 | 251.94 | 251.94 | 2003-04 |
| Kerala | 295.86 | 147.93 | 147.93 | 2002-03,2004-05 |
| Maharashtra | 275.78 | 137.89 | 137.89 | 2001-02 |
| Rajasthan | 275.42 | 137.71 | 137.71 | 2001-02 |
| Haryana | 210.98 | 105.99 | 105.99 | 2001-02,2002-03,2004-05, |
| Total | | | 2880.23 | |

b. Investment component

In the ARR & ERC 2006-07, KSEB had stated that APDRP schemes inter alia cover installation of energy meters, construction and re-conductoring of 11kV lines, installation of 100 kVA transformers, computerisation of billing etc, so as to reduce T&D loss, facilitate new service connections and accounting of energy. There are in total 52 schemes sanctioned for Kerala as shown below.

| | Date of sanction | Project Cost (Rs. Crore) | Scheme period |
|------------------|------------------|--------------------------|---------------|
| 3 circle schemes | 26-8-2002 | 181.59 | December 2005 |
| 7 town schemes | 27-11-2002 | 168.76 | March 2006 |
| 26 town schemes | 1-10-2004 | 123.91 | March 2006 |
| 13 town schemes | 4-4-2005 | 57.18 | March 2007 |
| 3 city schemes | 4-4-2005 | 373.57 | March 2008 |
| | | 905.01 | |

Progress

The Commission sought the complete details of the scheme and the achievements. The information provided by KSEB was incomplete and hence the Commission also referred to the information available from Govt. of India. At the close of the project (10th Plan), the achievement of different States are listed below:

State wise status of APDRP Project implementation

| States | Total Project outlay (Rs. Crore) | No. of Projects | Utilisation (Rs. Crore) | Percentage |
|----------------|----------------------------------|-----------------|-------------------------|------------|
| Delhi | 211.02 | 2 | 211.02 | 100% |
| Uttar Pradesh | 1069.25 | 35 | 996.51 | 93% |
| Bihar | 823.15 | 15 | 764.95 | 93% |
| Gujarat | 1083.22 | 13 | 989.51 | 91% |
| Andhra Pradesh | 1127.12 | 100 | 962.51 | 85% |
| West Bengal | 441.85 | 20 | 371.74 | 84% |
| Karnataka | 1186.31 | 35 | 958.94 | 81% |
| Goa | 288.94 | 7 | 227.17 | 79% |
| Tamil Nadu | 948.12 | 41 | 724.14 | 76% |
| Rajasthan | 1193.25 | 29 | 885.06 | 74% |
| Haryana | 431.95 | 18 | 307.97 | 71% |
| Chattisgarh | 353.33 | 7 | 244.47 | 69% |
| Maharashtra | 1643.12 | 34 | 1135.95 | 69% |
| Punjab | 715.57 | 26 | 430.45 | 60% |
| Madhya Pradesh | 663.2 | 48 | 377.33 | 57% |
| Jharkhand | 423.65 | 8 | 228.24 | 54% |
| Kerala | 858.5 | 52 | 429.68 | 50% |
| Orissa | 206.73 | 4 | 41.79 | 20% |
| Total | 13668.28 | 494 | 10287.43 | 75% |

The achievement of Kerala in terms of utilisation of projects was not satisfactory. The position of Kerala is second last, next to Orissa. In the case of Orissa, the failure was attributed to failure in arranging counterpart funding for the privatised utilises. If Orissa is left out, Kerala will rank as the last State in terms of achievement (50%), the national average is 75%. Such unsatisfactory performance needs to be seriously viewed since as per the scheme 25% of the project outlay is available as grant and failure to implement the project means failure to utilise the opportunity to benefit from the eligible subsidy to the tune of Rs.214 Crore.

As per the information available from Government of India, total project outlay of Rs.858.50 Crore was sanctioned by Government of India. Of this 25% of the cost (Rs.214.62 Crore) would be available as APDRP grant and balance 75% will be the counterpart funding. As per the information available, the funds allocation and utilisation are as follows:

| As per Government of India (as on 30-11-2009) (Rs. Crore) | |
|---|---------------|
| Total Project Cost | 858.50 |
| APDRP (Grant) | 214.63 |
| APDRP(Loan) | 115.28 |
| Total APDRP component | 329.90 |
| Total Released by Gol | 248.57 |
| Total Utilisation | 428.98 |
| Counter Part Funding | 182.59 |

As per the scheme, of the total project outlay, 50% is from Government of India comprised of 25% of the project outlay as grant and balance 25% from Gol share to be arranged from FIIs. The balance 50% is the counterpart funding to be arranged by SEBs/FII. As per the above table Kerala was allowed Rs.329.90 crore (Rs.214.63 crore (65%) grant component and Rs.115.28Crore (35%) loan component) as APDRP funds. The Grant component of Rs.214.63 Crore is 25% of project outlay. As on the close of the scheme, Rs.248.57 Crore was released by the Gol, which included the both grant and loan in the APDRP component. The above table reveals that Kerala could receive only Rs.248.57 Crore as central funds, which is about 50% of the total utilisation. The exact details of grant component received by the Board is not available with the Commission. Hence it could be inferred that between Rs.107 Crore (50% of the total utilisation) and Rs.167 Crore (65%of the total funds released

by Gol) was received as grant. Thus of the possible Rs.214.63 Crore about Rs.107 crore which would have been available as grant was lost to the Board.

Overall Status of APDRP scheme reported by KSEB

| Scheme Name | | Final scheme | Executed | Allowable | Schemes Short Closed | Details of project short closed | Overall status |
|------------------------------|--------------|---------------|---------------|---------------|----------------------|--|----------------|
| Circle scheme (3 schemes) | Cat A | 85.24 | 86.90 | 86.90 | | Pathanamthitta scheme (Rs.40.41crore) | Short Closed |
| | Cat B | 57.86 | 57.28 | 56.19 | | | |
| | Total | 143.10 | 144.18 | 143.10 | 40.41 | | |
| Town scheme (7 schemes) | Cat A | 78.17 | 71.69 | 71.69 | | Kollam (Rs.15.30 cr), Cochin(Rs.53.78cr), Kannur (Rs.17.49Cr) & Talassery (Rs.10.39 Cr) | Short Closed |
| | Cat B | 82.57 | 98.91 | 80.04 | | | |
| | Total | 160.74 | 170.60 | 151.73 | 96.96 | | |
| Town scheme (26 schemes) | Cat A | 41.48 | 52.58 | 52.58 | | Shournur (Rs.2.28 cr) Ottappalam (Rs.2.33 Cr) | Short closed |
| | Cat B | 82.45 | 87.13 | 71.19 | | | |
| | Total | 123.93 | 139.71 | 123.76 | 4.61 | | |
| Town Scheme (13 schemes) | Cat A | 15.84 | 18.89 | 18.89 | | Attingal (Rs.3.49 cr.), Varkala(Rs.4.14cr), Pala(Rs.5.02cr), Taliparamba (Rs.7.63 Cr), Kuthuparambu(2.46 Cr) | Short closed |
| | Cat B | 41.35 | 43.92 | 36.92 | | | |
| | Total | 57.18 | 62.81 | 55.81 | 22.74 | | |
| City Scheme (3 schemes) | Cat A | 232.56 | 30.25 | 30.25 | | All schemes short closed | Short Closed |
| | Cat B | 141.00 | 51.94 | 51.94 | | | |
| | Total | 373.56 | 82.19 | 82.19 | 373.56 | | |
| Total 52 Schemes | Cat A | 453.29 | 260.31 | 260.31 | | | |
| | Cat B | 405.23 | 339.18 | 296.28 | | | |
| | Total | 858.52 | 599.49 | 556.60 | 538.28 | | |

As per the information provided by the Board as shown above, of the total Rs.858.52 Crore, projects worth of Rs.538.28 crore have been short closed, showing the undesirable state of affairs. The achievements of the projects are reported as follows:

| Metering | APDRP Achievement | |
|---------------------------|-------------------|-----|
| Feeder meters | 871 | Nos |
| Boarder Meters | 3497 | Nos |
| DT meters | 15943 | Nos |
| Single phase meters | 2208161 | Nos |
| Three phase meters | 189537 | Nos |
| Consumer indexing | 2975055 | Nos |
| Computerised data logging | 107 | Nos |
| Computerised billing | 267 | Nos |
| R&M | | |
| Distribution transformers | 15023 | Nos |

| | | |
|-----------------------------------|------|-----|
| 220kV/110kV/33kV/11kV substations | 114 | Nos |
| Call centre | 231 | Nos |
| New | | |
| 11kV lines | 3597 | km |
| 11kV UG lnes | 207 | Km |
| LT lines | 1051 | km |
| 33/11kV SS | 9 | Nos |
| 66kV SS | 2 | Nos |
| 11kV VCB | 113 | Nos |
| Reconductoring | | |
| 11kV | 981 | Km |
| LT lines | 655 | Km |
| DTs | 3855 | nos |

The major thrust area of the project was to strengthen the distribution system and to introduce proper energy audit systems and energy accounting measures. It is pertinent to note that about 3500 boarder and about 16000 Distribution transformer meters were installed by the Board under the scheme. Further 29lakh consumers were indexed, 267 computerised billing systems created and 107 computerised data logging centres installed. This being the situation, the Board could not produce any preliminary estimates of energy losses even on a sample basis. The reason given by the Board for not conducting the energy audit was lack of metering facilities and inaccurate panels in the system. This reflects a serious loss of investments possible under the scheme, which needs to be viewed seriously. It is also pertinent to note that of the total 45 lakh faulty meters replaced about 24lakh meters were procured under this scheme. It is also worth to note that of the total 46510 distribution transformers 34% (15943) are metered. Of the total 9931 km of 11kV lines added between 2003-04 to 2008-09, about 4700km are under the scheme. As per the progress report during the period provided by the Board, a total 13482nos of distribution transformers were newly installed. However, the progress report of the scheme shows that in the scheme itself 15023nos of transfers were erected as part of Renovation & Modernisation and 3855 nos of new transformers were installed. This discrepancy in the data needs to be rectified.

RGVY scheme

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGVY) was launched in April-05 by merging all ongoing schemes. **Major attraction of the scheme is that under the programme 90% grant is provided by Govt. of India and 10% as loan by REC to the State Governments.** REC is the nodal agency for the programme. The objective of the scheme is to electrify all villages and habitations and to provide access to

electricity to all rural households. Providing electricity connection to Below Poverty Line (BPL) families free of cost is the major objective of the scheme. The project funding can be utilised for establishing Rural Electricity Distribution Backbone (REDB) with 33/11 KV (or 66/11 KV) sub-station and Village Electrification Infrastructure (VEI). The scheme is implemented with the involvement of the central public sector undertakings of Ministry of Power and projects were implemented on a turnkey basis. Certification of electrified village has to be given by the concerned Gram Panchayat. It is envisaged that franchisees to be deployed for the management of rural distribution for better consumer service and reduction in losses. Release of funds is linked to achievement of pre-determined milestones. The State Government has also to notify the Rural electrification plan.

RGVY is another important scheme in which the Board has missed the opportunity for harnessing substantial amount of grant from Government of India for the complete rural electrification of the State. Government of India bears 90% of the cost as grants. Proposal for an outlay of Rs.438.35 crore as detailed below were forwarded to Gol and sanction was received for implementing the scheme in 7 districts at an estimated cost of Rs.221.75 crore on 5-8-2005 as shown below.

| Scheme | Target | Cost (Rs.crore) |
|---|--|------------------------|
| Village electrification infrastructure | 3575 un electrified habitats in 930 revenue villages | 343.78 |
| Rural electricity distribution backbone | 1 no. of 66/11kV substation and 18 33/11kV substations | 94.57 |
| Total | | 438.35 |

| Districts covered | Project outlay Rs. Crore |
|-------------------|--------------------------|
| Kasaragod | 16.68 |
| Wyanad | 44.20 |
| Kannur | 23.08 |
| Kozhikode | 54.84 |
| Malappuram | 38.36 |
| Palakkad | 24.84 |
| Idukki | 19.76 |
| Total | 221.76 |

As per the status report provided by KSEB the scheme was implemented only in Idukki district. In Idukki, the total scheme sanctioned was for Rs.19.75 crore and the tender was awarded at about 20% above the rate. Of this as on 29-1-2010, Rs.16.55 Crore was sanctioned by REC and Rs.10 crore was spent. In all other districts, quoted rates by the turnkey contractors were to the tune of 80 to 85% over the

estimates. A quadripartite agreement was signed on 15-2-2007 for the other 6 districts by GoK, KSEB, REC and NESCL (NTPC electricity supply company). Revised schemes for Palakkad and Wyanad were forwarded to REC, but the scheme will be considered in the 2nd phase in the 11th plan only. Based on the discussion with Govt of Kerala and Govt of India, Govt of India directed to consider the 6 northern schemes with revised cost estimates under RGGVY. The revised scheme for 11th plan is as given below:

| Revised scheme for Malabar | | In principle approval | |
|----------------------------|---------------|-----------------------|--------------|
| Districts | Rs. Crore | Districts | Rs.Crore |
| Kasaragod | 13.59 | Thiruvananthapuram | 13.02 |
| Wyanad | 13.36 | Kollam | 9.40 |
| Kannur | 18.34 | Pathanamthitta | 18.56 |
| Kozhikode | 15.87 | Alappuzha | 23.90 |
| Malappuram | 30.35 | Kottayam | 6.23 |
| Palakkad | 15.21 | Ernakulam | 11.01 |
| | | Thrissur | 17.13 |
| Total | 106.71 | Total | 99.25 |

It may be noted that in the revised scheme **projects worth Rs.106.71 were only approved by Gol instead of Rs.221.76 Crore allowed earlier. In effect projects worth Rs.95.27 crore was lost in the revised scheme.** Projects worth Rs.99.25 crore could only be submitted for other districts. As against this, achievement of other States are self explanatory as per the status report published by Government of India (as on **15-3-2010**), with the same project conditionality as was applicable to the Board. The performance of Board for a scheme for which 90% of the project cost is grant is by all parameters disappointing. The Board could submit proposals for only 50% of the districts, which was the lowest percentage in India, which also shows under performance even in project formulation. Of the Rs.19,723 Crore sanctioned, the Board could **get only 0.2%**. In terms of total projects the achievement of the Board out of 573 projects, is only 1. The following table on the performance is self explanatory.

Physical & Financial Progress of RGGVY Projects Under Implementation (State-wise) (Source GOI)

| S No. | State/UT Name (Total No. of Districts) | No. of DPRs submitted | % district covered | Project cost | | |
|-------|---|-----------------------|--------------------|-------------------------------------|-----------------------------------|------|
| | | | | Project Cost Sanctioned (in Rs.Cr.) | Total Amount Released (in Rs.Cr.) | % |
| 1 | Sikkim (4) | 4 | 100% | 57.11 | 88.65 | 155% |
| 2 | Mizoram (8) | 8 | 100% | 104.25 | 159.97 | 153% |
| 3 | Uttar Pradesh (70) | 64 | 91% | 2719.51 | 3171.63 | 117% |
| 4 | Nagaland (11) | 11 | 100% | 111.17 | 123.74 | 111% |
| 5 | Karnataka (27) | 25 | 93% | 595.32 | 620.59 | 104% |

| | | | | | | |
|----|---------------------------------|------------|------------|-----------------|-----------------|------------|
| 6 | Uttarakhand (13) | 13 | 100% | 643.89 | 655.05 | 102% |
| 7 | Jharkhand (22) | 22 | 100% | 2662.61 | 2587.09 | 97% |
| 8 | Bihar(38) | 43 | 113% | 2975.90 | 2839.49 | 95% |
| 9 | Jammu & Kashmir (14) | 14 | 100% | 635.94 | 595.87 | 94% |
| 10 | Himachal Pradesh (12) | 12 | 100% | 205.26 | 167.87 | 82% |
| 11 | Arunachal Pradesh (16) | 16 | 100% | 537.69 | 395.21 | 74% |
| 12 | Haryana (20) | 18 | 90% | 197.40 | 135.51 | 69% |
| 13 | Andhra Pradesh (23) | 26 | 113% | 840.10 | 556.29 | 66% |
| 14 | West Bengal (18) | 28 | 156% | 2345.28 | 1527.91 | 65% |
| 15 | Assam (23) | 23 | 100% | 1660.35 | 1044.43 | 63% |
| 16 | Rajasthan (32) | 40 | 125% | 1254.49 | 704.5 | 56% |
| 17 | Orissa (30) | 31 | 103% | 3575.12 | 2001.88 | 56% |
| 18 | Maharashtra (36) | 34 | 94% | 713.44 | 385.18 | 54% |
| 19 | Meghalaya (7) | 7 | 100% | 290.42 | 155.95 | 54% |
| 20 | Tamil Nadu (30) | 26 | 87% | 447.41 | 236.79 | 53% |
| 21 | Madhya Pradesh (48) | 32 | 67% | 1465.66 | 757.38 | 52% |
| 22 | Gujarat (25) | 25 | 100% | 360.44 | 167.02 | 46% |
| 23 | Tripura (4) | 4 | 100% | 131.47 | 57.88 | 44% |
| 24 | Punjab (17) | 17 | 100% | 154.37 | 59.9 | 39% |
| 25 | Chhattisgarh (16) | 14 | 88% | 1105.22 | 374.77 | 34% |
| 26 | Manipur (9) | 9 | 100% | 357.80 | 121.11 | 34% |
| 27 | Kerala (14) | 7 | 50% | 221.76 | 31.55 | 14% |
| | Total of All States(587) | 573 | 98% | 26369.37 | 19723.21 | 75% |

Project achievement in terms of different parameters (Source Govt. of India)

| S No. | State/UT Name (Total No. of Districts) | Electrification of Un-/De-Electrified villages | | | Intensive Electrification of Electrified villages | | | No. of Connections to Rural Households including BPL | | | No. of Connections to BPL Households | | |
|-------|--|--|--------------------|------------|---|--------------------|------------|--|--------------------|------------|--------------------------------------|--------------------|------------|
| | | Coverage in No. | Achievement in No. | % | Coverage in No. | Achievement in No. | % | Coverage in No. | Achievement in No. | % | Coverage in No. | Achievement in No. | % |
| 1 | SIKKIM (4) | 25 | 0 | 0% | 418 | 0 | 0% | 28166 | 0 | 0% | 11458 | 66 | 1% |
| 2 | MIZORAM (8) | 137 | 0 | 0% | 570 | 0 | 0% | 44334 | 378 | 1% | 27417 | 378 | 1% |
| 3 | UTTAR PRADESH (70) | 30802 | 27736 | 90% | 3287 | 2741 | 83% | 1694075 | 853879 | 50% | 1120648 | 853879 | 76% |
| 4 | NAGALAND (11) | 105 | 14 | 13% | 1152 | 81 | 7% | 142992 | 4368 | 3% | 69900 | 4368 | 6% |
| 5 | KARNATAKA (27) | 132 | 58 | 44% | 28191 | 21550 | 76% | 1932797 | 825522 | 43% | 891939 | 735488 | 82% |
| 6 | UTTARAKHAND (13) | 1469 | 1481 | 101% | 14105 | 8117 | 58% | 357309 | 205674 | 58% | 281615 | 205674 | 73% |
| 7 | JHARKHAND (22) | 19737 | 12533 | 64% | 7622 | 3889 | 51% | 2926260 | 781068 | 27% | 1691797 | 781068 | 46% |
| 8 | BIHAR(38) | 23211 | 18836 | 81% | 6651 | 940 | 14% | 6022036 | 1093081 | 18% | 2762455 | 1093081 | 40% |
| 9 | JAMMU & KASHMIR (14) | 283 | 63 | 22% | 6050 | 1249 | 21% | 295221 | 20962 | 7% | 136730 | 20962 | 15% |
| 10 | HIMACHAL PRADESH (12) | 93 | 0 | 0% | 10666 | 1059 | 10% | 36479 | 2163 | 6% | 12448 | 540 | 4% |
| 11 | ARUNACHAL PRADESH (16) | 2129 | 227 | 11% | 1756 | 135 | 8% | 76407 | 2080 | 3% | 40810 | 976 | 2% |
| 12 | HARYANA (20) | 0 | 0 | 0% | 5985 | 2033 | 34% | 569686 | 93290 | 16% | 224073 | 93290 | 42% |
| 13 | ANDHRA PRADESH (23) | 0 | 0 | 0% | 27481 | 19377 | 71% | 3954128 | 2698446 | 68% | 2592140 | 2245904 | 87% |
| 14 | WEST BENGAL (18) | 4573 | 4048 | 89% | 24775 | 1909 | 8% | 3974005 | 450839 | 11% | 2699734 | 423429 | 16% |
| 15 | ASSAM (23) | 8525 | 1863 | 22% | 13330 | 2712 | 20% | 1414828 | 217179 | 15% | 991656 | 217179 | 22% |
| 16 | RAJASTHAN (32) | 4454 | 2559 | 57% | 34841 | 18349 | 53% | 2229442 | 1164756 | 52% | 1750118 | 695180 | 40% |
| 17 | ORISSA (30) | 17895 | 6286 | 35% | 28992 | 5431 | 19% | 4858292 | 751337 | 15% | 3185863 | 751337 | 24% |
| 18 | MAHARASHTRA (36) | 6 | 0 | 0% | 40292 | 7159 | 18% | 2633742 | 631028 | 24% | 1876391 | 631028 | 34% |
| 19 | MEGHALAYA (7) | 1943 | 137 | 7% | 3536 | 717 | 20% | 188648 | 19096 | 10% | 116447 | 19096 | 16% |
| 20 | TAMIL NADU (30) | 0 | 0 | 0% | 12416 | 0 | 0% | 1692235 | 355040 | 21% | 545511 | 355040 | 65% |
| 21 | MADHYA PRADESH (48) | 796 | 89 | 11% | 32788 | 5031 | 15% | 2511813 | 180279 | 7% | 1337537 | 152602 | 11% |
| 22 | GUJARAT (25) | 0 | 0 | 0% | 17934 | 4019 | 22% | 1595853 | 280123 | 18% | 955150 | 280123 | 29% |
| 23 | TRIPURA (4) | 160 | 8 | 5% | 642 | 47 | 7% | 228759 | 19661 | 9% | 194730 | 19661 | 10% |
| 24 | PUNJAB (17) | 0 | 0 | 0% | 11840 | 0 | 0% | 405023 | 19507 | 5% | 148860 | 19507 | 13% |
| 25 | CHHATTISGARH (16) | 1132 | 96 | 8% | 16333 | 3732 | 23% | 1285545 | 351282 | 27% | 777165 | 224716 | 29% |
| 26 | MANIPUR (9) | 882 | 128 | 15% | 1378 | 99 | 7% | 192148 | 4996 | 3% | 107369 | 4996 | 5% |
| 27 | KERALA (14) | 0 | 0 | 0% | 604 | 29 | 5% | 76011 | 16121 | 21% | 90128 | 16121 | 18% |
| | TOTAL OF ALL STATES(587) | 118489 | 76162 | 64% | 353635 | 110405 | 31% | 41366234 | 11042155 | 27% | 24640089 | 9845689 | 40% |

The achievement of the Board is less than 50% of the national average. The less than satisfactory implementation of the scheme has a bearing on the quality of service given to the consumers and their costs.

F. Distribution automation and computerization:

According to the information available with the Commission, billing computerization has been completed in all the sections. The Commission in the previous ARR Order had given directions to implement new bill payment systems for the benefit of the consumers. In order to have energy audit systems and bill payment systems in place, computerization and networking have to be completed. According to the Board complete computerization will be possible once the Part A of R-APDRP scheme is completed. The major aim of R-APDRP is that once the system is in place both regulatory and commercial/technical systems will be integrated and data flow for monitoring will be in place. The system will be capable of energy auditing, loss estimation, performance evaluation (Standards of performance), complaints redressal system etc., However, **it may be noted that delay in networking of section offices and integrating the existing billing system with comprehensive system planned under R-APDRP may delay the process of complete computerization. As envisaged in the R-APDRP, the Commission will monitor the implementation of Part A & B of the project since 100% of the project cost of part A and 25% of part B will be converted into grant.**

2.6. Compliance on Standards of Performance:

The Commission has issued Kerala State Electricity Regulatory Commission (Licensees' Standards of Performance) Regulations, 2006 applicable to distribution licensees as per section 57 and Section 59 of the Act with effect from 1-11-2006. All other licensees in the State except KSEB have implemented the regulations. The implementation of the regulation was extended based on the request of the Board, initially to 1-5-2007 and further to 1-11-2007, 1-5-2008, 1-11-2008 and finally to 1-4-2009. The Board has agreed to implement the regulation with effect from 1-4-2009. On inspection of various 'Model Sections' by the Commission, it was revealed that no basic facilities are made available to implement the performance standards. In many cases, proper registers are not even maintained for registering and monitoring complaints. The Commission vide letter dated 26-8-2009 instructed the Special Officer, KSEB to issue necessary directions appropriately to maintain all registers in the section offices and also direct them to furnish monthly reports as per clause

8(1)(a) of the Regulation directly to the Commission. The Commission also directed the Chief Engineer (Distribution North) to issue direction to maintain proper complaint registers in the distribution sections under him. The Commission again vide letter dated 10-2-2010 addressed the Special Officer to furnish the correct data on achievement of performance with supporting details from the section offices for evaluation. Reminders were also issued on 29-3-2010, but no report has been received by the Commission till date.

The Commission views the non-implementation of distribution standards of performance by the Board very seriously. Hon. APTEL has directed all distribution licensees to implement the standards of performance specified by the Commission. The Commission has practically extended the date of effect by about 30 months for KSEB. The Commission also reviewed and relaxed the standards based on requests of KSEB. It is not the standards that is an issue, but proper system have not been created to evaluate the performance. After the lapse of considerable time, the so called 'model' sections are not seen maintaining the basic registers. **Considering this issue in detail the Commission directs that KSEB shall within in one month prepare a status report on implementation of standards of performance regulation at the circle levels of KSEB and the monitoring mechanism if any created by higher offices. The baseline data on standards shall also be provided for each circle with the status report.** It may also be noted that KSEB had requested only one year period with effect from 1-4-2009 to implement the standards of performance without compensation and hence the compensation clause shall be applicable from 1-4-2010 onwards. The amount of compensation paid to consumers may be reported monthly as envisaged in Section 59(a) &(b) of the Act.

CHAPTER – 3

REVIEW OF CAPITAL EXPENDITURE

3.1. Introduction

The Board has initiated a new interactive approach for identifying capital projects in generation, transmission and distribution since 2008-09. Probable load growth is projected based on the feedback received from stakeholders and in consultation with elected people's representatives projects are formulated. An ambitious plan of capital expenditure for Rs.1377.70 crore proposed in 2009-10 is revised now by the Board to Rs.947.66 Crore. For the year 2010-11, capital expenditure of Rs.995.15 crore is proposed.

The capital expenditure for generation in 2009-10 and 2010-11 includes 9 ongoing projects viz., Kuttiyadi tail race, Kuttiyadi additional extension, Pallivasal extension, Kuttiar diversion, Ranni-Perunad SHP, Thottiyar, Sengulam Augmentation, Adyanpara SHP, and Poozhithodu SHP, with a total out lay for the year 2009-10 and 2010-11 as Rs.113.70 Crore and Rs.124.26 crore respectively. Out of the 6 tendered projects 3 projects are under pre-qualification stage and two other projects are already tendered. One project (Athirappally) is held up. The total out lay for tendered projects for 2010-11 is Rs.22.65 crore.

In 2009-10, 8 projects are taken up for tendering which are in various stages for which Rs.19.74 crore was earmarked for 2010-11. Another 14 projects are prioritized for approval (total 207MW 592.02MU) during the year 2010-11 and 2011-12. Other capital works in generation include, capital works for diesel projects BDPP/KDPP, renovation and modernization of hydro stations, survey and investigation, revamping seismic network in Idukki region, mechanical fabrication, civil R&D, construction of administrative complexes, and Dam safety works etc., the total outlay for these works is Rs.284.34 crore.

In transmission, the projects planned for 2010-11 are 2 nos of 220kV substations, 19 nos of 110kV substations, 6 nos of 66kV substations and 19nos of 33 kV substations. Further 28.5km of 220kV lines, 138.8km of 110kV lines, 13.5 km of 66kV lines and 138 km of 33kV lines are also planned. In the petition, the Board has committed that the financial viability of these projects will be submitted by January 2010. Modernisation of Load Dispatch centre is another project included as part of transmission.

In the distribution wing, Board is planning to provide 5 lakh connections and to construct 3000 km of 11kV lines, 3800km of LT lines and installation of 5000 distribution transformers. 8 lakh faulty meters are also proposed to be replaced in 2010-11.

The Board reported that APDRP scheme sanctioned by Government of India for Rs.853.62 crore included 3 circle schemes (Rs.148.24 crore), 46 nos of town schemes (Rs.341.87 Crore) and 3 nos of subtransmission and distribution project for cities (Rs.373.56 crore). These projects are now either completed or short closed on 31-3-2009. The total allowable expenditure under APDRP is Rs.556.60 Crore. For the completed schemes 25% of the amount will be provided as grant. The city scheme (Thiruvananthapuram, Ernakulam and Kozhikode) envisages laying of 11kV UG cables and installation of RMUs, compact secondary substations and transformers. The expenditure up to 31-3-2009 under the city scheme is Rs.82.19 crore. Balance work under the project is planned to be completed using Board's own funds.

The Board obtained sanction for implementing R-APDRP scheme during 11th five year plan from Government of India. The project is proposed to be implemented in 43 towns. Part A of the project consists of establishment of IT infrastructure and part B consists of distribution infrastructure. As part of Part A, project worth Rs.288.33 crore was forwarded and Rs.241.39 crore is expected from the Government of India and balance Rs.76.04 crore to be met from Own fund. If the project is implemented in time, the complete funding under Part A will be converted as grant.

As part of RGGVY projects for all districts are under preparation. Revised DPRs for southern districts such as Thiruvananthapuram, Kollam, Pathanamthitta, Alappuzha, Kottayam, Ernakulam and Thrissur are being submitted for REC approval.

3.2 Objections of Stakeholders

Shri.S.P Ravi representing Chalakudi Puzha Samrakshna Samithi stated that proper assessment of different options on utilisation of coal from Baitarini should be taken up before finalising the Cheemeni Project. According to him, economic viability of the Poringalkuthu LB additional extension project needs to be checked since the spill from Poringalkuthu dam has been considerably reduced. Shri. Satheesh, representing M/s Carborandum Universal stated that project execution in generation lacks proper planning and vision. The opportunity cost of time over run and cost over run needs to be considered in the light of the high cost of power from liquid fuel

stations. He suggested to tap non-conventional energy potential in the State through private participation. The HT-EHT Association and many others in their objections stated that KSEB failed to explain how the proposed investments will meet the objectives. There is no statement on the benefits on the proposed investments. The physical and financial progress of the projects are not submitted for proper scrutiny. In the absence of relevant details, the objectors requested the Commission to disallow the proposed capital expenditure and proposal for fresh borrowing and interest cost. Some of the objectors have stated that the capital expenditure proposed by KSEB is unrealistic since every year the proposed capital expenditure is revised to a lower level. Hence according to them only realistic level of capital expenditure needs to be allowed to KSEB. M/s FACT, M/s MRF limited, M/s TTP Limited, M/s HNL limited etc., suggested that Board should take earnest efforts to tap the hydro potential in the State. Kerala Chamber of Commerce and Industry expressed a similar opinion.

3.3 Analysis and decision of the Commission

The Commission in the previous Orders had mentioned the lack of progress in capital expenditure programmes. The Board has been submitting the investment proposal as part of the annual budget, without providing the scheme wise details or viability studies. The information provided by the Board even after several queries was incomplete, which is not useful for continuous monitoring of the projects. Hence, project monitoring and evaluation could not be taken up effectively. The Commission on several occasions had made it clear that for the approval of the investment plan, project wise details with necessary information on the viability of the project need to be submitted. In the ARR petition, the Board stated that schemewise details with DPR would be submitted by February 2010 and Chief Engineer Planning was entrusted with the task. However, the information was provided by the Board only on 24-4-2010 which could not be evaluated.

The Commission notes that the Board is following a strategy of projecting the capital expenditure initially high, which is later scaled down successively. The Board has proposed Rs.1022.38 Crore in the ARR for 2007-08, which was revised to Rs.956.17 Crore subsequently. Similarly, for the year 2008-09, Rs.1145 Crore was proposed which was revised to Rs.1047.6 Crore. For 2009-10 the capital expenditure proposed is Rs.1377.10 crore which is about 31% more than the revised estimates for 2008-09. However, it was substantially scaled down to Rs.947.66 crore later i.e., the projected capital expenditure in the ARR later revised downwards and in actual the performance was much lower as shown below.

Performance under capital expenditure 2006/07 to 2009-10

| Year | | Generation | Transmission | Distribution | Other works | Total |
|----------------|-----------------|---------------|---------------|---------------|-------------|---------------|
| 2006-07 | Proposed | 250.00 | 218.50 | 290.00 | 1.50 | 760.00 |
| | Revised | 323.94 | 168.78 | 288.00 | 1.50 | 782.22 |
| | Actuals | 150.77 | 139.49 | 255.01 | | 545.27 |
| 2007-08 | Proposed | 336.22 | 221.80 | 464.36 | | 1,022.38 |
| | Revised | 344.53 | 221.50 | 386.09 | 4.05 | 956.17 |
| | Actuals | 115.60 | 241.34 | 284.43 | | 641.37 |
| 2008-09 | Proposed | 540.52 | 181.00 | 419.52 | 5.05 | 1,146.09 |
| | Revised | 310.37 | 276.88 | 456.25 | 4.10 | 1,047.60 |
| | Actuals | 68.89 | 153.30 | 223.16 | | 445.35 |
| 2009-10 | Proposed | 403.33 | 366.73 | 600.64 | 6.40 | 1,377.10 |
| | Revised | 262.82 | 240.66 | 436.40 | 7.78 | 947.66 |
| 2010-11 | Proposed | 284.34 | 275.97 | 425.00 | 9.84 | 995.15 |

The jacking up of figures in the ARR may be for enhancing the interest liability and also depreciation benefits for the period under scrutiny. Hence, the Commission would seriously consider to claw back the excess interest and depreciation on account of actual lower performance. Based on the information provided by the Board over the years, the physical progress in the generation sector is analysed below:

| Hydel schemes | Capacity | Target date | | |
|----------------------|----------|-----------------------|--------------------|---|
| | | As per Five year plan | As per 2008/09 ARR | As per 2009-10 ARR |
| Kuttiyadi tail race | 3.75MW | 2007-08 | Nov.2008 | Commissioned 1 st unit on 9-11-2008 and 22-10-09 |
| Neriamangalam Extn | 25MW | 2007-08 | May-08 | 22-5-2008 |
| Kuttiyaidd Addl Extn | 100 MW | 2007-08 | May-09 | Mar-10 |
| Azhutha Diversion | 57MU | 2006-07 | Apr-07 | May 2007 |
| Kuttiyar Diversion | 37MU | 2007-08 | Jun-07 | Jun-09 |

All the on going projects are delayed beyond the initial target dates. As per the information available 3 projects have been completed now. The cost due to delay in commissioning the projects is the additional cost of power purchase necessitated, which needs to be imposed on the Board as penalty. The Commission will address this issue separately.

The Commission's observations on Baitarni Coal block and the proposed Chemeni Power project have already been given in the previous order. Without even a prefeasibility report, no evaluation of the project could be done.

The achievements in transmission and distribution sector are very low as per the five year plan targets as shown below:

Physical target and Achievement in Transmission capital expenditure

| Substations | Transmission | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | Total |
|--------------------------------|--------------|---------|---------|---------|---------|---------|-------|
| As per Five year plan Proposal | 220kV | 2 | 0 | 1 | 2 | 1 | 6 |
| | 110kV | 11 | 11 | 8 | 6 | 18 | 54 |
| | 66kV | 1 | 4 | 0 | 0 | 1 | 6 |
| | 33kV | 12 | 26 | 7 | 4 | 7 | 56 |
| Actual Achievement reported | 220kV | 1 | | | | | 1 |
| | 110kV | 4 | 2 | | | | 6 |
| | 66kV | 1 | | | | | 1 |
| | 33kV | 13 | 16 | | | | 29 |

| Lines | Transmission | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | Total |
|--------------------------------|--------------|---------|---------|---------|---------|---------|--------|
| As per Five year plan Proposal | 220kV | 39.34 | 18.61 | 28.5 | 15 | 17 | 118.45 |
| | 110kV | 124 | 134.8 | 41.8 | 85.58 | 286.4 | 672.58 |
| | 66kV | 40 | 14.61 | 164 | 57.6 | 0 | 276.21 |
| | 33kV | 174.63 | 309 | 63.94 | 63.94 | 10 | 621.51 |
| Actual Achievement reported | 220kV | 1.01 | | | | | 1.01 |
| | 110kV | 56.38 | 17.5 | | | | 73.88 |
| | 66kV | 11.13 | | | | | 11.13 |
| | 33kV | 105.27 | 169.27 | | | | 274.54 |

| Distribution | Transmission | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | Total |
|--------------------------------|---------------------------|---------|---------|---------|---------|---------|-------|
| As per Five year plan Proposal | 11kV lines | 3427 | 3177 | 3225 | 3264 | 3463 | 16556 |
| | LT lines | 4043 | 3798 | 3663 | 4186 | 3575 | 19265 |
| | Distribution transformers | 2009 | 2286 | 2346 | 2503 | 2646 | 11790 |
| Actual Achievement reported | 11kV lines | 1807 | 3018 | | | | 4825 |
| | LT lines | 8128 | 7636 | | | | 15764 |
| | Distribution transformers | 2553 | 4109 | | | | 6662 |

The Commission sought details of load flow studies to support the transmission plan. The Board stated that the studies were not conducted on regular basis but for annual peak only due to inaccurate metering and lack of details. There is no doubt that in the absence of systematic load flow studies, the constraints and stability of the system cannot be predicted. The reason stated by the Board that meters are inaccurate and lack of details, is not logical since, even for conducting studies for

annual peak sufficient information is necessary. Thus, the reply from Board clearly indicates that transmission planning in KSEB is weak and it needs to be strengthened urgently.

The Board stated that region wise voltage adalaths were conducted and results were provided. It is apparent that the efforts made are not scientific and no integration is made into the overall planning process.

The Commission notes that under Modernisation of Load Dispatch centre, the Board has been continuously providing a budget provision, but no work has been executed so far. It is noted that in 2008-09 Rs.153 lakh & in 2009-10 Rs.266 lakhs was provided. In 2010-11, Rs.5.97 Crore is earmarked for this. On this issue, Board's reply is that modernisation of LD is under the consideration of the Board and would be reported after finalisation. This shows that even without a project provisions are made as part of the proposed capital expenditure.

The Commission has analysed the capital expenditure proposed by the Board in the ARR and the actual expenditure and the deviations. The following table gives the details.

Capital expenditure proposed in ARR and actual (2002-03 to 2009-10)

| Proposed in the ARR | Rs. Crore | | | | | | | |
|-------------------------------------|--------------------|---------------|---------------|---------------|----------------|----------------|----------------|--|
| | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | |
| Capital Expenditure | 453.40 | 459.01 | 695.21 | 662.60 | 924.49 | 1061.15 | 1293.00 | |
| IDC capitalized | 115.45 | 115.73 | 99.51 | 53.30 | 37.11 | 25.75 | 27.87 | |
| Other expenses capitalized | 119.25 | 123.53 | 158.95 | 43.90 | 65.26 | 59.19 | 55.82 | |
| Total capital expenses | 688.10 | 698.27 | 953.67 | 759.80 | 1026.86 | 1146.09 | 1376.69 | |
| Expenses transferred to Gross asset | 924.65 | 707.84 | 905.68 | 603.33 | 821.48 | 912.07 | 1189.26 | |
| Actuals | (Rs. Crore) | | | | | | | |
| | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | |
| Capital Expenditure | 235.36 | 621.93 | 357.00 | 407.82 | 459.13 | 296.30 | 551.73 | |
| IDC capitalized | 101.08 | 78.11 | 62.04 | 48.50 | 35.13 | 29.33 | 22.71 | |
| Other expenses capitalized | 118.15 | 109.05 | 42.88 | 43.61 | 43.19 | 48.08 | 70.75 | |
| Total capital expenses | 454.59 | 809.09 | 461.92 | 499.93 | 537.45 | 373.71 | 645.19 | |
| Expenses transferred to Gross asset | 801.37 | 968.51 | 501.42 | 651.65 | 505.23 | 467.70 | 564.56 | |
| Difference | Rs. Crore | | | | | | | |
| | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2007-08 | |
| Capital Expenditure | | 168.53 | -102.01 | -287.39 | -203.47 | -628.19 | -509.42 | |
| Total capital expenditure | | 120.99 | -236.35 | -453.74 | -222.35 | -653.15 | -500.90 | |
| Expenses transferred to Gross asset | | 43.86 | -206.42 | -254.03 | -98.10 | -353.78 | -347.51 | |

As noted above, the achievement in terms of completion of projects is much lower than projected. Considering this, the Commission hereby directs that **now on**

scheme/project wise details with benefits quantified, date of commencement, physical and financial progress, target date of completion etc., are to be submitted along with ARR&ERC. In its absence the Commission may be forced to disallow interest commitments in the tariff.

CHAPTER – 4

ENERGY SALES PROJECTIONS

4.1. Sales projections

The Board has projected the energy sales for the year 2010-11 based on the past trend. According to the Board, energy sales in the State is showing an increasing trend since 2003-04. The Board stated that, as in the previous years, the energy consumption was estimated by considering factors such as connected load, actual growth of consumers, regional characteristics, seasonal variations, change in consumer habits etc. According to the Board, the methodology used in the past was realistic and the percentage error was less than 2%. However the methodology used in the previous years required modification due to the power restrictions in 2008-09. Energy sales in 2008-09 was lower on account of power restrictions such as half an hour load shedding, 20% restriction in consumption for HT-EHT and LT consumers and high rate for consumption above 200 units per month for domestic consumers. These restrictions were removed on 1st May 2009. In view of the distortion in sales data, the Board omitted the energy sales for 2008-09 for projecting the sales for 2010-11.

Energy sales for 2009-10 was projected as 13679 MU by KSEB, which was later re-estimated as 13870MU, due to lifting of restrictions. KSEB expects an addition of 5.13 lakh consumers in 2009-10. The average growth of sales for the period from 2003-04 to 2008-09 is 6.9% of which LT growth was 8.4% and HT growth was 3.5%. Compared to this, in 2008-09, the growth rate was only 3% and for many consumer categories (agriculture, HT-EHT, licensees) sales growth was negative on account of restrictions.

By excluding the sales for the year 2008-09, sales for 2010-11 was estimated effectively by considering sales from 2003-04 to 2007-08. KSEB also assumed total addition of about 5 lakh consumers in 2010-11. Accordingly, the total sales projected for the year 2010-11 is 14830 MU as shown below.

Energy sales Estimated by the Board for 2010-11 (in MU)

| Category | Actual | | | | | | Revised estimate | Projections |
|--------------------|---------|---------|---------|---------|---------|---------|------------------|-------------|
| | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 |
| LT Category | | | | | | | | |
| Domestic | 4004 | 4262 | 4668 | 5213 | 5603 | 5931 | 6580 | 7078 |

| Category | Actual | | | | | | Revised estimate | Projections |
|---------------------|-------------|-------------|--------------|--------------|--------------|--------------|------------------|--------------|
| | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 |
| Commercial | 879 | 948 | 1093 | 1246 | 1378 | 1502 | 1706 | 1886 |
| Industrial | 751 | 783 | 874 | 934 | 984 | 1015 | 1131 | 1211 |
| Agricultural | 202 | 191 | 190 | 220 | 231 | 225 | 238 | 250 |
| Street Lights | 166 | 183 | 208 | 229 | 249 | 294 | 305 | 325 |
| Sub total LT | 6002 | 6367 | 7033 | 7842 | 8445 | 8967 | 9960 | 10750 |
| HT category | | | | | | | | |
| HT I | 1125 | 1238 | 1362 | 1436 | 1461 | 1326 | 1439 | 1485 |
| HT II | 130 | 141 | 130 | 135 | 138 | 107 | 115 | 119 |
| HT-III | 9 | 9 | 10 | 9 | 9 | 9 | 10 | 10 |
| H- IV | 304 | 339 | 378 | 431 | 507 | 579 | 686 | 723 |
| EHT 66/110 | 1107 | 1036 | 1004 | 1070 | 1024 | 966 | 1105 | 1158 |
| Railway Traction | 46 | 44 | 58 | 72 | 109 | 142 | 161 | 168 |
| Bulk Supply | 188 | 212 | 296 | 335 | 357 | 317 | 394 | 417 |
| Sub total HT | 2909 | 3019 | 3238 | 3488 | 3605 | 3446 | 3910 | 4080 |
| Total | 8911 | 9386 | 10271 | 11330 | 12050 | 12413 | 13870 | 14830 |

4.2 Objections of stakeholders:

HT-EHT Association has objected to the method of estimation of energy sales by the Board. According to them, energy sales should be based on CAGR from 2003-04 to 2008-09 and the year 2008-09 should not be excluded for projections. Hence the total sales would only be 14173 MU rather than 14830 estimated by the Board. According to Southern Railway, Board should deliberately encourage growth of industries in the State considering the negative growth in sales to High Tension industries. According to M/s Binani Zinc, the sales growth will be around 3 to 4% considering slow down of the economy.

4.3 Analysis of the Commission

KSEB adopted a method of eliminating the abnormal year 2008-09 in the projections. The Commission has noted that in general annual projections of KSEB are not much far from reality, though much effort is not taken to substantiate the projection with robust analysis. The Commission has always insisted that KSEB should have a comprehensive database and robust forecasting methods for medium to long term sales projection and validation. The Commission is of the view that KSEB should not limit the load forecast for ARR purposes alone, but it should be the basis for the medium and long term planning process. Accordingly, regional forecasts of energy (MU) and demand (MW) are essentially to be developed for transmission and

distribution planning. When the Commission sought the details of regional forecasts, the Board has given the reply that developing regional forecasts required large quantity of data which cannot be processed at the corporate level. The Commission would like to point out that KSEB should be well aware of the duty cast upon them as a licensee as per section 39(2)(b) and section 42(1) of the Act.

The average annual growth rate from 2003-04 to 2007-08 works out to 7.8%. A comparison of annual sales growth shows that only the energy sales for industrial consumers have been lower during power restrictions. For all other consumers, the sales were near normal even with power restrictions. The overall sales growth for HT-EHT was 5.1% and EHT alone is -2%. Sales growth of HT I industrial, HTIV commercial, Railways, and Licensees are higher than the average growth rate. In the Low Tension sector growth was phenomenal at 8.9%, which was mainly propelled by LT Commercial and Domestic category.

Growth rate of energy sales (2004-05 to 2010-11)

| Category | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | Annual Average Growth rate |
|---------------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|-------------|----------------------------|
| Domestic | 4004 | 6.4% | 9.5% | 11.7% | 7.5% | 5.9% | 10.9% | 7.6% | 8.5% |
| Commercial | 879 | 7.8% | 15.3% | 14.0% | 10.6% | 9.0% | 13.6% | 10.6% | 11.5% |
| Industrial | 751 | 4.3% | 11.6% | 6.9% | 5.4% | 3.2% | 11.4% | 7.1% | 7.1% |
| Agricultural | 202 | -5.4% | -0.5% | 15.8% | 5.0% | -2.6% | 5.8% | 5.0% | 3.1% |
| Street Lights | 166 | 10.2% | 13.7% | 10.1% | 8.7% | 18.1% | 3.7% | 6.6% | 10.1% |
| Sub total LT | 6002 | 6.1% | 10.5% | 11.5% | 7.7% | 6.2% | 11.1% | 7.9% | 8.7% |
| HT category | | | | | | | | | |
| HT I | 1125 | 10.0% | 10.0% | 5.4% | 1.7% | -9.2% | 8.5% | 3.2% | 4.0% |
| HT II | 130 | 8.5% | -7.8% | 3.8% | 2.2% | -22.5% | 7.5% | 3.5% | -1.3% |
| HT-III | 9 | 0.0% | 11.1% | -10.0% | 0.0% | 0.0% | 11.1% | 0.0% | 1.5% |
| H- IV | 304 | 11.5% | 11.5% | 14.0% | 17.6% | 14.2% | 18.5% | 5.4% | 13.2% |
| EHT 66/110 | 1107 | -6.4% | -3.1% | 6.6% | -4.3% | -5.7% | 14.4% | 4.8% | 0.6% |
| Railway Traction | 46 | -4.3% | 31.8% | 24.1% | 51.4% | 30.3% | 13.4% | 4.3% | 20.3% |
| Bulk Supply | 188 | 12.8% | 39.6% | 13.2% | 6.6% | -11.2% | 24.3% | 5.8% | 12.1% |
| Sub total HT | 2909 | 3.8% | 7.3% | 7.7% | 3.4% | -4.4% | 13.5% | 4.3% | 5.0% |
| Total | 8911 | 5.3% | 9.4% | 10.3% | 6.4% | 3.0% | 11.7% | 6.9% | 7.5% |

From the above table it is amply clear that the growth was propelled by the LT sector with sales growth rate close to 9%. The major contributors in the LT sector are Domestic (8.5%), Commercial (11.5%) and public lighting (10.1%). The Commission once again points out that the growth of public lighting should be viewed with caution mainly on two counts: one; it contributes to the peak load two; the tariff levels

are comparatively low (only Rs.2/kWh as per the projections of the Board). Board shall consider to introduce energy efficient CFL/LED lamps for public lighting.

Based on the proposal from KSEB, the Commission in its order dated 2-12-2009 has revised the ToD tariff for HT-EHT categories and also introduced Maximum Demand based tariff and ToD tariff for LT industrial consumers as an optional scheme. Since the impact of peak shifting is difficult to assess, the Commission directed the Board to study and report not later than 6 months, the impact of the approved TOD tariff on peak shifting and on the revenue. It was also directed that KSEB should approach the Commission with all supporting materials, if the approved tariff has substantial financial or any other adverse impacts. Since the Board so far has not approached the Commission on this count, it should be assumed that the new and revised schemes have a positive effect on the system.

The Board in its petition dated 25-3-2010 proposed power restrictions for two months April and May 2010. The Board proposed to impose 25% restriction on all HT&EHT consumers, LT-II, LT-IV, LT-VI(A), LT-VI(B), LT-VI (C), LT-VII (A), LT-VII(B), LT-VII (C) and to restrict domestic consumption by 200 units per month. As per the projections of the Board, due to restrictions, the consumption would reduce by 5.97MU per day and energy requirement by 6.87MU per day. After following the due procedure the Commission disposed of the petition by allowing 10% restrictions on all consumers except LTVID and LTV. In the case of domestic category the limit was fixed as 300 units/month. Accordingly, the Commission expects that the sales would be about 2.67MU less per day for the month of April and May 2010 ie., a total of 163MU. Hence the Commission assumes that energy sales would be about 163MU less than the level projected by KSEB due to power restrictions. Considering all the above, energy sales for the year 2010-11 is estimated as follows:

Approved Energy Sales for 2010-11

| Category | Sales as per ARR (MU) | Approved Sales (MU) |
|---------------------|------------------------------|----------------------------|
| LT Category | | |
| Domestic | 7078 | 7078 |
| Commercial | 1886 | 1886 |
| Industrial | 1211 | 1211 |
| Agricultural | 250 | 250 |
| Street Lights | 325 | 325 |
| Sub total LT | 10750 | 10750 |
| HT category | | |
| HT I | 1485 | 1485 |

| Category | Sales as per ARR (MU) | Approved Sales (MU) |
|---|----------------------------------|--------------------------------|
| HT II | 119 | 119 |
| HT-III | 10 | 10 |
| H- IV | 723 | 723 |
| EHT 66/110 | 1158 | 1158 |
| Railway Traction | 168 | 168 |
| Bulk Supply | 417 | 417 |
| Sub total HT | 4080 | 4080 |
| Total | 14830 | 14830 |
| Less sales due to restrictions in April and May 2010 | | (163) |
| Net Sales | | 14667 |

As part of the validation process, the Commission sought the details and methodology for month wise projection of sales by KSEB. However, Board did not provide any data, but maintained that monthly projections are available in the ARR petition. In the absence of sufficient information, the Commission could not proceed to allocate monthly sales for the year 2010-11, which is required for estimating the additional commitment on fuel price increase. **The Commission hereby directs that, based on the approved overall energy sales, Board shall revise the month wise energy sale and furnish it to the Commission within one month from the date of this order.**

CHAPTER – 5

TRANSMISSION AND DISTRIBUTION LOSS

5.1 Introduction

KSEB in its petition has stated that in between 2001-02 and 2008-09, T&D loss was reduced by 11.93% due to the sincere efforts taken by KSEB as shown below. The internal loss level projected for 2010-11 is 16.78% compared to 17.70% in 2009-10.

Loss reduction achieved by the Board

| Year | External loss | Extent of reduction | Internal loss | Extent of reduction |
|----------------------------------|---------------|---------------------|---------------|---------------------|
| | (%) | (%) | (%) | (%) |
| 2001-02 | 32.15 | | 30.76 | |
| 2002-03 | 30.41 | 1.74 | 29.08 | 1.68 |
| 2003-04 | 28.46 | 1.95 | 27.44 | 1.64 |
| 2004-05 | 26.22 | 2.24 | 24.95 | 2.49 |
| 2005-06 | 24.59 | 1.63 | 22.96 | 1.99 |
| 2006-07 | 23.43 | 1.16 | 21.47 | 1.50 |
| 2007-08 | 21.63 | 1.80 | 20.02 | 1.45 |
| 2008-09 | 20.45 | 1.18 | 18.83 | 1.19 |
| 2009-10 (Revised projections) | 19.24 | 1.21 | 17.70 | 1.13 |
| 2010-11 (Projections) | 18.53 | 0.71 | 16.78 | 0.92 |

KSEB estimated that transmission system loss is about 5% and distribution loss is 14.55%. As per the study report of the Power Finance Corporation, the T&D losses of KSEB for the year 2007-08 is better compared to other states except Andhra Pradesh and Tamil Nadu. According to KSEB, in Tamil Nadu and Andhra Pradesh, about 20 to 30% of the consumers are unmetered and consumption is based on assessment. In the case of Kerala metering is 100% and hence estimates are more reliable. The Board has also given a calculation of Rs.790.55 Crore of saving through reduction in energy losses from 2001-02 to 2008-09. According to the Board, the target level of distribution losses stipulated by Ministry of Power at the end of 11th plan is 15%, but the distribution losses in Kerala has already reached that level. With respect to the directions issued by the Commission such as separation of transmission and distribution losses, estimate of voltage level distribution losses and separation of technical and commercial losses, the Board has forwarded a status report which was communicated to the Commission vide letter 21-11-2009. KSEB stated that the attempt to study losses through load flow analysis failed due to inaccurate database and mismatch of meters due to difference in loading in off-peak and peak. A pilot study was initiated to assess the distribution losses separately in urban and rural areas which will be completed in February 2010. Transmission losses could not be estimated because of inaccurate meters and low accuracy

meters in EHT panels. The replacement of meters requires considerable capital investment and the task is assigned to Transmission Chief Engineers and the reports are awaited. KSEB further reported that one of the objective of R-APDRP is to assess and segregate technical and commercial losses in the system. Part A of the R-APDRP includes establishment of base line data using IT applications for energy accounting. The Board is in the process of replacement of faulty meters in a phased manner. After completion of these works, AT&C loss can be accurately quantified. In order to reduce the losses Board has narrated several text book steps such as reduction in LT:HT ratio, strengthening of transmission network, reconductoring of lines, capacitor compensation, realigning of LT feeders, reallocation of transformers, use of amorphous core transformers, introducing 'LT less' system, load balancing, energy audit at transformer level etc., However, no action taken report was submitted and the status of the above measures are not known. The progress of capital works in transmission & distribution and the proposed works for 2010-11 are shown below:

Physical Targets Achieved by the Board

| Year | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 (Revised) | 2010-11 (projection) |
|---------------------------------|---------|---------|---------|---------|---------|---------|-------------------|----------------------|
| Substations (Nos) | | | | | | | | |
| 220kV | 1 | 1 | 1 | 0 | 1 | | 3 | 2 |
| 110 kV | 6 | 8 | 4 | 2 | 4 | 2 | 20 | 19 |
| 66kV | 3 | 2 | 4 | 3 | 1 | | 4 | 6 |
| 33kV | 7 | 15 | 10 | 10 | 13 | 16 | 39 | 19 |
| Lines (Km) | | | | | | | | |
| 220kV | 4.3 | 15 | 56 | | 1.01 | 0 | 29.1 | 28.5 |
| 110 kV | 154.6 | 30 | 55 | 30 | 56.38 | 17.5 | 100 | 138.5 |
| 66kV | 8.4 | 5 | 13 | 15 | 11.13 | 0 | 0.3 | 13.5 |
| 33kV | 95.4 | 157 | 131 | 95 | 105.44 | 169.27 | 457.8 | 138 |
| 11 kV lines | 1269 | 955 | 1062 | 1820 | 1807 | 3018 | 4880 | 3000 |
| LT lines | 4429 | 6074 | 7441 | 8229 | 8128 | 7636 | 6666 | 3800 |
| Distribution Transformers (Nos) | 1063 | 1882 | 1751 | 2124 | 2553 | 4109 | 5400 | 5000 |

As in the case of previous ARR&ERC petitions, the Board narrated the usual steps being taken for reducing the commercial losses such as replacement of faulty meters, anti-power theft activities, computerization of billing and revenue collection, energy audit, loss monitoring at circle level, installing meters at transformers, feeders and border points, providing load factor and power factor incentives etc.,

The Board has stated that in 2009-10 target for replacement of meters was 7.44 lakhs of which 3.78 has been already completed (upto September). In 2010-11, the

Board proposes to replace 8 lakh meters. The status of replacement of faulty meters reported by the Board is as follows:

Progress of Faulty meter replacement

| Year | No. of Faulty meters replaced (Lakhs) |
|---------|---------------------------------------|
| 2002-03 | 4.21 |
| 2003-04 | 8.67 |
| 2004-05 | 4.35 |
| 2005-06 | 6.38 |
| 2006-07 | 2.69 |
| 2007-08 | 5.80 |
| 2008-09 | 6.44 |

Performance of the Anti power theft squad and regional audit given in the filing are compiled and shown below:

Performance of Anti-Power theft squad and Audit Offices

| Year | Anti power Theft Squad | | | | Regional Audit Office | | Division/Section Squad | | |
|------------------------|------------------------|------------------------|-----------------|-----------------|-----------------------|-----------------|--------------------------|-----------------|-----------------|
| | Inspections | Theft cases Registered | Amount Assessed | Amount Realised | Amount assessed | Amount realized | Number of cases detected | Amount assessed | Amount realized |
| | (Nos) | (Nos) | (Rs. Cr) | (Rs. Cr) | (Rs. Cr) | (Rs. Cr) | (Nos) | (Rs. Cr) | (Rs. Cr) |
| 2005-06 | 15611 | 981 | 21.69 | 9.82 | 14.46 | 4.35 | | | |
| 2006-07 | 16221 | 1895 | 12.73 | 11.04 | 14.02 | 7.08 | 18094 | 6.09 | 4.66 |
| 2007-08 | 18606 | 1144 | 16.93 | 10.5 | 24.72 | 11.94 | 24281 | 10.5 | 6.21 |
| 2008-09 | 15792 | 504 | 29.58 | 18.97 | 32.05 | 18.32 | 40612 | 37.76 | 19.2 |
| 2009-10 (up to Oct-08) | 9760 | 196 | 18.85 | 12.00 | 14.26 | 10.99 | 15254 | 16.61 | 9.59 |

Against the revised loss target of 18.69% for 2008-09, the actual losses reported was 18.83%. The internal T&D loss target of 17.43% proposed by the Board for 2009-10 in the previous ARR is now revised to 17.70%. By strengthening the transmission and distribution system, KSEB expects reduction in losses to the tune of 1.13% in 2009-10 and 0.92% in 2010-11. Thus the loss level proposed by the Board for 2010-11 is 16.78%

5.2 Objections of stakeholders

Shri. S.P. Ravi, Chalakudi Puzha Samrakshna Samithi, stated that the loss reduction achieved by the Board is welcome. However, the Board never achieved the target set by the Commission, which is a concern. The HT-EHT Association expressed a similar opinion According to them going by the past trends the loss reduction target shall be 1% and the loss level for 2010-11 shall be 15.92%. They have challenged the loss figures submitted by the Board from 2001-02 and raised objections on the

argument put forwarded by the Board in support of jacking up the loss level. They have demanded that complete billing details from 1999-00 shall be scrutinised to verify the arguments of the Board. Shri. A.R Satheesh strongly objected to the T&D loss figures of KSEB. According to him by adjusting slabwise consumption in domestic category KSEB is manipulating T&D losses. M/s Binani Zinc limited suggested that the loss reduction target shall be at least 1.5%. M/s FACT suggested that loss reduction shall be 1% from the previous level approved by the Commission.

5.3 Analysis and decision of the Commission

The loss reduction target is one of the major performance parameters stipulated by the Commission. The Board has claimed a cumulative loss reduction of 11.93% between 2002-03 and 2008-09. However, the Consumers have strongly objected to the claims of KSEB mainly by pointing to the fact that the base level of losses were inflated in 2001-02, which was only below 18% in 2000-01. National Electricity Policy and Tariff Policy aims at faster reduction in losses to protect the interest of the consumers. The Forum of Regulators (FOR) in their deliberations stressed the need for aggressive reduction of AT&C losses. The Sub-Committee of Forum of Regulators on 'Methods of loss reduction' has suggested that loss reduction target of not less than 10% of the current level to be set if the current loss level is above 20% (ie., 2% reduction every year). It is also pertinent to point out that the Board could not achieve the proposed loss reduction in any of the ARR&ERC petitions in the last 6 years. Kerala is a 100% metered State with low level of non-technical losses compared to other states. However, so far the Board did not initiate a comprehensive exercise to assess the base level of T&D loss in the State. In the absence of any reliable studies on loss level, the loss reduction targets proposed by the Board is more of an assumption than realistic assessment. The Commission since its inception, has repeatedly given directions for carrying out loss studies at different levels for reasonable assessment of the base level of losses. In the compliance report on directives, the Board has admitted that the directions have been not complied so far. After the lapse of four years, Board has reported in the letter dated 24-11-2009 as follows:

“(1) Board has made an attempt to find out transmission and distribution losses through load flow analysis. But this was not successful for want of sufficiently accurate database, issues of accuracy of meters and large number of arbitrary assumptions required. Hence Board has taken alternative steps for assessment of T&D losses.

(2) in the distribution wing a pilot study is initiated for assessment of distribution losses in 33kV/11kV and LT system as well as commercial losses, separately in urban and rural areas..... the Board has targeting to complete the study by 15th February 2010.

(3) transmission loss: to find out transmission losses accurate metered data are required. Many meters with EHV panels are of lower accuracy levels and need to be replaced with accurate meters. The Board has directed Transmission chief engineers to evolve a suitable methodology for segregation of transmission losses at different voltage levels.”

The above reply shows the state of affairs in the Board in dealing with creation of basic database on the system. In the absence of such information, the rationale for investments proposed by the Board for system strengthening and expansion are quite questionable. The Commission could infer from the above reply that the transmission and distribution loss of 5% and 14.55% respectively claimed by the Board is only by a thumb rule. The contention of the Board that heavy investment is required for replacing EHV panels needs to be viewed seriously since, it shows even after providing substantial amount under R&M expenses, basic monitoring systems are not kept in sound condition. Further such approach would look like a deliberate attempt to withhold critical information so as to escape proper scrutiny and the matter deserves in depth probe.

As noted above, the Commission faces the problem of lack of authenticity of data since the loss figures are never supported with adequate data. As per the data provided by the Board, about 45 lakhs of faulty /electromechanical meters were replaced (other than new connections) with electronic meters in the last 5 years. It is reasonable to attribute the reduction in losses to the replacement of more sensitive electronic meters, than proper strengthening of the distribution system. It has been noticed that after the introduction of electronic meters, recorded sales have been substantially improved, which could be one reason for improvement in loss reduction without corresponding reduction in technical loss. This conclusion carries more weight in the absence of any better information or supporting details provided by KSEB. Even though a wing of KSEB namely TRAC is communicating with plan and programmes for loss reduction it is reasonably suspected that none of the such plans and programmes and consequent targeted loss reduction are seen communicated to the field office through the Chief Engineers of Transmission and Distribution wings.

The Commission also notes that the Board has taken little effort in estimating losses using the existing facilities. The Board has already invested more than Rs.500 Crore in APDRP scheme. One of the major objectives of the APDRP scheme is energy audit and systems are created for measurement of losses since funds allocation as well as incentives are based on the reduction in distribution loss. If such facilities are not properly employed to estimate the loss, it apparently points to the fact that investments made for recording such information are either faulty or not maintained properly.

The Board has always projected higher loss reduction, which was later scaled down to lower levels and the actuals will be again lower. Target for loss reduction in 2008-09 was 1.63% which was revised to 1.32%. Against this, the actual reduction achieved in 2008-09 was only 1.19%. Similarly for 2009-10, loss reduction was projected as 1.27% which was revised to 1.13%. In 2010-11, a lower target of 0.92% was proposed by the Board.

The Commission also analysed the capital expenditure proposed by KSEB in the past in relation to the loss levels. It is clear that there is no correlation between loss targets and capital expenditure proposed. Most of schemes provided under distribution are generally for providing service connection, rather than for strengthening the distribution system. .

Capital expenditure in Distribution

| Years | Capital Expenditure (Rs. Crore) | | | Loss reduction Target proposed (%) |
|---------|---------------------------------|---------|---------|------------------------------------|
| | Proposed in ARR | Revised | Actuals | |
| 2006-07 | 290.00 | 288.00 | 255.01 | 1.76 |
| 2007-08 | 464.36 | 386.09 | 284.43 | 1.83 |
| 2008-09 | 419.52 | 456.25 | 233.16 | 1.63 |
| 2009-10 | 600.64 | 436.40 | NA | 1.27 |
| 2010-11 | 425.00 | | | 0.92 |

Because of the lack of proper studies to support the loss targets proposed by the Board are proving to be costly to the Board since, the underachievement of losses would result in disallowance of excess power purchase cost during the truing up process. **Hence, the Board should realise the facts and immediately initiate proper system to estimate the losses on a sound footing by giving instructions to Chief Engineers to fix section wise loss reduction targets and to conduct monthwise monitoring of input energy into the section and revenue realisation. Best achievements has to be properly rewarded.**

5.3.1. Progress of replacement of faulty meters

The Commission notes that progress in the area of replacement of faulty meters is also tardy. As against the target of 10.3 lakhs in 2008-09, only 6.44 lakhs meters were replaced. In 2009-10 target set by the Board was 8 lakhs, which was later revised to 7.44 lakhs. Against this, the achievement reported as on 30-9-2009 is only 3.78 lakhs. The Commission notes that total number of faulty meters in the system remains at very high levels (7.44lakhs). In the letter dated 13-8-2009 on status of compliance, the Board reported that about 3.9 lakh faulty meters are expected to be faulty thus the total faulty meters will be 11.39 lakhs (single phase only). The Board also provided a plan for complete replacement of meters by March 2010 along with a purchase plan of about 17 lakh Single phase static meters with LCD. Mere purchase of meters at competitive rates without ensuring quality of meters is likely to increase the number of faulty meters year by year even if crores of meters are replaced.

Progress of replacement of faulty metes – Target Vs Achievement

| Year | Target given in the ARR (Lakhs) | Revised Target (Lakhs) | No. of Faulty meters actually replaced (Lakhs) |
|---------|---------------------------------|------------------------|--|
| 2002-03 | | | 4.21 |
| 2003-04 | | | 8.67 |
| 2004-05 | | 5.00 | 4.35 |
| 2005-06 | 5.00 | 8.50 | 6.38 |
| 2006-07 | 4.00 | 4.00 | 2.69 |
| 2007-08 | 4.13 | 6.00 | 5.80 |
| 2008-09 | 6.00 | 10.30 | 6.44 |
| 2009-10 | 8.00 | 7.44 | |

Considering the routine exercise of purchase of meters, the Commission sought yearwise details of purchase of meters, number of faulty meters reported, new connection provided, number of faulty meters replaced, total number of meters used and closing stock in the following format. Board conveniently, skipped the data on total number of purchase of meters over the years and gave only the following data.

Purchase of meters and utilisation

| Year | No. of faulty meters as on 1st April | No. of faulty meters reported | Total number of meters purchased | No. of new connections provided | No. of faulty meters replaced | Total no. of meters used | closing stock of meters as on 31st March |
|---------|--------------------------------------|-------------------------------|----------------------------------|---------------------------------|-------------------------------|--------------------------|--|
| 2002-03 | | | | 355520 | 427000 | | |
| 2003-04 | | | | 391815 | 863536 | | |
| 2004-05 | | | | 548307 | 418791 | | |

| | | | | | | | |
|---------|--------|----------------|--|----------------|----------------|--|--|
| 2005-06 | 497222 | 608445 | | 548521 | 636256 | | |
| 2006-07 | 469411 | 481355 | | 478745 | 269844 | | |
| 2007-08 | 680922 | 583630 | | 482725 | 580484 | | |
| 2008-09 | 684068 | 747922 | | 482766 | 647282 | | |
| 2009-10 | 784708 | 553400 | | 323814 | 741015 | | |
| Total | | 2974752 | | 3612213 | 4584208 | | |

The critical information on number of meters purchased and closing stock of meters were not provided by the Board. The data provided by the Board shows that even after replacing considerable number of meters every year the opening position of faulty meters each year has in fact increased. This is on account of substantial number of meters becoming faulty every year, which raises the concern on the quality of meters being procured. It should also be noted with concern that from 2005-06 to 2009-10 (5 years), about 29.74 lakh meters become faulty, which is about 37% of the total number of consumers. There are reports that the new meters purchased for replacing faulty meters becoming faulty within a short time. It is alarming to note that from 2002-03 to 2009-10, Board has replaced 45.85lakh faulty meters. Assuming Rs.300 per meter, about Rs.137.52 crore has been spent on replacing faulty meters which is being loaded on to the consumers. The Commission in the previous order observed that a large number of meters are becoming faulty regularly, which points towards the necessity of procuring high quality meters by issuing good quality specifications and ensuring the same.

5.3.2. Progress in achieving planned capital investment programme

The Commission notes that the target investments proposed by the Board in the transmission and distribution sector have never been achieved. The Board has always proposed ambitious investment programmes, later the targets were revised downwards, and the actual achievement was still less.

Performance of the Board on project implementation in Transmission & Distribution

| Year | 2007-08 (Proj) | 2007-08 (Actual) | 2008-09 (Proj) | 2008-09 (Actual) | 2009-10 (Proj) | 2009-10 (Rev) | 2010-11 (Proj) |
|--------------------------|-------------------|---------------------|-------------------|---------------------|-------------------|------------------|-------------------|
| Substations (Nos) | | | | | | | |
| 220kV | 3 | 1 | 2 | | 2 | 3 | 2 |
| 110 kV | 11 | 4 | 7 | 2 | 18 | 20 | 19 |
| 66kV | 1 | 1 | | | 5 | 4 | 6 |
| 33kV | 31 | 13 | 32 | 16 | 27 | 39 | 19 |
| Lines (Km) | | | | | | | |
| 220kV | 30.7 | 1.01 | 18.5 | 0 | 74 | 29.1 | 28.5 |

| Year | 2007-08 (Proj) | 2007-08 (Actual) | 2008-09 (Proj) | 2008-09 (Actual) | 2009-10 (Proj) | 2009-10 (Rev) | 2010-11 (Proj) |
|------------------------------------|-------------------|---------------------|-------------------|---------------------|-------------------|------------------|-------------------|
| 110 kV | 114.75 | 56.38 | 119 | 17.5 | 202.3 | 100 | 138.5 |
| 66kV | 36.99 | 11.13 | 15.5 | 0 | 16 | 0.3 | 13.5 |
| 33kV | 170.5 | 105.44 | 375.7 | 169.27 | 318.3 | 457.8 | 138 |
| 11 kV lines | 2000 | 1807 | 3941 | 3018 | 5000 | 4880 | 3000 |
| LT lines | 6000 | 8128 | 6500 | 7636 | 3800 | 6666 | 3800 |
| Distribution Transformers (Nos) | 2000 | 2553 | 4128 | 4109 | 5000 | 5400 | 5000 |

As per this table, for 2007-08, the Board has proposed three 220 kV substations, eleven 110 kV substations and thirty one 33 kV substations, but the achievement was only one 220kV substation, four 110 kV substations and thirteen 33kV substations. In 2008-09 as against the target of 2nos of 220kV substations, none was completed, against the target of 7 nos (including the backlog of previous years) of 110kV substations only 2 was achieved. Against 16 nos of 33kV substations only 16 are operational. Same is the case with construction of lines. As against the target of 30.70 km of 220 kV lines in 2007-08 achievement was only 1.01km in 2007-08 in 2008-09 as against the target of 18.5kms the achievement was nil. Exception is in the case of installation of transformers and construction of 11kV lines. However, the Commission is completely in the dark on the benefits of such investments made in the system.

Loss reduction proposed, approved and achievement

| Year | Proposed in the ARR (%) | Approved by the Commission (%) | Actual achieved by KSEB (%) |
|--|----------------------------|-----------------------------------|--------------------------------|
| 2005-06 | 2.72 | 2.72 | 1.99 |
| 2006-07 | 1.76 | 2.50 | 1.50 |
| 2007-08 | 1.83 | 2.00 | 1.45 |
| 2008-09 | 1.63 | 1.63 | 1.19 |
| 2009-10 | 1.27 | 1.00 | 1.13* |
| *proposed to be achieved as per ARR petition | | | |

The observations of the Commission reveals the following:

- The base level of losses are not firm. The present loss levels are based on the difference between total energy input and energy sales without proper backing of technical studies and hence the exact level of loss is not ascertainable
- No information is available on the separation of transmission and distribution losses or technical and commercial losses

- Loss targets are prepared without any systematic basis or capital expenditure plan and system strengthening plan. No relation is established between the amount of investment and loss reduction
- Progress of works proposed and executed is very low, which contributes to non achievement of targets set by the Commission.
- No systems are in place for estimation and periodic monitoring of system losses and remedial measures. Plans and targets seem to remain at the head office level only. At the field level, programmes and targets are not properly communicated.

The Board has projected an internal loss level of 16.78%, which is about 0.92% less than the revised estimates for the year 2009-10. The Commission had fixed internal loss for the year 2009-10 as 16.92%. After having deliberated on the issue in detail, the Commission is of the view that for 2010-11, the targeted loss reduction shall be 0.92% as projected by the Board, from that approved for the year 2009-10 ie.,16.92%. Accordingly, the loss target fixed for 2010-11 would be 16.00% as follows:

| | Proposed in the ARR | Approved by the Commission |
|--------------------------------------|---------------------|----------------------------|
| Energy sales (MU) | 14830 | 14667 |
| Internal loss (%) | 16.78% | 16.00% |
| Net Energy input to KSEB System (MU) | 17821 | 17461 |

5.4 AT&C Loss

The Commission has repeatedly pointed out that the amount collected against the current demand has to be separated to know the actual collection efficiency. It is obvious that the collection efficiency furnished by the Board would be lower if collection against current demand is considered. In the Order on ARR & ERC for 2008-09 and 2009-10, the Commission had fixed collection efficiency as 98%. For the year 2010-11 the collection efficiency shall be 99%. Accordingly the AT&C loss target for 2010-11 shall be:

| | 2010-11 |
|-----------------------|----------------|
| T&D loss | 16.00% |
| Collection efficiency | 99.00% |
| AT&C loss | 16.84% |

CHAPTER – 6

ANALYSIS OF ANNUAL REVENUE REQUIREMENTS

6.1 Introduction

The Board has projected an Aggregate Revenue Requirement (ARR) of Rs.7503.98 Crore for 2010-11 including the return on equity. The details of expenses under different heads and the approach of the Commission are explained in the ensuing sections.

6.2. Generation and Power purchase

Total energy requirement of energy for 2010-11 estimated by the Board is 18230.16 MU. The peak demand estimated for the year is 3280 MW, which is an increase of 6% on a compounded basis over the peak demand met during 2007-08 (2745 MW). Two projects, Neriamangalam extension (25MW) and Kuttiadi Tail race (3.75 MW) were commissioned during 2008-09. Kuttiadi Additional extension (100 MW) is expected to commence commercial operation in March 2010.

6.2.1 Internal Generation

Based on the ten year inflow data (from 2000-01 to 2009-10), the average inflow is estimated as 6537 MU. Based on the present reservoir storage and past trend in inflow it is estimated that 19.15 MU per day hydro generation is expected in the first two months (April and May) of the current year. Based on the 10 year average, daily average generation of 17.89MU is expected for the period from June 2010 to March 2011. Hence the total hydro availability from storage plants for the next financial year is estimated as 6607MU (19.15MU/day for two months & 17.89 MU/day from June,09 to March, 2010). In addition to this, 106 MU is expected from small hydro projects having capacity of 41.10MW and 240MU from Kuttiyadi additional extension. Thus the total expected hydro generation for the year 2010-11 is 6953.03MU. By considering 0.5% auxiliary consumption, the net hydro availability would be 6918.4MU.

In 2010-11, the Board is planning to operate BDPP and KDPP to the full available capacity. The cost of fuel is the major issue with these plants. The auxiliary

consumption is taken as 2.5% of the total generation. According to the Board a total of 286.47MU is expected from BDPP and 447MU from KDPP. ie., a total of about 733.47 MU from BDPP and KDPP. Considering the auxiliary consumption, the net energy available will be 715.13 MU. Based on the price of fuel as on 1-12-2009, the variable cost of generation is estimated as Rs.7.21/kWh for BDPP and Rs.7.37/kWh for KDPP. The total generation cost from these plants is estimated to be Rs.536.58 Crore as follows:

Generation and cost of BDPP and KDPP proposed for 2010-11

| Generating station | Gross Generation | Auxiliary consumption | Net Generation | Variable cost | Total Variable cost |
|--------------------|------------------|-----------------------|----------------|---------------|---------------------|
| | (MU) | (MU) | (MU) | (Rs/kWh) | (Rs in Crore) |
| BDPP | 286.47 | 7.16 | 279.31 | 7.21 | 206.54 |
| KDPP | 447.00 | 11.18 | 435.83 | 7.37 | 329.44 |
| Total | 733.47 | 18.34 | 715.13 | | 536.58 |

6.2.2 Purchase of power from Central Generating Stations (CGS)

As stated in the petition, the present allocation from Central Generating Stations is about 1029.7 MW. In addition, NLC expansion Stage II is expected to start commercial operation from April 2010 and Koodamkulam 1st unit by June 2010 and 2nd unit by December 2010. Another project of NTPC Simhadri 2nd stage is expected to start commercial operation by February 2011. The new projects expected at the Central level are as follows:

New CGS expected to be commissioned during 2010-11

| Name of the station | Total capacity | Allocation to KSEB | Allocated capacity | Expected date of commercial operation |
|---------------------|----------------|--------------------|--------------------|--|
| | (MW) | (%) | (MW) | |
| NLC- Exp- Stge-II | 500 | 14.0 | 70 | Aprl- 2010 |
| Kudamkulam- NPC | 2000 | 13.0 | 260 | 1st unit by June-10 and 2nd unit by Dec-10 |
| NTPC- Simhadri | 1000 | 8.0 | 80 | Feb-11 |
| Total | 3500 | | 410 | |

The capacity available from CGS stations for the year 2010-11 and the estimated fixed cost projected by the Board are given below.

Fixed cost commitment to CGS during 2010-11

| Sl No. | Power Plant | Allotted Capacity | Fixed Cost |
|--------|-------------------|-------------------|---------------|
| | | (MW) | (Rs in crore) |
| 1 | Thalcher - II | 415.8 | 175.64 |
| 2 | NLC- Exp- Stage-1 | 58.8 | 34.31 |
| 3 | NLC-II- Stage-1 | 63.0 | 12.67 |

| | | | |
|----|-----------------------|--------|--------|
| 4 | NLC-II- Stage-2 | 90.0 | 19.68 |
| 5 | RSPTS Stage I, II&III | 306.1 | 87.58 |
| 6 | MAPS | 23.0 | 24.48 |
| 7 | KAIGA Stg I | 38.0 | 70.36 |
| 8 | KAIGA Stg II | 35.0 | 67.22 |
| 9 | Kudankulam | 266.0 | 283.74 |
| 10 | NLC - II Exp | 70.0 | 38.73 |
| 11 | Simhadri Exp | 80.0 | 8.40 |
| | Total | 1445.6 | 822.80 |

The Board has stated that the fixed cost shown above is likely to increase by 67% if CERC finalises rates as per the norms applicable for the period 2009-14. The variable cost of power from central stations has been estimated based on the actuals from April 2009 to September 2009. In the case of nuclear power stations single part tariff is applicable i.e., Rs.2.00/kWh for MAPS and Rs.3.12/kWh for KAIGA. For Kudankulam Rs.3.25/kWh is taken. The average cost of NLC expansion is adopted for new NLC Exp Stage II. The fixed and variable cost of Simhadri is taken as Rs.1.00/kWh and Rs.1.23/kWh respectively.

The capacity allocation of Central stations and the generation expected by KSEB is as follows:

Auxiliary consumption and target PLF of CGS proposed by Board

| Sl No. | Power Plant | IC | Allocation | Allocated Capacity to KSEB (in MW) | Aux Consumption (%) | Target PLF (%) | Energy available (MU/day) | Remarks |
|--------|--------------------|------|------------|------------------------------------|---------------------|----------------|---------------------------|--------------------------------------|
| 1 | TALCHER - Stage II | 2000 | 20.79% | 415.8 | 8.50% | 85.00% | 7.76 | |
| 2 | NLC- Exp- Stage-1 | 420 | 14.00% | 58.8 | 9.50% | 80.00% | 1.02 | |
| 3 | NLC-II- Stage-1 | 630 | 10.00% | 63.0 | 10.00% | 75.00% | 1.02 | |
| 4 | NLC-II- Stage-2 | 840 | 10.71% | 90.0 | 10.00% | 75.00% | 1.46 | |
| 5 | RSPTS Stage I & II | 2100 | 11.67% | 245.1 | 8.50% | 85.00% | 4.57 | |
| 6 | RSPTS Stage III | 500 | 12.20% | 61.0 | 8.50% | 85.00% | 1.14 | |
| 7 | MAPS | 440 | 5.23% | 23.0 | 10.00% | 68.50% | 0.34 | |
| 8 | KAIGA Stg I | 440 | 8.64% | 38.0 | 10.00% | 75.00% | 0.62 | |
| 9 | KAIGA Stg II | 440 | 7.95% | 35.0 | 10.00% | 75.00% | 0.57 | |
| 13 | Kudankulam | 2000 | 13.30% | 266.0 | 10.00% | 75.00% | 4.31 | 1st unit by June-10 2nd by Dec-10 |
| 14 | NLC - II Exp | 500 | 14.00% | 70.0 | 10.00% | 80.00% | 1.21 | by Apr-10 |
| 15 | Simhadri Exp | 1000 | 8.00% | 80.0 | 8.50% | 85.00% | 1.49 | by Feb-11 |
| | | | | 1445.6 | | | 25.51 | |

The Board has estimated the availability of energy from the Central Generating Stations as 19.71MU/day from April to May 2010, 21.86 MU per day from June to November 2010 and 24.02MU per day during December 2010 and January 2011 and 25.51MU per day during February and March 2011. Accordingly a total of 8197MU is available at the generating bus and after the external loss 7814MU will be

available at the Kerala bus. The total energy available from CGS is estimated by KSEB as follows:

Energy availability from Central Generating Stations

| Source | Energy scheduled at generator bus | External loss | Net Energy input into KSEB system | Fixed cost | Variable cost /kWh | Variable cost | Total cost |
|--------------------|-----------------------------------|---------------|-----------------------------------|------------|--------------------|---------------|------------|
| | (MU) | (MU) | (MU) | (Rs. Cr) | Rs./kWh) | (Rs. Cr) | (Rs. Cr) |
| Thalcher – II | 2832.88 | 132.01 | 2700.87 | 175.64 | 1.24 | 351.35 | 526.99 |
| NLC- Exp- Stage-1 | 372.92 | 17.38 | 355.55 | 34.31 | 1.20 | 44.75 | 82.34 |
| NLC-II- Stage-1 | 372.52 | 17.36 | 355.16 | 12.67 | 1.28 | 47.68 | 70.71 |
| NLC-II- Stage-2 | 531.96 | 24.79 | 507.17 | 19.68 | 1.28 | 68.09 | 87.77 |
| RSPTS Stage I & II | 2085.28 | 97.17 | 1988.11 | 87.58 | 1.42 | 296.11 | 431.23 |
| MAPS | 124.28 | 5.79 | 118.49 | 24.48 | | | 25.29 |
| KAIGA Stg I | 224.79 | 10.48 | 214.31 | 70.36 | | | 73.07 |
| KAIGA Stg II | 206.84 | 9.64 | 197.2 | 67.22 | | | 67.22 |
| Kudankulam | 915.71 | 42.67 | 873.03 | 283.74 | | | 283.74 |
| NLC - II Exp | 441.5 | 20.57 | 420.93 | 38.73 | 1.28 | 56.51 | 95.24 |
| Simhadri Exp | 88.1 | 4.11 | 84 | 8.4 | 1.23 | 10.84 | 19.24 |
| Total | 8196.78 | 381.97 | 7814.81 | 822.8 | 1.07 | 875.33 | 1762.83 |

6.2.3. Power purchase from IPPs

In addition to CGS, RGCCPP (180 MW), BSES (157 MW) and KPCL (20MW) are the IPPs available to the State. From these plants 2069 MU is expected for the year 2010-11. The fixed cost commitments to these plants based on the past claims are Rs.9.18 Crore for KPCL, Rs.89.76 Crore for BSES and Rs.99.16 Crore for RGCCPP. The average cost of power from BSES and RGCCPP is proposed as Rs.7.16kWh and Rs.7.34/kWh respectively and for KPCL Rs.7.26/kWh is assumed based on the fuel price on 1st December 2009. The power purchase cost from IPPs estimated by the Board is as follows:

Cost of power purchase from IPPs

| Source | Annual generation proposed (MU) | Fixed cost (Rs.Cr) | Variable Cost | | Total (Rs.Cr) |
|--------|---------------------------------|--------------------|---------------|----------------|---------------|
| | | | Rate (Rs/kWh) | Amount (Rs.Cr) | |
| RGCCPP | 1010.69 | 99.16 | 7.34 | 741.85 | 841.01 |
| BSES | 922.03 | 89.76 | 7.16 | 660.17 | 749.93 |
| KPCL | 135.96 | 9.18 | 7.26 | 98.70 | 107.88 |
| Total | 2068.68 | 198.10 | | 1500.72 | 1698.82 |

In addition to the above IPPs, the Board propose to purchase power from Wind energy generators, Ullumkal SHP and MPS Steel Co-generation Plant. Total energy expected from these sources is 135MU. The Board has entered into PPA with WEGs for 27.9 MW at Agali and Ramakkalmedu. The Board expects about 61.05 MU from

WEGs @ Rs.3.14 /kWh. The estimated cost would be about Rs.19.17 crore. Ullumkal SHP with installed capacity of 7 MW would be operational from this year and the cost of purchase is now a provisional rate of Rs.2.00/kWh. The total generation expected is 34 MU at a cost of Rs. 6.80 crore. M/s MPS Steel may provide 40 MU from the plant @2.34/kWh which would be about Rs.9.55 crore

Proposed generation & Cost from other IPPs

| Source | Capacity (MW) | Annual generation proposed (MU) | Cost of energy (Rs/ kWh) | Total cost (Rs.Cr) |
|-------------------------------|---------------|---------------------------------|--------------------------|--------------------|
| Wind IPPs | 21.90 | 61.05 | 3.14 | 19.17 |
| Ullumkal SHP | 7.00 | 34.00 | 2.00 | 6.80 |
| MP steel- Co generation plant | 8.00 | 40.80 | 2.34 | 9.55 |
| Total | 36.90 | 135.85 | | 35.52 |

The proposed monthly demand supply position for the year is given in the following table. It is estimated that 165MU may be purchased from traders/day ahead purchase or exchanges.

Demand and Supply position for the year 2010-11

| Month | Energy Demand (MU) | Availability (MU) | | | | | Shortages to be met through Traders/ PX (MU) |
|--------|--------------------|-------------------|-----------------------------|---------|---------|----------|--|
| | | Hydro (net) | KSEB sources thermal & Wind | CGS | IPPs | Total | |
| Apr-10 | 1535.03 | 593.51 | 73.38 | 591.20 | 212.31 | 1470.41 | 64.63 |
| May-10 | 1577.34 | 609.34 | 75.81 | 610.91 | 214.49 | 1510.55 | 66.79 |
| Jun-10 | 1432.69 | 508.81 | 69.02 | 655.84 | 199.02 | 1432.69 | 0.00 |
| Jul-10 | 1387.44 | 567.63 | 29.22 | 677.70 | 112.89 | 1387.44 | 0.00 |
| Aug-10 | 1494.62 | 584.51 | 24.43 | 677.70 | 207.98 | 1494.62 | 0.00 |
| Sep-10 | 1452.32 | 609.48 | 73.38 | 655.84 | 113.62 | 1452.32 | 0.00 |
| Oct-10 | 1538.96 | 592.05 | 64.60 | 677.70 | 204.60 | 1538.96 | 0.00 |
| Nov-10 | 1517.31 | 558.65 | 73.38 | 655.84 | 195.55 | 1483.42 | 33.89 |
| Dec-10 | 1555.12 | 545.92 | 63.07 | 744.50 | 201.64 | 1555.12 | 0.00 |
| Jan-11 | 1579.42 | 584.14 | 59.19 | 744.50 | 191.60 | 1579.42 | 0.00 |
| Feb-11 | 1484.04 | 553.50 | 53.49 | 714.26 | 162.80 | 1484.05 | 0.00 |
| Mar-11 | 1648.85 | 610.85 | 59.19 | 790.79 | 188.02 | 1648.85 | 0.00 |
| Total | 18203.15 | 6918.40 | 718.13 | 8196.78 | 2204.53 | 18037.84 | 165.31 |

Based on the above the merit order stack proposed by KSEB is as follows:

Merit Order Stack as projected by KSEB

| Source | Merit Order | Estimated variable cost for 2010-11 (Rs/kWh) | Source | Merit Order | Estimated variable cost for 2010-11 (Rs/kWh) |
|--------------------|-------------|--|-----------------|-------------|--|
| Hydel | 1 | 0 | MP steel Co-Gen | 11 | 2.34 |
| Thalcher - II | 2 | 1.20 | Kaiga | 12 | 3.13 |
| NLC - Exp | 3 | 1.20 | Kaiga- Stg-II | 13 | 3.13 |
| NLC-II - Stage-1 | 4 | 1.28 | Wind IPP | 14 | 3.14 |
| NLC- Exp- Stage-II | 5 | 1.28 | Kudumkulam | 15 | 3.25 |
| NLCII - Stage II | 6 | 1.28 | BSES | 16 | 7.16 |
| NTPC- RSTPS | 7 | 1.42 | BDPP | 17 | 7.21 |
| MAPS | 8 | 1.97 | KPCL | 18 | 7.26 |
| Wind -Kanjikode | 9 | 2.00 | Kayamkulam | 19 | 7.34 |
| Ullumkal IPP | 10 | 2.00 | KDPP | 20 | 7.37 |

6.2.4 Transmission charges

Transmission charges payable to PGCIL proposed by the Board based on the actuals from April 2009 to September 2009 are as follows:

Transmission charges payable

| Sl No | Items | Actuals- Apr-09 to Sep-09 | Estimate for the year 2010-11 |
|-------|--------------------------------------|---------------------------|-------------------------------|
| | Southern region | | |
| | Transmission charges | 85.54 | 204.92 |
| | ULDC Charges | 6.46 | 16.39 |
| 1 | Sub total | 91.99 | 221.31 |
| 2 | NTPC Kayamkulam Transmission charges | 5.64 | 11.27 |
| 3 | Total transmission charges | | 232.58 |

In addition to the above, income tax, incentives, water cess, foreign exchange variation, etc., are also payable to CGS and PGCIL. Based on the actual bills in the past years the Board projects the same as Rs.104.19 Crore for 2010-11.

Based on the above, total internal generation cost (excluding the cost of hydel stations) projected by the Board as Rs.536.58 Crore and power purchase cost as Rs.3824.75 Crore, totaling to an amount of Rs.4361.33 Crore ie., about an average of Rs.2.45/kWh if internal generation and power purchase cost are taken together. The power purchase cost alone works out to 3.75/kWh. Summary of total generation and power purchase cost proposed by the Board is as follows:

Internal generation and Power purchase proposed by KSEB for 2010-11

| Source | Energy Produced /Purchased | Auxiliary Consumption | External Loss | Net Energy Input to KSEB T&D system | Fixed Cost | Incentive, Tax, etc. | Total Variable cost | Total Cost |
|--------------------------|----------------------------|-----------------------|---------------|-------------------------------------|----------------|----------------------|---------------------|----------------|
| | MU | MU | MU | MU | Rs. Cr | Rs. Cr | Rs. Cr | Rs. Cr |
| KSEB Internal | | | | | | | | |
| Hydel | 6953.16 | 34.77 | | 6918.40 | | | | |
| Wind -Kanjikode | 3.00 | 0.00 | | 3.00 | | | 0.60 | 0.60 |
| BDPP | 286.47 | 7.16 | | 279.31 | | | 206.54 | 206.54 |
| KDPP | 447.00 | 11.18 | | 435.83 | | | 329.44 | 329.44 |
| Sub total | 7689.63 | 53.10 | | 7636.53 | | | 536.58 | 536.58 |
| Power purchase | | | | | | | | |
| (a) CGS | | | | | | | | |
| Thalcher – II | 2832.88 | | 132.01 | 2700.87 | 175.64 | 3.34 | 339.95 | 518.92 |
| NLC- Exp- Stage-1 | 372.92 | | 17.38 | 355.55 | 34.31 | 3.28 | 44.75 | 82.34 |
| NLC-II- Stage-1 | 372.52 | | 17.36 | 355.16 | 12.67 | 10.36 | 47.68 | 70.71 |
| NLC-II- Stage-2 | 531.96 | | 24.79 | 507.17 | 19.68 | | 68.09 | 87.77 |
| RSPTS Stage I & II | 2085.28 | | 97.17 | 1988.11 | 87.58 | 47.54 | 296.11 | 431.23 |
| MAPS | 124.28 | | 5.79 | 118.49 | 24.48 | 0.81 | 0.00 | 25.29 |
| KAIGA Stg I | 224.79 | | 10.48 | 214.31 | 70.36 | 2.71 | 0.00 | 73.07 |
| KAIGA Stg II | 206.84 | | 9.64 | 197.20 | 67.22 | 0.00 | 0.00 | 67.22 |
| Kudankulam | 915.71 | | 42.67 | 873.03 | 283.74 | 0.00 | 0.00 | 283.74 |
| NLC - II Exp | 441.50 | | 20.57 | 420.93 | 38.73 | 0.00 | 56.51 | 95.24 |
| Simhadri Exp | 88.10 | | 4.11 | 84.00 | 8.40 | 0.00 | 10.84 | 19.24 |
| IPPs | | | | | | | | |
| RGCCPP | 1010.69 | | | 1010.69 | 99.16 | | 741.85 | 841.01 |
| BSES | 922.03 | | | 922.03 | 89.76 | | 660.17 | 749.93 |
| KPCL | 135.96 | | | 135.96 | 9.18 | | 98.70 | 107.88 |
| Wind | 61.05 | | | 61.05 | | | 19.17 | 19.17 |
| Ullumkal | 34.00 | | | 34.00 | | | 6.80 | 6.80 |
| MP steel | 40.80 | | | 40.80 | | | 9.55 | 9.55 |
| Traders | 165.31 | | | 165.31 | | | 82.66 | 82.66 |
| PGCIL Charges | | | | | | | | |
| Eastern Region | | | | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 |
| Southern Region | | | | 0.00 | 221.31 | 20.39 | 0.00 | 241.70 |
| Kayamkulam | | | | 0.00 | 11.28 | 0.00 | 0.00 | 11.28 |
| Sub total power purchase | 10566.62 | | | | 1253.50 | 88.47 | 2482.83 | 3824.75 |
| Total | 18256.25 | 53.10 | 381.97 | 17821.18 | 1253.50 | 88.47 | 3019.41 | 4361.33 |

6.2.5. Objections of stakeholders

M/s Southern Railway in their objections stated that the Board did not consider the methods to avoid purchase from costly stations and pay adequate attention to increase internal generation capacity. According to them Board should explore the

the options of encouraging renewable sources. According to HT-EHT Association the hydro availability should be reworked based on the directions of the Commission. They arrived at the hydro generation at 7256MU for 2011-12. The availability from CGS would be 9229 MU including the generation from new stations. Based on this, the total generation and power purchase would be only Rs.2849.8 Crores compared to Rs.4361.33 crore projected by the Board. Shri. A.R Satheesh, stated that considering the storage available, there will be additional potential of 404MU in 2010-11. Different trade unions have also suggested that the availability of power from Central Stations will be higher than the projections of KSEB. Some of them contested that Board deliberately reduced the generation from hydel sources to show higher revenue gap. According to Shri. K.B. Muraleesharan, KSEB is transformed to a trading entity without showing any obligation to increase relatively low cost internal generation. M/s FACT, M/s Titanium Limited, M/s Apollo Tyres, M/s MRF Limited and Kerala Chamber of Commerce and Industry have stated that there is a deliberate attempt to inflate sales and deflate power from CGS and hydro sources.

6.2.6 Analysis and decision of the Commission

The total power generation and purchase expenses proposed by the Board for the year 2010-11 is comparatively higher than the levels in the previous years mainly on account of increases in the cost of power from the liquid fuel stations. Of the total energy requirement, about 15% (2802MU) is from the liquid fuel stations, but the cost is about 51% of the total cost (Rs. 2235 Crore), at an average rate of about Rs.8/kWh. The average cost of power including hydel stations is Rs.2.45/kWh, and excluding hydel is Rs.4/kWh. If the energy from liquid fuel stations are excluded, the average cost of power would be reduced to Rs.1.41/kWh ie., by Rs.1/kWh. *As pointed out earlier, this shows the high cost of power the consumers in Kerala are forced to pay for the lack of proper planning and execution by KSEB over the years.*

The Commission analysed the proposal of the Board on generation and power purchase in detail which is given in the following sections.

6.2.6.1 Internal generation

The Board has estimated the hydro generation at 6953.16 MU, considering 19.51MU per day for April and May 2010. Considering the storage available, the Commission re-estimates the hydro availability for April and May 2010. The storage as on 31-4-2010 is 1202MU. The average inflow in May is 179MU. By providing 550 MU as

reserve on 1-6-2010, generation possible in May is 831MU. The Board has already generated 584MU in April. The total hydro available for April and May is 1415MU, which works out to be an average of about 23.2MU instead of 19.15MU estimated by the Board. Hence, the Commission would consider a conservative estimate of 23MU per day for April and May, 2010. Thus the estimated hydro generation for 2010-11 would be about 234MU higher than the estimates of the Board. **Hence the Commission re-estimates the hydro availability at 7187 MU.**

The Board has projected 733.47 MU from BDPP and KDPP at the rate of Rs.7.21/kWh and Rs.7.37/kWh. The Commission generally projects the cost of power from these stations based on the projections of KSEB and price of fuel. The Commission has already issued KSERC (Fuel Price Adjustment formula) Regulations, 2009. As per the regulation, the difference in fuel cost over the approved level will be adjusted in each quarter considering the benchmark performance parameter such as station heat rate, specific fuel oil consumption etc., The Commission as part of fixing the benchmark parameters, sought the details of station heat rate (including the heat rate prescribed by the manufacturers) and other parameters. KSEB provided the actual performance parameters up to the month of December 2009. The Commission also convened a meeting with KSEB on this issue on 16-4-2010. In the meeting, the Board presented its draft normative calculations by considering derating, PLF and other corrections, which was about 10 to 20% higher than the actual values. In the case of KDPP, the Board has stated certain assumptions have been used in the past to estimate the parameters. The Commission has directed the Board to separately provide its proposal on this. **The Commission is of the view that the proposal of the Board can be considered after a consultation process. In the mean time, for the purpose of estimation, following values based on the data submitted by KSEB is used. which shall be replaced with approved normative parameters as and when it is approved by the Commission.** Accordingly tentative benchmark parameters are worked out as follows

Initial Benchmark parameters for BDPP/KDPP

| | BDPP | KDPP |
|---|-------|-------|
| Gross station heat rate (kCal/kWh) | 2000 | 1945 |
| Average Calorific value of fuel (kCal/kg) | 10045 | 9700 |
| Lubricant oil consumption (ml/kWh) | 1.32 | 0.50 |
| Price of LSHS (Rs./MT) | 35000 | 35000 |
| Price of Lub Oil (Rs./lt) | 110 | 95 |
| Auxiliary Consumption | 2.5% | 2.5% |

As per the data furnished by KSEB the average use of lubricant oil per kWh is 1.32ml/kWh and 0.5ml/kWh. The average LSHS cost as on 1st April 2010 is taken as Rs.35000/MT. The Commission also accepts the auxiliary consumption proposed by KSEB which is 2.5% for both plants. Accordingly, the fuel cost for BDPP and KDPP is worked out as follows:

| | BDPP | KDPP |
|---------------------------|-------------|-------------|
| Heat Rate (kcal/kWh) | 2,000.00 | 1945.00 |
| Cal. Value (kCal/kg) | 10045 | 9700 |
| Net Generation (MU) | 279.31 | 435.83 |
| Auxiliary Consumption | 2.50% | 2.50% |
| Gross Generation | 286.29 | 446.73 |
| Qty. of fuel Required | 57002 | 89575 |
| Price of Fuel | 35000 | 35000 |
| Cost of fuel | 199.51 | 313.51 |
| Cost/kWh | 6.97 | 7.02 |
| Lubricant oil | 1.2 | 0.5 |
| Cost of Lub oil (Rs./Its) | 109.52 | 95 |
| Cost of lub oil (Rs./kWh) | 0.13 | 0.05 |
| Fuel Cost | 7.10 | 7.07 |
| Total Cost | 203.27 | 315.64 |

6.2.6.2 Availability of power from CGS

The Board has estimated generation from CGS stations based on the norms and target availability fixed by CERC as 8196.78MU. However, Commission notes that the auxiliary consumption factor for some CGS used by KSEB is not as per the CERC norms. CERC has revised the operational norms including auxiliary consumption for the tariff period starting from 1-4-2009. The Commission has considered the revised norms, which is as follows.

Existing and revised norm for CGS

| Station | Aux. Consumption | | Availability | |
|------------------|------------------|--------------|---------------|--------------|
| | Existing norm | Revised norm | Existing norm | Revised norm |
| Talcher | 7.50% | 6.50% | 80% | 85% |
| RSTPS I&II, III | 7.85% | 7.08% | 80% | 85% |
| NLC II -Stage II | 10.00% | 10.00% | 75% | 75% |
| NLC I Exp | 9.50% | 9.50% | 75% | 80% |
| NLC II -Stage I | 10.00% | 10.00% | 75% | 75% |

Source: Statement of Reasons on Tariff Regulations published by CERC

In the petition KSEB stated that the actual availability from CGS was lower compared to the approved quantity of generation in 2009-10. According to KSEB the method followed by the Commission in 2009-10, does not consider factors such as fuel shortage and plant availability but considers only machine availability which does not represent actual generation. However, the arguments of KSEB are unacceptable considering the fact that the actual generation from CGS for the year 2009-10 (especially from Talcher and Ramagundam) is higher than the approved quantity. Further, the Commission considered the average PLF achieved by these stations, it was not the average availability as pointed out KSEB. In the previous order the Commission used average PLF achieved by CGS for estimating the generation, since actual PLF achieved by the Stations would be a better indicator of performance and the generation availability. Further the Commission allows the incentives applicable to the CGS at actuals. Since incentives are based on the actual performance, it is always fair to consider the average performance over the years. The PLF represents the actual performance of the station which takes into consideration the availability of fuel. The performance of Central Stations as given by CERC is given below:

Actual PLF Achieved by CGS Stations

| CGS | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | Average |
|------------------|---------|---------|---------|---------|---------|---------|----------------|
| Talcher | 73% | 82% | 82% | 84% | 90% | 94% | 88% |
| RSTPS I&II, III | 92% | 89% | 91% | 86% | 89% | 90% | 89% |
| NLC II -Stage II | 80% | 80% | 72% | 72% | 73% | 81% | 75% |
| NLC I Exp | | 54% | 88% | 84% | 89% | 89% | 87% |
| NLC II -Stage I | 83% | 74% | 72% | 70% | 57% | 82% | 70% |

Source: Statement of reasons published by CERC

The average PLF of Central stations is much higher than the target availability norms especially in the case of Ramagundam and Talcher. The Commission also verified the actual PLF achieved by the existing CGS especially Talcher and NTPC Ramagundam, which are much higher for the year 2009-10 than the PLF used by the Commission in 2009-10. Hence, the Commission finds no reason to deviate from the methodology followed in the previous order. Hence the Commission proceeds to approach the matter following the same method as used in 2009-10. Accordingly, the Commission re-estimates the generation from CGS stations as below.

Energy Availability from CGS

| Power Plant | Projection by KSEB | | | | | Approved by KSERC | | |
|------------------|--------------------|-----------------|--------|--------|-------------------|-------------------------------------|--------|-----------------------|
| | Allocation (MW) | Aux consumption | PLF | MU/Day | Total Energy (MU) | Aux consumption (Revised CERC Norm) | PLF | Energy available (MU) |
| TALCHER – II | 415.80 | 8.50% | 80% | 7.76 | 2832.88 | 6.50% | 88%* | 2997 |
| NLC – Exp | 58.80 | 10.00% | 80% | 1.02 | 372.92 | 10.00% | 87%* | 372 |
| NLCII - Stage I | 63.00 | 10.00% | 75% | 1.02 | 372.52 | 10.00% | 70%* | 372 |
| NLCII - Stage II | 90.00 | 8.50% | 75% | 1.46 | 531.96 | 7.08% | 75%* | 532 |
| NTPC (RSPTS) | 306.00 | 8.50% | 85% | 5.71 | 2085.28 | 7.08% | 89%* | 2217 |
| MAPS | 23.00 | 10.00% | 68.50% | 0.34 | 124.28 | 10.00% | 68.50% | 124.28 |
| KAIGA stage I | 38.00 | 10.00% | 75% | 0.62 | 224.79 | 10.00% | 75% | 224.79 |
| KAIGA stage II | 35.00 | 10.00% | 75% | 0.57 | 206.84 | 10.00% | 75% | 206.84 |
| Kudamkulam | 266.00 | 10.00% | 75% | 4.31 | 915.71 | 10.00% | 75% | 915.71 |
| NLC-Exp-II | 70.00 | 10.00% | 80% | 1.21 | 441.5 | 10.00% | 80% | 441.5 |
| Simhadri Exp | 80.00 | 8.50% | 85% | 1.49 | 88.1 | 8.50% | 85% | 88.1 |
| Total | 1,445.60 | | | | 8196.8 | | | 8491.22 |

*Average PLF for the past 5 years

Board has used the actual fuel cost from April to September 2009 as the basis for arriving at the variable cost of power from CGS. As per the data submitted by the Board in the average fuel cost of the CGS stations from April to February, the Commission arrives at the average variable cost for CGS as follows:

Approved Average variable cost of power from CGS

| Month (2009-10) | RSTS | Talcher Stage-II | NLC Stage-I | NLC Stage-II | NLC Expansion |
|-----------------|-------------|------------------|-------------|--------------|---------------|
| April | 1.38 | 1.46 | 1.21 | 1.21 | 1.14 |
| May | 1.42 | 1.28 | 1.21 | 1.21 | 1.14 |
| June | 1.57 | 1.12 | 1.21 | 1.21 | 1.14 |
| July | 1.30 | 1.46 | 1.21 | 1.21 | 1.14 |
| August | 1.23 | 0.85 | 1.21 | 1.21 | 1.14 |
| September | 1.23 | 0.80 | 1.21 | 1.21 | 1.14 |
| October | 1.37 | 0.81 | 1.21 | 1.21 | 1.14 |
| November | 1.37 | 0.81 | 1.21 | 1.21 | 1.14 |
| December | 1.43 | 0.93 | 1.21 | 1.21 | 1.14 |
| January | 1.58 | 1.12 | 1.22 | 1.22 | 1.15 |
| February | 1.57 | 1.19 | 1.22 | 1.22 | 1.15 |
| Average | 1.40 | 1.08 | 1.21 | 1.21 | 1.14 |

6.2.6.3. Energy purchase from other sources:

The Board has projected a total generation from IPPs using liquid fuel such as KPCL, RGCCP and BSES as 2093.68 MU at a total cost of Rs.1698.82 crore. The

variable cost projected by KSEB for RGCCPP is Rs7.34/kWh and for BSES Rs.7.16/kWh. For the diesel plant KPCL, the variable cost is assumed as Rs.7.26/kWh. The cost of energy from other IPPs such as wind (61.05MU), Ullumgal (34MU), MPSteel (40.8MU) is estimated at Rs.35.52 Crore. KSEB estimated that 165MU needs to be purchased from traders/exchange at rate of Rs.5/kWh.

As per the estimates of the Commission, high cost purchase from many sources could be curtailed by about 874 MU as follows

Generation and Power purchase approved for 2010-11

| Sources | Proposed in the ARR (MU) | | Estimates of the Commission (MU) | |
|---------------------------------------|--------------------------|----------------------------------|----------------------------------|----------------------------------|
| | Gross Energy | Net energy Available at KSEB Bus | Gross Energy | Net energy Available at KSEB Bus |
| Hydel stations | 6953.16 | 6918.40 | 7187 | 7,151.07 |
| Wind | 3.00 | 3.00 | 3.00 | 3.00 |
| BDPP | 286.47 | 279.31 | 286.47 | 279.31 |
| KDPP | 447.00 | 435.83 | 447.00 | 435.83 |
| Internal Total | 7689.63 | 7636.53 | 7923.47 | 7869.20 |
| Thalcher – II | 2832.88 | 2700.87 | 2,997.00 | 2,857.34 |
| NLC – Exp | 372.92 | 355.55 | 372.00 | 354.66 |
| NLC-II - Stage-1 | 372.52 | 355.16 | 372.00 | 354.66 |
| NLCII - Stage II | 531.96 | 507.17 | 532.00 | 507.21 |
| NTPC- RSTPS | 2085.28 | 1988.11 | 2,217.00 | 2,113.69 |
| MAPS | 124.28 | 118.49 | 124.28 | 118.49 |
| KAIGA Stg I | 224.79 | 214.31 | 224.79 | 214.31 |
| KAIGA Stg II | 206.84 | 197.20 | 206.84 | 197.20 |
| Kudamkulam | 915.71 | 873.03 | 915.71 | 873.04 |
| NLC- Exp-II | 441.50 | 420.93 | 441.50 | 420.93 |
| Simhadri Exp | 88.10 | 84.00 | 88.10 | 83.99 |
| CGS Total | 8196.78 | 7814.81 | 8491.22 | 8095.53 |
| Kayamkulam | 1010.69 | 1010.69 | 1010.69 | 1010.69 |
| BSES | 922.03 | 922.03 | 922.03 | 922.03 |
| KPCL | 135.96 | 135.96 | 135.96 | 135.96 |
| Wind | 61.05 | 61.05 | 61.05 | 61.05 |
| Ullumkal | 34.00 | 34.00 | 34.00 | 34.00 |
| MPS Steel | 40.80 | 40.80 | 40.80 | 40.80 |
| Purchase from Traders | 165.31 | 165.31 | 165.31 | 165.31 |
| Purchase other than CGS | 2370 | 2370 | 2370 | 2370 |
| Total | 18256 | 17821 | 18785 | 18335 |
| Energy requirement at KSEB BUS | | 17821 | | 17461 |
| Surplus | | 0 | | 874 |

Based on the merit order principle, the surplus energy should be deducted from the high cost sources. As per the merit order, the highest cost plants are the liquid fuel stations as follows:

| Stations | Rate (Rs./kWh) |
|----------|----------------|
| KDPP | 7.07 |
| BDPP | 7.10 |
| BSES | 7.16 |
| KPCL | 7.26 |
| RGCCPP | 7.34 |

Though the RGCCP is the bottom of the merit order stack, because of compensatory share received from CGS, the pooled cost of RGCCP would be lower than Rs.7/kWh, hence, it is excluded from the list. For the other stations the cost ranges from Rs.7.00/kWh to Rs,7.30/kWh. Since all the plants are required for meeting the peak, proportionate reduction method is followed for eliminating the surplus energy.

| Plants | Rate (Rs./kWh) | Energy Proposed (MU) | Less Surplus (MU) | Net Energy considered (MU) |
|--------|----------------|----------------------|-------------------|----------------------------|
| BDPP | 7.10 | 279 | 138 | 142 |
| BSES | 7.16 | 922 | 454 | 468 |
| KPCL | 7.26 | 136 | 67 | 69 |
| KDPP | 7.07 | 436 | 215 | 221 |
| Total | | 1773 | 874 | 899 |

Based on the above, the total power purchase approved for 2010-11 is as follows:

Power purchase and generation cost approved for 2010-11

| Source | Energy Produced /Purchased | Auxiliary Consumption | External Loss | Net Energy Input to KSEB T&D system | Fixed Cost | Incentive, Tax, etc. | Variable cost /Unit | Total Variable cost | Total Cost |
|--------------------|----------------------------|-----------------------|---------------|-------------------------------------|------------|----------------------|---------------------|---------------------|---------------|
| | MU | MU | MU | MU | Rs. Cr | Rs. Cr | Rs/kWh | Rs. Cr | Rs. Cr |
| KSEB Internal | | | | | | | | | |
| Hydel | 7187 | 36 | | 7151 | | | | | |
| Wind -Kanjikode | 3 | 0 | | 3 | | | | | |
| BDPP | 145 | 4 | | 142 | | | 7.10 | 103.09 | 103.09 |
| KDPP | 227 | 6 | | 221 | | | 7.07 | 160.08 | 160.08 |
| Sub total | 7562 | 0 | | 7517 | | | | 263.17 | 263.17 |
| Power purchase | | | | | | | | | |
| (a) CGS | | | | | | | | | |
| Thalcher - II | 2997 | | 140 | 2857 | 175.64 | 3.34 | 1.08 | 322.24 | 501.22 |
| NLC- Exp- Stage-1 | 372 | | 17 | 355 | 34.31 | 3.28 | 1.14 | 42.50 | 80.08 |
| NLC-II- Stage-1 | 372 | | 17 | 355 | 12.67 | 10.36 | 1.21 | 45.09 | 68.12 |
| NLC-II- Stage-2 | 532 | | 25 | 507 | 19.68 | | 1.21 | 64.46 | 84.15 |
| RSPTS Stage I & II | 2217 | | 103 | 2114 | 87.58 | 47.54 | 1.40 | 311.05 | 446.17 |
| MAPS | 124 | | 6 | 118 | 24.48 | 0.81 | - | - | 25.29 |
| KAIGA Stg I | 225 | | 10 | 214 | 70.36 | 2.71 | - | - | 73.07 |

| Source | Energy Produced /Purchased | Auxiliary Consumption | External Loss | Net Energy Input to KSEB T&D system | Fixed Cost | Incentive, Tax, etc. | Variable cost /Unit | Total Variable cost | Total Cost |
|------------------|----------------------------|-----------------------|---------------|-------------------------------------|-----------------|----------------------|---------------------|---------------------|-----------------|
| KAIGA Stg II | 207 | | 10 | 197 | 67.22 | - | - | - | 67.22 |
| Kudankulam | 916 | | 43 | 873 | 283.74 | - | - | - | 283.74 |
| NLC - II Exp | 442 | | 21 | 421 | 38.73 | - | 1.28 | 56.51 | 95.24 |
| Simhadri Exp | 88 | | 4 | 84 | 8.40 | - | 1.23 | 10.84 | 19.24 |
| Total CGS | 8491 | | 396 | 8096 | 822.80 | 68.04 | | 852.69 | 1,743.53 |
| IPPs | | | | | | | | | |
| RGCCPP | 1011 | | | 1011 | 99.16 | | 7.34 | 741.85 | 841.01 |
| BSES | 468 | | | 468 | 89.76 | | 7.16 | 334.82 | 424.58 |
| KPCL | 69 | | | 69 | 9.18 | | 7.26 | 50.06 | 59.24 |
| Wind | 61 | | | 61 | | | 3.14 | 19.17 | 19.17 |
| Ullumkal | 34 | | | 34 | | | 2.00 | 6.80 | 6.80 |
| MP steel | 41 | | | 41 | | | 2.34 | 9.55 | 9.55 |
| Traders | 165 | | | 165 | | | 5.00 | 82.66 | 82.66 |
| Total IPPs | 1848 | | | 1848 | 198.10 | | | 1,244.90 | 1,443.00 |
| Total purchase | 10340 | 0 | 396 | 9944 | 1,020.90 | 68.04 | | 2097.59 | 3186.53 |
| Eastern Region | | | | | - | 0.05 | | | 0.05 |
| Southern Region | | | | | 221.31 | 20.39 | | | 241.70 |
| Kayamkulam | | | | | 11.28 | - | | | 11.28 |
| Sub total PGCIL | - | - | - | - | 232.59 | 20.44 | - | - | 253.03 |
| Total | 17,901 | - | 396 | 17,461 | 1,253.50 | 88.48 | - | 2,360.75 | 3,702.73 |

The total power purchase approved is 10340 MU with a cost of Rs.3186.53 Crore. The total cost of generation, power purchase and transmission cost allowed is Rs.3702.73 crore for 2010-11 against Rs. 4361.33 Crore projected by KSEB.

KSEB shall within one month prepare and submit to the Commission, monthwise energy generation and purchase plan based on the approved figures for the year 2010-11, in accordance with the KSERC (Fuel Surcharge Formula) Regulations. **KSEB is duty bound to schedule the generation and power purchase in accordance with the principles envisaged under Section 61 so as to minimize the cost to the Consumers. KSEB shall endeavour to reduce dependence on high cost sources such as liquid fuel stations.** In 2009-10, KSEB could purchase substantial amount of energy through traders/power exchange. **Hence, the Commission is of the view that the Board shall take steps to replace the costly power from liquid fuel stations through short-term contracts through traders/power exchange judiciously through a transparent bidding process. Efforts should be taken to purchase on an average additional 50MU per month from June onwards from the traders, which would reduce the power purchase cost by about Rs.150 to Rs.200 Crores.** The Board shall submit the information as per the fuel surcharge regulations periodically.

In order to insulate the licensee from hydro risk, the Commission would resort to a comprehensive review of hydro energy availability in the month of December 2010, by then the rainfall position and the shortage/surpluses if any would be reasonably established. Accordingly, **KSEB shall approach the Commission with all necessary details for the review and if necessary, a reasonable proposal for short term purchase in a situation of hydro failure or reduction in availability from CGS or short fall in meeting peak load.**

6.3 Interest and financing charges:

The Board has projected Rs.391.62 crore towards interests and finance charges for the year 2010-11. As against the borrowing of Rs.587 Crore and repayment of Rs.587.34 crore proposed in 2008-09, the actual borrowing was Rs.94.49 crore (out of which Rs.9.34 crore was on account of foreign exchange variation) and repayment was Rs.850.crore, which was made possible by utilizing the deposits made earlier for this purpose. Accordingly, the outstanding liability as on 31-3-2009 was only Rs.1100 crore only compared to Rs.2295.54 crore proposed. It was made possible by resorting to swapping of loans, borrowing from least cost options, restricting the borrowing and reduction in cost of borrowing from Govt., and preclosure of loans and bonds. The Board claimed that as against the approved interest cost of Rs.365.60 crore, the actual interest cost was only Rs.339.60 crore.

In 2009-10, Board has revised estimates on capital expenditure, borrowing and repayment. As against the proposed capital expenditure of Rs.1377.10Crore, the revised estimate is Rs.947.65 crore. The revised borrowing would be Rs.655.79 Crore against Rs.764.87 crore proposed. As per the revised estimate for 2009-10, the closing balance of loans and bonds will be Rs.1206.99 crore. The revised borrowing plan proposed by the Board for 2009-10 is as follows:

Summary of Borrowings & Repayments for the year 2009-10(RE)

Rs.in Crore

| Item | Opening Balance as on 01.04.09 | | Borrowing in 2009-10 | | Redemption in 2009-10 | | Closing Balance as on 31.03.10 | |
|-----------------------------------|--------------------------------|----------------|----------------------|---------------|-----------------------|---------------|--------------------------------|----------------|
| | ARR | Revised | ARR | Revised | ARR | Revised | ARR | Revised |
| Loans from GOK | 69.50 | 0.00 | 69.50 | 0.00 | 0.00 | 0.00 | 139.00 | 0.00 |
| Existing Bonds | 43.20 | 43.20 | 0.00 | 0.00 | 20.90 | 22.30 | 22.30 | 20.90 |
| Loans from Financial Institutions | 1387.61 | 1057.17 | 695.37 | 655.79 | 206.75 | 526.86 | 1876.23 | 1186.09 |
| Total | 1500.31 | 1100.37 | 764.87 | 655.79 | 227.65 | 549.16 | 2037.53 | 1206.99 |

Based on the above the interest charges for 2009-10 was re-estimated as Rs.115.40 crore for loans and bonds.

The estimate for 2010-11 was prepared based on the revised estimates of 2009-10. The total fresh borrowing proposed in 2010-11 is Rs.450 crore, against the total capital expenditure of Rs.995.16 crore and repayment of Rs.653.35 crore proposed in 2010-11. Accordingly, the total interest charges for loans and bonds are arrived at Rs.138.08 crore as follows:

Interest Charges on Loans & Bonds proposed for 2010-11 (Rs. in Crore)

| Sl. No. | Particulars | Rate of Interest (%) | Balance at the beginning of the year | Planned borrowing during the year | Planned redemption during the year | Balance outstanding at the end of the year | Interest for the year |
|---------|------------------------------------|----------------------|--------------------------------------|-----------------------------------|------------------------------------|--|-----------------------|
| I | Loans from Government | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| II | Loans from others secured | | | | | | |
| | KSE Bond | 11.50 - 13.00 | 20.90 | 0.00 | 10.45 | 10.45 | 1.87 |
| | REC | 8.25-12.75 | 269.56 | 0.00 | 65.45 | 204.11 | 28.09 |
| | LIC | 9.00 | 18.00 | 0.00 | 2.00 | 16.00 | 1.62 |
| | PFC | 6.00 - 10.50 | 17.37 | 0.00 | 11.58 | 5.79 | 1.52 |
| | Subtotal | | 325.83 | 0.00 | 89.48 | 236.35 | 33.10 |
| III | Loans from others unsecured | | | | | | |
| | IDBI | 9.50 - 13.50 | 0.43 | 0.00 | 0.43 | 0.00 | 0.19 |
| | STL from REC | 8.25-8.5 | 195.00 | 0.00 | 195.00 | 0.00 | 5.15 |
| | LIC | 9.00 | 47.76 | 0.00 | 13.37 | 34.39 | 4.81 |
| | REC | 8.25-12.75 | 167.88 | 0.00 | 25.00 | 142.88 | 17.48 |
| | KPFC | 6.25-12.25 | 330.09 | 0.00 | 330.07 | 0.02 | 21.30 |
| | Subtotal | | 741.16 | 0.00 | 563.87 | 177.29 | 48.93 |
| | Additional borrowing 10-11 | 9.50 | 140.00 | 450.00 | 0.00 | 590.00 | 56.05 |
| | Grand Total | | 1206.99 | 450.00 | 653.35 | 1003.64 | 138.08 |

In addition, interest on security deposit (Rs.64.18 crore), interest on borrowing for working capital (Rs.95.32 crore), rebate to consumers for advance payment (Rs.14Crore), interest on provident fund balance (Rs.55.59 Crore), Cost of raising finance (Rs.1 crore), guarantee commission (Rs.3.49 crore), other bank charges (Rs.20 Crore) etc., are also proposed under 'other interest charges'.

Regarding interest on working capital, the Board claimed that it should be based on normative basis, irrespective of actuals as has been done by CERC. As per the CERC norms, the interest on working capital is allowed based on two months receivables, one and half month of fuel stock and one month O&M cost.

Accordingly, KSEB estimated the interest on Working capital as Rs.95.32 crore as follows :

| Sl No. | Description | 2008-09 | 2009-10 | 2010-11 |
|--------|---|---------|---------|---------|
| A | <u>O&M EXPENSES</u> | | | |
| | Employee cost | 1255.19 | 1456.63 | 1690.42 |
| | A&G Expenses | 135.46 | 155.45 | 171.05 |
| | R&M Expenses | 138.80 | 155.15 | 175.32 |
| | Total | 1529.45 | 1767.23 | 2036.79 |
| | 1/12 th of above A | 127.45 | 147.27 | 169.73 |
| B | Receivables | | | |
| | Annual Revenue | 4893.02 | 4531.00 | 4867.00 |
| | Receivables equivalent to 2 months | 815.50 | 753.83 | 809.00 |
| C | Fuel including stock | 322.21 | 330.12 | 334.28 |
| | Fuel and stock equivalent to 1 ½ months | 40.28 | 41.27 | 41.78 |
| | Total Working Capital (A+B+C) | 983.23 | 943.7 | 1020.51 |
| | Interest on working capital @9.34% | | | 95.32 |

Thus total interest & financing charges are proposed at Rs.391.632 crore for 2010-11 as follows:

Summary of Interest and Finance Charges (Rs.in Crore)

| Particulars | 2008-09 | 2009-10 | | | 2010-11 |
|--|---------------|---------------|---------------|---------------|---------------|
| | Accounts | ARR | SERC | Revised | Estimate |
| I - Interest on outstanding Loans & Bonds | 151.31 | 188.45 | 188.94 | 115.40 | 138.08 |
| II - Interest on Security Deposit | 50.50 | 50.50 | 50.50 | 55.35 | 64.18 |
| III - Other Interest and Finance Charges | | | | | |
| Interest on borrowings for working capital | 22.14 | 18.00 | 5.31 | 27.00 | 95.32 |
| Rebate to consumers for timely payment | 10.46 | 5.50 | 5.50 | 12.00 | 14.00 |
| Interest on PF | 37.93 | 64.88 | 64.88 | 51.34 | 55.59 |
| Other Interest | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 |
| Cost of raising finance: | 0.03 | 1.00 | 1.00 | 1.00 | 1.00 |
| Guarantee Commission | | 3.97 | | 4.02 | 3.49 |
| Bank Charges | 67.23 | 13.00 | 16.97 | 17.00 | 20.00 |
| Total of (III) | 137.79 | 106.36 | 93.67 | 112.37 | 189.41 |
| Grand Total (I+II+III) | 339.60 | 345.31 | 333.11 | 283.12 | 391.62 |

6.3.1. Objections from the Stakeholders

The HT-EHT Association has strongly objected to the claim of the Board for calculation of interest on working capital based on normative basis. According them, as per the KSERC (Tariff) Regulations, 2003 there is no provision for interest on working capital on normative basis. The CERC norms were effective from 2004, and the Board never claimed working capital on CERC Norms, there is no provocation for

changing the stand now. Further, as per the calculations of the Association, the change in non-cash working capital position is negative or the Board is cash surplus. The claim of the Association is as follows:

| Particulars | 2010-11 |
|---|----------------|
| Current Assets (A) | 2655 |
| Cash & Bank (B) | 715 |
| Non cash current Assets (C=A-B) | 1940 |
| Current Liabilities (D) | 8091 |
| Non cash net current assets (Non cash working capital requirement) (E= C-D) | (6151) |
| Change in non cash working capital = working capital borrowing | (1967) |

They have requested to disallow the claim on interest on new loans for capital expenditure since no information was there for analyzing the capital expenditure. According M/s HNL, KSEB should follow normative basis for estimation of working capital.

6.3.2. Analysis and decision of the Commission

The Board has claimed that the interest charges have been reduced substantially over the years due to several measures such as swapping of loans and restricting the fresh loans. It needs to be mentioned that over the years the Board has made efforts in reducing the outstanding liabilities by promptly repaying the loans. Further, the Board has parked substantial funds in short term deposits for repayment even before they are due. The efforts on the part of the Board was cited for appreciation. However, the Commission also notes that the substantial cash surplus was accumulated through lower capital expenditure, which helped to reduce the interest burden. Another reason could be the netting off of loans from the Government, which was about Rs.436.78 Crore. There was a decrease of Rs.132.95 crore towards interest cost in 2006-07 when compared to 2005-06 a major portion of which could be attributed to the writing off of loans. The actual borrowing by the Board was much less than what is proposed in the ARR as shown below:

Borrowings proposed and actual (2004-05 to 2008-09)

| Year | Borrowing (Rs. Crore) | | | |
|---------|-----------------------|---------|--------|-------------------------|
| | Proposed in ARR | Revised | Actual | Actual as % of proposed |
| 2004-05 | 800.0 | 800.0 | 582.2 | 73% |
| 2005-06 | 1000.0 | 511.4 | 379.4 | 38% |
| 2006-07 | 600.0 | 536.5 | 41.1 | 7% |
| 2007-08 | 584.6 | 353.6 | 3.1 | 1% |
| 2008-09 | 587.3 | 390.1 | 94.5 | 16.1% |

Though low interest cost gets directly transferred to lower cost of electricity, the Commission is of the view that this trend is not desirable for a growing capital intensive industry. The reduction in outstanding liability is the result of surplus cash available, which was accumulated with lower capital investment. Further, as shown below, no long term borrowing was necessitated since major share of the total capital expenses was funded through contribution and expenses capitalization (ie., in 2008-09 about 80% of the capital expenditure). The funds available such as PF, security deposits, RoE, Depreciation, Grants, electricity duty etc., would be more than sufficient for meeting repayment obligation, which is the reason for the cash surplus accumulated over the years. Further nearly Rs.300 Crore is available with the Board in 2009-10 from duty collected from the consumers which is not remitted to Government.

Funding pattern of capital expenditure over the years

| | | (Rs. Crore) | | | | | | |
|--------------------|---|--------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| 1 | Total capital expenses | 454.59 | 809.09 | 461.92 | 499.93 | 537.45 | 373.71 | 645.19 |
| 2 | IDC + Expenses capitalised | 219.23 | 187.16 | 104.92 | 92.11 | 78.32 | 77.41 | 93.46 |
| 3 | Contribution for cost of capital Assets | 155.88 | 185.26 | 201.23 | 265.83 | 216.14 | 186.47 | 422.57 |
| 4 = 1-(2+3) | Internal funds or net borrowing required for capex | 79.48 | 436.67 | 155.77 | 141.99 | 242.99 | 109.83 | 129.16 |
| | (2+3) as % of 1 | 83% | 46% | 66% | 72% | 55% | 71% | 80% |

The interest for the additional borrowing proposed by the Board for 2010-11 is Rs.56.05 crore considering proposed additional borrowing of Rs.450 crore for 2010-11 and Rs.140 Crore in 2009-10. It seems, while projecting Rs.56 crore as interest, Board has assumed that Rs.450 crore additional borrowing would be available in the beginning of the year itself. The Board has proposed Rs.764.87 Crore as additional borrowing in the ARR for 2009-10. The Commission in the Order for 2009-10, based on the actual borrowing in the previous years, capital expenditure, and the cash surplus available concluded that borrowing requirement would be about Rs.382.44Crore in 2009-10. As against this, as per the filing, the Board has proposed Rs.140 crore only. The Commission in its letter dated 15-1-2010 sought the details of actual borrowing upto December, 2009 and plan for borrowing upto March, 2010. However, Board did not provide the complete details as sought by the Commission, but provided total borrowing including short term working capital loans/Overdraft etc. Based on the information given by the Board Rs.600 Crore is

availed as short term loan/over draft. Since the Board did not provide the information as sought, the Commission is compelled to proceed with the information available in the filing. For 2010-11, the Board proposes Rs.450 Crore as borrowing. However, the Commission is of the view that, borrowing level proposed by the Board is not at all required since, substantial revenue realized from the consumers in the form of Electricity Duty is retained by the Board and used as internal sources, which is about Rs.227 crore in 2008-09. The same is revealed in the actual financial position shown above.

Considering the above and the planned redemption proposed to the tune of Rs.653.35crore and depreciation and other non-cash expenses available to the Board, the Commission is of the view that the borrowing proposed to the tune of Rs.450 Crore may not be required for 2010-11. From the experience of previous years, the Commission could not judge reasonably the actual amount of capital investment to be incurred in 2010-11 against the proposed Rs.995 Crore. The Board has estimated interest for additional borrowing as Rs.56.05 Crore, apparently assuming all borrowing at the beginning of the year. Even if the projections on additional borrowings are considered, the interest for the additional borrowing would only be Rs.34.67 crore since borrowings are resorted to staggered manner.

The Board has incorporated the impact of netting off of Government loans while estimating the interest and financing charges. The Commission in its Order on ARR&&ERC for 2008-09 has taken a position that netting off in the present form is not acceptable. Similar stand has been taken by the Comptroller and Auditor General of India. Still no conclusive decision is taken by the Government on this issue. Since the decision on netting of is delayed, Commission cannot continue to provide the interest on Government loans in the ARR in a fictitious manner, which allows the Board to have excess cash without corresponding liability.. Hence, as and when netting of proposal is decided, the Commission will consider the matter and will address the issue appropriately. Till then the issue is deferred and no provision on interest on government loan is provided in the ARR.

6.3.4 Other interest charges

Regarding other interest charges, the Commission has noted the interest on working capital projected by the Board. The Board suggested to follow the norms of CERC for estimation of interest on working capital. However, while making such proposal, the Board has failed to consider the substantial security deposits available with them in comparison with Central Generating Stations, where only LC is available as

payment security mechanism. If the security deposits are also considered, the actual working capital is negative and the interest commitment should come down as shown below.

| Sl No. | Description | 2008-09 Rs. Crore | 2009-10 Rs. Crore | 2010-11 Rs. Crore |
|--------|---|----------------------|----------------------|----------------------|
| A | <u>O&M EXPENSES</u> | | | |
| | Employee cost | 1255.19 | 1456.63 | 1690.42 |
| | A&G Expenses | 135.46 | 155.45 | 171.05 |
| | R&M Expenses | 138.80 | 155.15 | 175.32 |
| | Total | 1529.45 | 1767.23 | 2036.79 |
| | 1/12 th of above A | 127.45 | 147.27 | 169.73 |
| B | Receivables | | | |
| | Annual Revenue | 4893.02 | 4531.00 | 4867.00 |
| | Receivables equivalent to 2 months | 815.50 | 753.83 | 809.00 |
| C | Fuel including stock | 322.21 | 330.12 | 334.28 |
| | Fuel and stock equivalent to 1 ½ months | 40.28 | 41.27 | 41.78 |
| | Total Working Capital (A+B+C) | 983.23 | 943.7 | 1020.51 |
| D | Less Security Deposits available | 1069.75 | 1194.75 | 1324.75 |
| E | Net working capital (A+B+C)-D | -86.52 | -251.05 | -304.24 |

Further as per the ARR Petition, for 2010-11 the Board has a net negative working capital of about Rs.5435.84 crore, which shows that Board is doing business with consumers advance money and no funds of the Board is blocked on this account. Considering this position, the Commission is of the view that there is no justification for proposing such high level of interest for working capital. Hence, only the approved level of interest on working capital of Rs.5.31 Crore as in previous year is allowed for this year also.

The Board has proposed Rs.64.18 Crore on interest on security deposits as it expects that the outstanding as on 1-4-2009 would be Rs.1069.75 Crore. The Commission sought the details of debts and deposits for 2010-11, in which Board has shown the addition to security deposit as Rs.130 Crore only in 2010-11. However, addition to security deposits for the year 2009-10 itself is about Rs.147.32 crore as per the ARR. Since not much information is provided by the Board, the Commission agrees to the proposal of the Board. Similarly, the Board estimated Rs.14 crore towards rebate for advance payment by the consumers. The actual rebate paid to the consumers was only Rs.1.7 Crore in 2008-09. Considering this the Commission allows Rs.2 crore on this head. Cost of raising finance, Bank charges, Guarantee Commission and interest on outstanding on provident fund balance are allowed as projected by the Board. **The Commission would like to reiterate that, these payments shall only be allowed on actual basis after the prudence check**

in the truing up process. Accordingly, the interest charges for 2010-11 is approved as shown below on a provisional basis considering the ambiguity in the netting off proposal.

Interest Charges approved for 2010-11

| Particulars | Proposed by the Board | Allowed by the Commission |
|---|-----------------------|---------------------------|
| | (Rs. Crore) | (Rs. Crore) |
| Interest for existing loans | 82.03 | 82.03 |
| Interest for additional borrowing (2009-10 & 2010-11) | 56.05 | 34.68 |
| Interest on security deposits | 64.18 | 64.18 |
| Interest on working capital | 95.32 | 5.31 |
| Rebate for timely payment | 14.00 | 2.00 |
| Interest on PF | 55.59 | 55.59 |
| Other interest | 0.01 | 0.01 |
| Cost of raising finance | 1.00 | 1.00 |
| Guarantee Commission | 3.49 | 3.49 |
| Bank Charges | 20.00 | 20.00 |
| Total | 391.67 | 268.29 |

6.4. Depreciation

The Board has estimated the depreciation for 2010-11 as Rs.532.89 Crore. The Board argued that since 2006-07, the Commission is adopting CERC norms for depreciation as per Tariff policy. KSEB further stated that FOR is yet to make modification on the depreciation rates notified by CERC for generation and transmission assets. Though KSEB follows Annual Account Rules for 2010-11, as directed by the Commission, KSEB is claiming depreciation as per CERC norms. As part of the restructuring process, KSEB formed committees to rectify the anomalies in the capitalisation, and it is estimated that after rectification, an amount of about Rs.690 crore may be added to assets at the end of the year. Hence the opening gross fixed assets for 2010-11 would be Rs.10744.62 crore Accordingly the depreciation is worked out as follows:

Depreciation proposed by the Board for 2010-11

| Asset Class | Gross Fixed Assets | | Depreciation rates | Depreciation Amount | |
|----------------------|--------------------|---------|--------------------|---------------------|--------------------|
| | 2009-10 | 2010-11 | | 2009-10 (Estimate) | 2010-11 (Estimate) |
| | Rs. Cr | Rs. Cr. | % | Rs. Cr | Rs. Cr. |
| Land and Land Rights | 280.8 | 344.66 | 0 | 0.00 | 0.00 |
| Buildings | 497.3 | 524.37 | 3.34 | 16.61 | 17.51 |
| Hydraulic Works | 899.02 | 931.02 | 5.28 | 47.47 | 49.16 |
| Other Civil Works | 301.93 | 378.65 | 3.34 | 10.08 | 12.65 |
| Plant and Machinery | 3454.35 | 3978.72 | 5.28 | 182.39 | 210.08 |

| | | | | | |
|----------------------------|----------------|-----------------|------|---------------|---------------|
| Lines, Cable Network, etc. | 3753.53 | 4513.04 | 5.28 | 198.19 | 238.29 |
| Vehicles | 13.05 | 16.04 | 9.50 | 1.24 | 1.52 |
| Furniture and Fixtures | 13.91 | 15.41 | 6.33 | 0.88 | 0.98 |
| Office Equipments | 35.22 | 42.7 | 6.33 | 2.23 | 2.70 |
| Assets not in use | 0.01 | 0.01 | | | |
| Total | 9249.12 | 10744.62 | | 459.09 | 532.89 |

6.4.1 Objections of Stakeholders

The HT-EHT Association stated that depreciation shall not be allowed on consumer contribution, grants etc., as has been the practice in other States. On allowing depreciation as per new CERC norms, they have objected to the practice of cherry picking of regulations by KSEB. M/s HNL also suggested that depreciation shall not be charged on consumer contribution

6.4.2. Analysis and decision of the Commission

The Commission in the previous orders has taken a stand that depreciation shall be allowed as per the provisions of CERC norms, which was endorsed by the State Advisory Committee and stakeholders in general. The Central Commission has revised the depreciation norms in the tariff period for 2009-14 for Generating Companies and Transmission utilities. In the said regulations, CERC has made significant change in the manner of calculation of Depreciation. In the said regulations, the CERC has considered 12 year repayment period for long term loans and adjusted the depreciation for the loan component in such a way that cash flow is available to meet the repayment obligation. Accordingly the actual depreciation would increase to 4.5% to 5%, where as per the old norms it was about 3% to 3.5%.

It is pertinent to note that Board in the petition proposed to follow CERC norms apparently lured by the higher cash flow available. In the past, the Board has been taking a consistent view that CERC norms are not applicable to them. The Board all along had argued that, it is mandatory on its part to keep the accounts as per the Annual Accounting Rules in force, where norms as per Government of India notification 1994 shall apply. The Policy directions issued by the Government and the request of the Government to the Commission vide letter dated 15-7-2008, were repeatedly quoted in support of the claim, in spite of serious audit objections of C&AG. Almost all the orders of the Commission on ARR&ERC and Truing up in various years have been challenged at the Appellate Tribunal on this ground at the cost of public funds. This being the situation, the Board suddenly proposed the CERC norms with no supporting claims as to why such change in stand is required.

The Board has increased the addition to capital assets for the year 2010-11 to the tune of about Rs.690 crore in the name of rectification of accounts, which is yet to be completed. Such claims of the Board without proper supporting details cannot be admitted. Hence, the Commission is inclined to reject the addition of Rs.1495.50 crore for the year 2009-10. Nowhere in the history of the Board, such high level of capitalization have been recorded. In the absence of authentic data, the Commission used average capitalisation from 2002-03 to 2008-09, which is Rs.637.21 crore for arriving at the opening GFA for the year 2010-11.

As per the para 5.3(c) of Tariff Policy, the Forum of Regulators (FOR) vide letter dated 23-6-2006 had communicated that depreciation as per CERC (Terms and conditions of Tariff) Regulations 2004 shall be applicable for distribution. FOR has not taken any decision on depreciation consequent to the revision of rates by CERC since the said regulation was applicable for the period 2004-09 only. Hence, the depreciation allowed would be subject to the revision by FOR if any.

Accordingly, Rs.485.75 Crore is estimated provisionally as depreciation for the year 2010-11. As and when properly authenticated information is provided, depreciation would be re-estimated after prudence check.

Depreciation approved for the year 2010-11

| Asset Class | 2009-10 | | 2010-11 | | 2010-11 |
|------------------------|----------------------------------|-----------------|----------------------------------|--------------------|---------------|
| | GFA at the beginning of the year | Addition to GFA | GFA at the beginning of the year | Depreciation rates | Depreciation |
| | Rs. Cr | Rs. Cr | Rs. Cr. | % | Rs. Cr. |
| Land & Rights | 280.8 | 27.21 | 308.01 | 0 | 0.00 |
| Buildings | 497.3 | 11.53 | 508.83 | 3.34 | 17.00 |
| Hydraulic Works | 899.02 | 13.63 | 912.65 | 5.28 | 48.19 |
| Other Civil Works | 301.93 | 32.69 | 334.62 | 3.34 | 11.18 |
| Plant & Machinery | 3454.35 | 223.42 | 3,677.77 | 5.28 | 194.19 |
| Cable Network etc | 3753.53 | 323.61 | 4,077.14 | 5.28 | 215.27 |
| Vehicles | 13.05 | 1.27 | 14.32 | 9.50 | 1.36 |
| Furniture and Fixtures | 13.91 | 0.64 | 14.55 | 6.33 | 0.92 |
| Office Equipments | 35.22 | 3.19 | 38.41 | 6.33 | 2.43 |
| Assets not in use | 0.01 | - | 0.01 | | |
| Total | 9249.12 | 637.21 | 9,886.33 | 4.96 | 490.53 |

Many objectors have raised the issue that depreciation shall not be allowed for assets created out of consumer contribution and grant. The Commission has taken a position that since replacement of assets is carried out by the Board, providing depreciation is justifiable. In such circumstances, when such assets are replaced,

the Board should not claim the capital expenditure and should deduct the same from the capital expenditure plan. However, such steps are not being practiced by the Board. Hence, the Commission is of the view that there is a merit in the arguments of the objectors. Hence, this issue will be examined separately collecting the relevant facts and figures and giving opportunity for hearing to all concerned. Therefore the provision agreed to for depreciation will be treated as provisional.

6.5. Employee cost:

The Board has projected substantially high employee cost of Rs.1690.42 crore for the year 2010-11 which is about 58% higher than the approved level in 2009-10. The Board has revised the employee cost for 2009-10 as Rs.1456.63 crore by about 36% over the approved level. The total number of employees as on 31-3-2009 is reported as 27089, of which distribution sector accounts for 21690 numbers. According to the Board, the salary and terminal benefits are allowed periodically in line with the policy of the Government, which the Board cannot deny to the employees. The salary and other benefits for the serving employees are estimated at Rs.927.59 crore for 2010-11. While projecting salary & DA Board considered DA as on 31-3-2010 as 73% and for the ensuing year an addition of 18% (9% from July 10 and another 9% from Jan 2011). A provision of Rs.70 crore is given for leave encashment. In order to accommodate the salary revision due from August 2008 to workmen and from July 2008 to Officers a provision of 12% is also included as part of employee cost. To support this provision, the Board has referred to the judgment of Hon. Supreme Court dated 3-3-2009 in appeal No. 1110, 1112, 1138, 1152 and 1327 of 2007. According to the Board, as per the judgment appropriate provision for pay and allowance has to be made in the respective years in which it becomes due. Board also stated that the salary is only 12.35% of the total expenses. According to the Board the number of consumers served per employee and also employee per MU sold are the productivity parameters to be considered for evaluation of employee costs. The number of consumers per employee increased from 295 in 2003-04 to 375 in 2010-11, and employee per MU sold is 2.78 in 2003-04 and 1.86 in 2010-11. The employee cost (excluding pension) per unit of energy is 45 paise unit in 2003-04 and in 2010-11 it is 63 paise/unit. The cost of serving employees for the year 2010-11 is estimated by the Board is as follows:

Details of salary and benefits of serving employees projected by the Board

| Sl No. | Particulars | 2008-09 | 2009-10 | 2010-11 |
|--------|--|----------|----------|----------|
| | | (Rs. Cr) | (Rs. Cr) | (Rs. Cr) |
| A. | Basic Pay | 378.80 | 405.32 | 433.69 |
| B. | DA at the beginning of the year * | 173.18 | 222.93 | 316.59 |
| | DA released/ provision made during the year | 32.10 | 36.48 | 39.00 |
| C | Other allowances (HRA, Project allowances) | 27.33 | 29.85 | 32.00 |
| | Over Time/ holiday wages | 0.08 | 0.10 | 0.12 |
| | Bonus | 4.18 | 4.25 | 4.50 |
| | Medical reimbursements | 3.54 | 4.00 | 4.50 |
| | Compensation | 0.46 | 0.50 | 0.54 |
| | Leave salary & Pension Contribution | 0.17 | 0.18 | 0.20 |
| | Earned Leave encashment | 57.59 | 60.00 | 70.00 |
| | Staff Welfare | 0.79 | 0.85 | 1.00 |
| D | Additional provisions made for pay revision, due from July/Aug-2008 | 81.15 | 95.15 | 114.60 |
| E | Total | 759.37 | 859.61 | 1016.74 |
| F | Less amount capitalised from employee cost | 67.22 | 77.57 | 89.15 |
| G | Net Employee cost | 692.15 | 782.04 | 927.59 |

* DA as on 31-3-2008 = 38%

DA as on 31-3-2009 = 55%

DA anticipated as on 31-3-2010= 73%

The Board has also made an effort to address the criticism that the employee cost is much higher in KSEB than in other utilities. According to KSEB it is due to the fact that in other utilities cost of employees associated with operation and maintenance only is booked under employee cost and employee cost for capital works are booked separately under capital cost. However in the Board except in construction of lines, substations and generating stations same employees are used for capital works and O&M, which inflate the employee cost artificially.

Performance parameters of the employees as stated by the Board

| Particulars | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 |
|--|---------|---------|----------|----------|----------|----------|----------|----------|
| No. of employees | 24766 | 24454 | 25565 | 25894 | 25110 | 27089 | 27625 | 27625 |
| No. of Consumers in Lakh | 73.00 | 78.00 | 83.00 | 87.10 | 90.30 | 93.63 | 98.76 | 103.76 |
| Energy sold in MU | 8910.80 | 9384.40 | 10905.70 | 12377.90 | 13396.60 | 12877.65 | 13870.10 | 14830.10 |
| Revenue from sale of energy (Rs. in Crore) | 2756.10 | 2917.40 | 3367.30 | 4009.70 | 4697.00 | 4893.02 | 4531.17 | 4867.25 |
| No. of consumers/employee | 295.00 | 319.00 | 324.00 | 337.00 | 359.62 | 345.64 | 357.50 | 375.60 |
| Revenue/employee (Rs. Lakh) | 11.10 | 11.90 | 13.20 | 15.50 | 18.71 | 18.06 | 16.40 | 17.62 |
| Employee cost - serving employees (Rs. Crore) | 397.50 | 446.70 | 487.60 | 542.10 | 514.90 | 692.15 | 782.04 | 927.59 |
| Employee cost/unit of energy sold excluding pension (Rs/kWh) | 0.45 | 0.48 | 0.45 | 0.44 | 0.38 | 0.54 | 0.56 | 0.63 |
| Employee per MU of energy sold | 2.78 | 2.61 | 2.34 | 2.09 | 1.87 | 2.10 | 1.99 | 1.86 |

Another component of employee costs, pension liabilities, are projected at Rs.673.68 crore. As on 30-9-2009, the number of pensioners is 30278 and 574 employees are due to retire in the current financial year. KSEB proposes to separate the pension liabilities by creating a pension fund. As part of the restructuring process, Board has appointed a consultant to suggest an appropriate scheme for meeting pension liabilities. The size of the fund is estimated to be Rs.4520 crore. The pension liabilities for the year 2010-11 is estimated as follows:

Estimate of pension and terminal benefits for 2010-11

| Particulars | 2008-09 (prov) | 2009-10 (Revised) | 2010-11 |
|--|-------------------|----------------------|----------|
| | (Rs. Cr) | (Rs. Cr) | (Rs. Cr) |
| Monthly Pension | 402.08 | 490.79 | 555.39 |
| Commutation | 25.02 | 26.4 | 28.6 |
| DCRG | 22.81 | 24.2 | 26.4 |
| Medical, interim relief and festival allowance | 2.16 | 2.58 | 3.26 |
| Provision for pension revision | 43.75 | 53.05 | 60.03 |
| Total | 495.82 | 597.02 | 673.68 |

Accordingly the total employee cost projected for 2010-11 is Rs.1690.42 Crore.

6.5.1. Objections of stakeholders:

The HT-EHT Association pointed out that consistent double digit increase in employee cost over the years is to be addressed seriously. The directions issued by the Commission in the past have never been complied with. According to them it is not prudent on the part of the Board management to publish the expected increase in wage revision which is to be decided on a negotiated level. According to them, a weighted average of 7% increase per annum from 2007-08 as a base shall only be allowed ie., only Rs.1109 crore needs to be provided as employee costs. Shri. Satheesh, CUMI, stated that no organization can survive if the employee costs are 35% of the revenue and 58% increase in cost in one year cannot be accepted by any standards. Almost all objecting employee unions objected to the unconditional increase in employee cost of KSEB, which are transferred to the consumers. According to them increase in employee cost shall be only through curtailing expenses and increasing productivity. M/s HNL also raised similar grounds. According to Shri. K.B Muraleedharan the sustainability of an entity is questioned if 1/3rd of the revenue is earmarked for employee costs. M/s HNL, Kerala Chamber of Commerce and Industry, M/s Hindalco Limited, M/s GTN textiles, M/s MRF Limited, M/s TTP limited etc., also expressed similar opinion. M/s Binani Zinc limited suggested to have an independent study on the employee costs.

6.5.2 Analysis and decision of the Commission

The staggering increase in employee cost is a concern to all the stakeholders and many have pointed out this. The Commission is of the view that Board has not taken any concrete measures in addressing this pertinent issue over the years. The Board has been impervious to the directions of the Commission as well as to the concerns expressed by the consumers on the increasing employee cost. The Commission has analysed this issue in detail. The increase in employee cost is due to uncontrolled increase in wages as well as in pensions. There is no effort to control the number of employees in the organization. Over the years (between 2004-05 to 2008-09), though the number of sanctioned places have decreased by about 5000, actual number of employees have increased by about 2600 at a rate of 11%. This increase needs to be viewed with respect to the substantial retirement taking place over the years.

Growth in number of employees

| Year | No. of employees | | | |
|-------------------------|------------------|---------------------|-------------|---------------------|
| | Sanctioned | Annual increase (%) | Actual | Annual increase (%) |
| 2004-05 | 35870 | | 24454 | |
| 2005-06 | 35870 | 0.0% | 25565 | 4.5% |
| 2006-07 | 30877 | -13.9% | 25894 | 1.3% |
| 2007-08 | 30862 | 0.0% | 25110 | -3.0% |
| 2008-09 | 30862 | 0.0% | 27089 | 7.9% |
| Overall Increase | -5008 | -14.0% | 2635 | 10.8% |

The table below shows the category wise increase in number of employees. Over the last four years, the category wise increase in number of employees is about 20% to over 85%. Number of chief engineers have increased by 45%, Asst. Engineers or equivalent have increased by a staggering 85%, Executive Engineers by 31%, other non-technical officers by 42% and technical staff by 20%. In spite of considerable increase at all levels, the overall increase was limited to 11% on account of reduction in non-technical category to the tune of 2100 nos (32%). These figures suggest that the organization is becoming more and more top heavy.

Comparison of increase in employees based on category

| Category of Employee | 2004-05 | | 2008-09 | | Increase (nos) | | Increase (%) | |
|------------------------------------|------------|---------|------------|---------|----------------|---------|--------------|---------|
| | Sanctioned | Working | Sanctioned | Working | Sanctioned | Working | Sanctioned | Working |
| Chairman/CMD | 1 | 1 | 1 | 1 | 0 | 0 | 0% | 0% |
| Members of Board | 6 | 3 | 3 | 3 | -3 | 0 | -50% | 0% |
| Chief Engineers | 15 | 11 | 18 | 16 | 3 | 5 | 20% | 45% |
| Deputy Chief Eng. or equivalent | 78 | 67 | 83 | 79 | 5 | 12 | 6% | 18% |
| Executive Engineers or equivalent | 270 | 238 | 332 | 311 | 62 | 73 | 23% | 31% |
| Asst. Exe. Engineers or equivalent | 935 | 670 | 922 | 800 | -13 | 130 | -1% | 19% |
| Asstt. Engineers or equivalent | 2666 | 1539 | 3632 | 2847 | 966 | 1308 | 36% | 85% |
| All non-technical -officers | 1807 | 936 | 1350 | 1330 | -457 | 394 | -25% | 42% |
| All other Technical staff | 21446 | 14358 | 18391 | 17182 | -3055 | 2824 | -14% | 20% |
| All non-technical -Non officers | 8646 | 6631 | 6130 | 4520 | -2516 | -2111 | -29% | -32% |
| Total | 35870 | 24454 | 30862 | 27089 | -5008 | 2635 | -14% | 11% |

It is also pertinent to examine whether the above increase in employees is justified with respect to the growth in the system. The installed capacity almost stagnant, annual sales increased by 32% and number of consumers increased by 20%, HT lines by 9%, and LT lines by 19% as shown below:

Comparative growth in the system

| Parameters | Unit | 04-05 | 08-09 | % increase |
|---------------------------|---------|--------|--------|------------|
| Hydel | MW | 1843.6 | 1886.5 | 2% |
| Thermal (Incl. IPPs) | MW | 591.6 | 591.6 | 0% |
| Wind | MW | 2 | 23.9 | 1095% |
| Total | MW | 2437.2 | 2502 | 3% |
| Annual Sales | MU | 9384 | 12414 | 32% |
| No of Consumers | (Lakhs) | 77.99 | 93.6 | 20% |
| Per Capita Consumption | kWh | 400 | 470 | 18% |
| EHT lines | Ckt Kms | 9924 | 10855 | 9% |
| EHT S/s | (Nos) | 251 | 299 | 19% |
| HT lines | Ckt Kms | 33998 | 41245 | 21% |
| LT lines | Ckt Kms | 207711 | 241888 | 16% |
| Distribution transformers | (Nos) | 36442 | 46510 | 28% |

The above analysis shows that the uncontrollable increase in employee cost needs urgent attention. The Commission since inception had issued several directions to KSEB to control/limit the expenses and to improve the productivity so as to justify high employee costs. However, no action has been taken till now. The Commission as part of the clarification process raised about 10 questions on employee cost. KSEB could not provide convincing answers to the queries. Since as per the estimates of the Board, the employee cost/kWh sale for 2010-11 works out to about

Rs.1.14, the Commission sought the long term steps taken to arrest the employee costs by KSEB. The Board instead of suggesting any means, justified the high level of employee cost with innovative replies. According to KSEB, cost of employees working in capital works are not completely included in capital expenses, which inflate the employee cost (revenue expenses). At present no separate employees are provided for carrying out capital works in the distribution sector. If the cost of employees executing the capital works in generation, transmission and distribution are separated, the cost of employees will be comparable to other distribution utilities. According to KSEB the criticism on employee cost is without appreciating these facts. Further, according to the Board, comparison of per unit cost of employees is misleading in the case of Kerala, which is an industrially backward state. As part of the restructuring process M/s PFC Consulting Limited has submitted actuarial valuation report which is under the consideration of the Government.

The arguments put forwarded by the Board for justifying the employee expenses are neither reasonable nor logical. As per the provisions of the Act, electricity has to be supplied at a reasonable cost. Hence it is pertinent to compare the per unit cost, since that is what the consumer is ultimately concerned with. The justification that high employee cost in distribution is due to capital works is no way helpful for the Board in supporting their claim since the accounting practices followed in all SEBs are the same. Further, almost all the capital works are carried out through contractors and at the most only the supervision charges needs to be accounted. Further provision of capitalizing the employee cost is available and in 2010-11 about 9% of the employee cost is proposed to be capitalized by the Board.

The efforts of the Board in curtailing employee expenses are cosmetic and half hearted. To cite an example, while finalizing the ARR&ERC for 2009-10, the Board vide letter dated 26-3-2009, stated that several steps are taken to improve the productivity of the employees by fixing responsibilities. Circulars were issued on the guidelines for promotion to the post of managerial cadres. The task of work study on various functional areas has been entrusted to M/s Centre for Management Development. However, no update or followup action on the above steps has been reported in the present ARR.

It is also pertinent to verify the parameters supplied by the Board to show the improving level of productivity/efficiency. The employee per MU of energy sold increased from 1.87 in 2007-08 to 2.10 in 2008-09 & in 2009-10 it is 1.99. In 2010-11, the number of employees are held constant to reduce the ratio to 1.86. While estimating employee related performance parameters, the Board has excluded pension liabilities, which is not justified. Though the Board has repeatedly stated about the consultant's report on structuring of pension liabilities, the report was not

produced before the Commission even after it was sought by the Commission. The Commission is of the considered view that any justification provided by the Board to substantiate the increase in employee costs is self defeating unless concrete steps are taken to address the issue rather than evading it.

There is widespread criticism that the salary levels of employees in the Board are higher than that in Government or any other comparable organisations. Several objectors have pointed to the share of salaries in the total income. The following table shows the cost per employee and pension, which is self explanatory.

| Salary | 2008-09 | 2009-10 | 2010-11 | Growth Rate |
|------------------------------------|---------|---------|---------|-------------|
| Employee costs (Rs.Crore) | 759.37 | 859.61 | 1016.74 | 15.7% |
| No. of employees | 27089 | 27625 | 27625 | |
| Average Annual Salary (Rs.lakhs) | 2.80 | 3.11 | 3.68 | |
| Average monthly salary (Rs.) | 23360 | 25931 | 30671 | 14.6% |
| Pension | | | | |
| Pension (Rs. Crore) | 495.84 | 597.02 | 673.68 | 16.6% |
| No.of pensioners | | 30,278 | 30,852 | |
| Average annual pension (Rs. Lakhs) | | 1.97 | 2.18 | |
| Average monthly pension (Rs.) | | 16432 | 18197 | |

The level of favourable employee indicators if any presented by the Board are incomplete without the status of outsourcing and contracting at different levels. For several posts vacancies exist, but the work is being outsourced and many people have been engaged on contract basis. These outsourced employees never become part of the official statistics which artificially keeps the employee indicators favourable. The Commission sought the details of categorywise number of employees on contract basis/HR basis and the expenses incurred for various years. The information has not been provided by the Board.

6.5.2.1 Comparison of cost structure

The Commission has to refer to the present industry status and similar benchmarks available. A comparison of cost levels with those of other states would be useful to benchmark the position of KSEB with similarly placed SEBs. Based on the study report of PFC, cost levels of various utilities for the year 2006-07 are compiled and given below. Major component of the cost is power purchase cost. In the case of Kerala, lower power purchase cost does not translate into lower overall cost due to high employee cost and other costs. Employee costs and O&M costs in Kerala are one of the highest in comparison with similar entities.

Comparison of cost structure of SEBs and Utilities in 2006-07

| State | Utility | Total Cost Rs./kWh | Power Purchase Cost Rs./kWh | Employee Cost Rs./kWh | O&M Rs./kWh | Financing Cost Rs./kWh | Cost other than power purchase | Empl. Cost as%of total cost | Empl Cost % of other cost | T&D Loss |
|-------------------------------|---------|-----------------------|-----------------------------------|-----------------------------|----------------|---------------------------|-----------------------------------|-----------------------------------|------------------------------------|-------------|
| Bundled Utilities | | | | | | | | | | |
| Jharkhand | JSEB | 5.43 | 3.79 | 0.55 | 0.18 | 0.91 | 1.64 | 10% | 33% | 45% |
| West Bengal | WBSEB | 6.56 | 2.64 | 0.40 | 0.13 | 0.84 | 3.92 | 6% | 10% | 30% |
| Himachal Pradesh | HPSEB | 3.70 | 2.26 | 0.85 | 0.10 | 0.35 | 1.44 | 23% | 59% | 14% |
| Punjab | PSEB | 3.70 | 2.43 | 0.63 | 0.12 | 0.53 | 1.27 | 17% | 49% | 23% |
| Tamil Nadu | TNEB | 3.59 | 2.64 | 0.39 | 0.08 | 0.46 | 0.95 | 11% | 41% | 18% |
| Maharashtra | MSEDCL | 4.05 | 3.30 | 0.39 | 0.11 | 0.22 | 0.74 | 10% | 53% | 35% |
| Chattisgarh | CSEB | 3.13 | 1.80 | 0.66 | 0.26 | 0.28 | 1.33 | 21% | 50% | 36% |
| Kerala | KSEB | 3.51 | 1.41 | 0.69 | 0.20 | 0.65 | 2.10 | 20% | 33% | 22% |
| Distribution companies | | | | | | | | | | |
| Orissa | CESCO | 3.63 | 2.50 | 0.48 | 0.23 | 0.41 | 1.13 | 13% | 43% | 44% |
| Delhi | NDPL | 3.97 | 3.01 | 0.36 | 0.19 | 0.43 | 0.96 | 9% | 37% | 27% |
| Haryana | DHBVNL | 3.84 | 3.36 | 0.26 | 0.10 | 0.10 | 0.48 | 7% | 54% | 30% |
| Andhra Pradesh | APCPDCL | 2.75 | 2.39 | 0.15 | 0.07 | 0.20 | 0.36 | 5% | 41% | 15% |
| Karnataka | BESCOM | 3.77 | 3.24 | 0.19 | 0.07 | 0.15 | 0.53 | 5% | 35% | 24% |

There has been a quantum jump in the employee costs since the study period which will make the current position more unfavourable for Kerala. The Commission has reservations in the projections of the Board. As per the Board, the basic salary will increase at 7% in 2010-11, though more than 500 employees are retiring (no increase in no.of employees projected in 2010-11). The projections of the Board do not reflect the impact of retirement on the basic pay, though cost of retiring persons are accounted in the terminal benefits. In order to account for inflation, about 18% increase in DA is provided for 2010-11. These projections would be valid only if inflation as per CPI for industrial workers, grows at the same rate as that of the current year. The Commission also notes the lack of basis for projections by the Board. The earned leave provision is estimated to increase over the years. Commission sought the methods for estimation of earned leave encashment details, Board has given the following table.

| | | 2006-07 | 2007-08 | 2008-09 |
|---|--|---------|---------|---------|
| 1 | EL encashment of serving employees | 15.68 | 24.76 | 45.29 |
| 2 | Terminal surrender | 8.78 | 11.88 | 12.29 |
| 3 | Total | 24.46 | 36.64 | 57.58 |
| 4 | Salaries/DA /allowances | 514.64 | 474.07 | 696.83 |
| 5 | One Month Salary (3 /2) | 42.89 | 39.51 | 58.07 |
| 6 | Surrender of serving employees as a % of 1 month salary (1 /4) | 37% | 63% | 78% |

With the above, Board stated that EL provision is below one month salary of serving employees. However, Board could not explain the increase in the provision from 37% to 78% in the last 3 years.

6.5.2.2. Wage revision

The Board has provided Rs.114 crore for salary and Rs.60 crore for pension on account of wage revision which is due from 2008 June. This works out to 20% of the salary & DA in 2008-09. The Commission is in no way agreeable to such a provision to be passed on to the consumers in the current tariff since, there is no steps initiated in this direction. The wage revision is decided based on mutual negotiations and based on the bargaining power of the management and unions and such advance estimates would weaken the position of the management during the negotiations. In almost all the years, the Board did not show separately the impact of provision for wage revision separately in the ARR. During the hearing, several employee unions representing various organizations have repeatedly stated their experience of wage revision which was completely met out of productivity improvement. In support of providing provision for wage revision, the Board cited a Supreme court judgment in appeal no.1110, 1112, 1138, 1152, and 1327 between UPPCL and others Vs NTPC stated that as per this order, adequate provision is to be given for pay revision in the respective years. The Commission carefully perused the judgment. The said order was on additional employee costs to be payable by NTPC and it was held by the apex court that any additional claims actually paid should be claimed in the relevant tariff period itself. We are of the considered view that this case in no way helps KSEB for making an additional claim for wage revision which is not yet initiated.

The Commission in its order dated 24-12-2007 on the truing up of accounts for the year 2003-04 and 2004-05 stated that licensee should make genuine efforts to substantially enhance the productivity of employees through proper incentive-disincentive mechanism and also to take genuine long term measure to arrest the employee costs. The Appellate Tribunal for Electricity in its various orders have also taken a similar view. With supporting judgments from the Hon Supreme Court, Hon Appellate Tribunal for Electricity, in Appeal No 4 of 2005 dated 26 May 2006, M/s Siel Limited Vs PSERC, PSEB and Others, APTEL has observed that :

There is no obligation on the part of the Board to extend same salary and allowances to the employees of the Board as are payable to the

employees of the State Government. The process of reforms which has been triggered by the Act of 1998 and the Act of 2003 will lose its momentum in case salaries/ incentives are not linked to the performance of the employees. There is nothing on record to show that there has been improvement in the performance of the employees of the Board. Benefit should be made available for rewarding efficiency in performance. Automatic availability of benefits generates inefficiency and indolence”.

In another decision, in appeal no. 84 of 2006, KPTCL Vs KERC and others, ATE has ruled that there is no illegality or error on the disallowance of a portion of the labour cost such a bonus/ exgratia, cost of supplying electricity to its employees to pass through the tariff. Hence it is clear that, benefits extended to the employees need not be automatic and has to be judged based on performance. The Commission has no obligation to pass on whatever costs projected by the Board to the consumers, especially in a situation where consumers are left with no option but to depend on the Board. Since the Board suo-motu raised the issue of wage revision, the Commission is forced to state the policy to be followed in this regard as follows:

Increase in any cost element has to be consistent with the Electricity Act, 2003 which specifically emphasizes the need to secure economy and efficiency in the functioning of the Licensees. Moreover, the financial position of the Licensees shall also be taken into consideration while analyzing the scope for wage revision. Considering the huge revenue gap proposed by the Board, the Commission is of the opinion that the Board should evolve parameters and benchmarks before venturing into any wage revision negotiations. **The salary revision if any offered shall completely be funded through efficiency gains without any extra burden to the consumers.** In its absence, for the reasons already stated, the Commission would not be able to pass on the additional burden to the consumers. Further, the Commission directs that the Board shall keep the following parameters in sight if it plans to negotiate a wage revision:

- i. Financial health of the Board and impact on retail tariff
- ii. Efficiency parameters and achievement of standards of performance.
- iii. Additional burden to be funded through efficiency improvements
- iv. Pay scales & allowance in Central/ State Governments and also in similarly placed power utilities.
- v. Present high employee cost per unit in comparison with neighbouring states.
- vi. Pay revision to be linked to improvements in productivity since inflation is completely accounted for in DA revisions.

The Commission notes with regret that the Board could not provide many details as sought by the Commission. The Commission has sought the method of additional commitment estimated for wage revision, which was not given. When the details of employees working on contract/HR basis and expenses was sought, the Board stated that information was being collected, which is yet to be submitted. The Commission also sought the reports of the consultant on pension & other issues which was also not provided. **The Commission considering the above factors, declines to accept any provision for wage revision.**

As shown below, the employee cost including pension liabilities increase by about 12% on a compounded basis where as salary to serving employees alone increased by about 14% which shows that the rate of increase is propelled by increase in the salary of serving employees.

Comparison of increase in employee costs & pension liabilities

| Year | Salary & benefits to serving employees | Yearly increase | Pension & other benefits to retired employees | Yearly increase | Total employee costs | Yearly increase | (%) of pension in total employee cost |
|-------------------------|--|-----------------|---|-----------------|----------------------|-----------------|---------------------------------------|
| | (Rs. Cr) | (%) | (Rs. Cr) | (%) | (Rs. Cr) | (%) | |
| (1) | (2) | | (3) | | (4)= (2)+(3) | | (5)= (3)/(4) |
| 2002-03 | 356.38 | | 314.45 | | 670.83 | | 46.9% |
| 2003-04 | 397.53 | 11.5% | 390.78 | 24.3% | 788.31 | 17.5% | 49.6% |
| 2004-05 | 446.73 | 12.4% | 342.91 | -12.2% | 789.64 | 0.2% | 43.4% |
| 2005-06 | 487.65 | 9.2% | 374.88 | 9.3% | 862.53 | 9.2% | 43.5% |
| 2006-07 | 542.14 | 11.2% | 355.95 | -5.0% | 898.09 | 4.1% | 39.6% |
| 2007-08 | 514.88 | -5.0% | 390 | 9.6% | 904.88 | 0.8% | 43.1% |
| 2008-09 | 759.37 | 47.5% | 495.84 | 27.1% | 1255.21 | 38.7% | 39.5% |
| 2009-10 (Estimates) | 859.61 | 13.2% | 597.02 | 20.4% | 1456.63 | 16.0% | 41.0% |
| 2010-11 (projection) | 1016.74 | 18.3% | 673.68 | 12.8% | 1690.42 | 16.1% | 39.9% |
| Rate of increase | | 14.00% | | 9.99% | | 12.25% | |

In between 2007-08 and 2008-09, the employee cost has increased by 47.5% and pension liabilities increased by 27.1%. The Board could not provide the reasons for such increase. The projection for 2009-10 and 2010-11 is made on the premise of inflated figures of 2008-09. The Commission is of the view that such increase is not reasonable by any standards. Further, inflationary trends in the economy have moderated considerably. The Commission has approved the employee cost of Rs.1069.96 crore as projected by KSEB for 2009-10. Stressing the need for

curtailing the employee expenses and conveying strong signals to the management to take appropriate action, the Commission is inclined to provide 7% increase over 2009-10 approved level for various items of employee expenses except DA. Two installments of DA @6% over the present level are also allowed for 2010-11.

| Particulars | 2010-11 | |
|--|-----------------|-----------------|
| | Projected | Approved |
| | (Rs. Cr) | (Rs. Cr) |
| Basic pay | 433.69 | 415.01 |
| DA | 355.59 | 302.96 |
| Other allowances (HRA, Project allowances) | 32.00 | 28.89 |
| Over Time/ holiday wages | 0.12 | 0.21 |
| Bonus | 4.50 | 3.53 |
| Medical reimbursements | 4.50 | 3.64 |
| Compensation | 0.54 | 0.75 |
| Leave salary & Pension Contribution | 0.20 | 0.21 |
| Earned Leave encashment | 70.00 | 42.80 |
| Staff Welfare | 1.00 | 0.70 |
| Additional provisions made for pay revision, which is due from July/Aug-2008 | 114.60 | |
| Total | 1,016.74 | 798.70 |
| Monthly pension | 555.39 | 448.61 |
| Commutation | 28.60 | |
| DCRG | 26.40 | |
| Medical, Interim relief, Festival allowance, FPS offices | 3.26 | |
| Provision for pension revision | 60.03 | |
| Total pension liabilities | 673.68 | |
| Grand total | 1,690.42 | 1,247.31 |

Any increase in employee costs above the approved levels shall be funded through efficiency gains. In the previous order, the Commission had directed the Board to initiate work study to assess the reasonable level of employee costs, which has not been initiated. **The Commission directs that Board shall within one month initiate the work study to assess the reasonable level of employee strength and costs taking into consideration improvement in technology, possibility of outsourcing, mechanization, improved management strategies etc.** The Board shall be transformed into a lean and efficient organization not only to protect the interest of the consumers, but also the existing employees.

6.6. A&G Expenses

Administration and General expenses (net of electricity duty) projected by the Board for 2010-11 is Rs.85.64 Crore against Rs.60.99 Crore for 2008-09 (actual). The Section 3(1) duty is estimated as Rs.85.4 Crore. According to the Board, A&G expenses are highly amenable to inflation and business growth. As per CERC norms, inflation of 5.72% is allowed for various expenses. The increase in A&G expenses is due to addition of new connections to the tune of 5 lakhs every year and increase in energy sales at the rate of 8% per year. The Board projected Rs.1 crore for consultancy charges for reorganization of the Board. Rs.10 Crore has been provided for advertisement for awareness programmes. The A&G expenses projected for 2010-11 is as follows:

A&G expenses proposed for 2010-11

| Sl. No. | Particulars | 2008-09 | 2009-10 | 2010-11 |
|---------|-------------------------------------|---------------|---------------|---------------|
| | | Provisional | Revised | Estimate |
| 1 | Rents, rates and taxes | 3.89 | 4.12 | 4.66 |
| 2 | Insurance | 0.50 | 0.75 | 0.85 |
| 3 | Telephone/telex charges, etc. | 3.93 | 4.17 | 4.72 |
| 4 | Internet and related charges | 0.01 | 0.06 | 0.07 |
| 5 | Legal charges | 1.74 | 1.98 | 2.24 |
| 6 | Audit fees | 2.25 | 2.65 | 3.00 |
| 7 | Consultancy charges | 0.06 | 1.18 | 1.33 |
| 8 | Other Professional charges | 0.51 | 0.55 | 0.62 |
| 9 | Conveyance and vehicle hire charges | 13.44 | 14.52 | 17.55 |
| 10 | Sub Total (Total of 1 to 9) | 26.33 | 29.98 | 35.04 |
| 11 | OTHER EXPENSES | | | |
| | a) Fees and subscriptions | 0.25 | 0.42 | 0.53 |
| | d) Printing & stationary | 7.25 | 8.12 | 9.18 |
| | e) Advertisements | 3.35 | 10.75 | 11.00 |
| | f) Contributions/donations | 0.33 | 0.42 | 0.48 |
| | g) Electricity charges | 3.45 | 3.62 | 4.09 |
| | h) Water charges | 0.27 | 0.31 | 0.35 |
| | i) Entertainment | 0.25 | 0.28 | 0.32 |
| | j) Miscellaneous expenses | 8.41 | 9.19 | 10.46 |
| 12 | Total of Other Expenses | 23.56 | 33.21 | 36.41 |
| 13 | Freight | 6.98 | 8.17 | 9.24 |
| 14 | Other purchase related expenses | 4.12 | 4.38 | 4.95 |
| | Total | 60.99 | 75.74 | 85.64 |
| 15 | Ele. Duty u/s 3(I), KED Act | 74.47 | 79.8 | 85.4 |
| | GRAND TOTAL | 135.46 | 155.45 | 171.05 |

6.6.1 Objections of stakeholders

According to the objectors, the section 3(1) duty shall not be allowed to include as part of A&G expenses.

6.6.2 Analysis and Decision of the Commission

The Commission noted the over projection of A&G expenses by the Board. A&G expense no doubt is one of the controllable items of cost hence no escalation over inflation can be allowed for this item. The Commission notes that the actual A&G expenses for 2007-08 was only Rs.47.81 crore, where as it is projected at Rs.85.64 Crore for 2010-11, showing an increase of 21% on a compounded level. In between 2007-08 and 2008-09 A&G expenses have increased by 28%, mainly due to increase in printing & stationary, advertisements and miscellaneous expenses. The Commission sought the details of miscellaneous expenses, but the Board did not provide the exact details, instead stated that all expenses other than specifically mentioned will form part of miscellaneous expenses. The Board attributed increase in A&G expenses due to increase in number of connections and sales, with out substantiating how these factors related to A&G expenses. The Board provided Rs.10 crore for advertisement expenses. In 2008-09, where large scale campaigns were organised on account of power restrictions, the advertisement expense was only Rs.3.35 crore. Hence, the arguments of the Board for about 21% increase in A&G expenses cannot be substantiated and it is on the higher side. The Board has stated that CERC is providing 5.37% escalation based on inflation. Considering all the factors and stressing the need to contain the expenses under this head, the Commission limits the A&G expenses for 2010-11 at a level of 6% compounded increase over actual expenses in 2008-09. The Board shall limit the A&G expenses at this level and under any circumstances shall not exceed this amount without proper justification. In the case of advertisements the Commission agrees to Rs.4 Crore for the campaign for promoting energy efficiency and efficient energy use as requested for the Board. Accordingly the A&G expenses approved for 2010-11 is as follows:

A&G Expenses approved for 2010-11

| Sl. No. | Particulars | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2010-11 |
|---------|-------------------------------|---------|---------|----------|---------|----------|
| | | Actual | Actual | Approved | ARR | Approved |
| 1 | Rents, rates and taxes | 3.45 | 3.89 | 4.46 | 4.66 | 4.37 |
| 2 | Insurance | 0.6 | 0.50 | 1.21 | 0.85 | 0.56 |
| 3 | Telephone/telex charges, etc. | 3.6 | 3.93 | 4.37 | 4.72 | 4.42 |
| 4 | Internet and related charges | 0.01 | 0.01 | 0.07 | 0.07 | 0.01 |
| 5 | Legal charges | 2.42 | 1.74 | 5 | 2.24 | 1.96 |
| 6 | Audit fees | 2.27 | 2.25 | 2.15 | 3.00 | 2.53 |
| 7 | Consultancy charges | 0.06 | 0.06 | 0.2 | 1.33 | 0.07 |
| 8 | Other Professional charges | 0.4 | 0.51 | 0.42 | 0.62 | 0.57 |
| 9 | Conveyance and vehicle hire | 11.21 | 13.44 | 15.74 | 17.55 | 15.10 |

| Sl. No. | Particulars | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2010-11 |
|---------|---------------------------------|---------|--------------|--------------|--------------|--------------|
| | | Actual | Actual | Approved | ARR | Approved |
| | charges | | | | | |
| 10 | Sub Total (Total of 1 to 9) | 24.01 | 26.33 | 33.6 | 35.04 | 29.58 |
| 11 | OTHER EXPENSES | | | | | |
| | a) Fees and subscriptions | 0.48 | 0.25 | 0.29 | 0.53 | 0.28 |
| | d) Printing & stationary | 4.2 | 7.25 | 4.33 | 9.18 | 8.15 |
| | e) Advertisements | 0.92 | 3.35 | 0.75 | 11.00 | 4.00 |
| | f) Contributions/donations | 0.78 | 0.33 | 1.00 | 0.48 | 0.37 |
| | g) Electricity charges | 3.38 | 3.45 | 3.74 | 4.09 | 3.88 |
| | h) Water charges | 0.11 | 0.27 | 0.17 | 0.35 | 0.30 |
| | i) Entertainment | 0.18 | 0.25 | 0.31 | 0.32 | 0.28 |
| | j) Miscellaneous expenses | 6.2 | 8.41 | 8.84 | 10.46 | 9.45 |
| 12 | Total of Other Expenses | 16.25 | 23.56 | 19.43 | 36.41 | 26.71 |
| 13 | Freight | 5.3 | 6.98 | 7.81 | 9.24 | 7.84 |
| 14 | Other purchase related expenses | 2.25 | 4.12 | 3.39 | 4.95 | 4.63 |
| | Total | 47.81 | 60.99 | 64.22 | 85.64 | 68.76 |

As per the Order of the APTEL, Electricity duty under Section 3(1) is not included in A&G expenses. The Board need not take up this issue before the Commission henceforth.

6.7. Repair and maintenance Expenses:

The Board proposed R&M expenses for the year 2010-11 as Rs.175.32 Crore, which is about 12% higher than the actual for 2008-09. KSEB proposed 13% increase over the revised estimate for the year 2009-10 by considering an inflation of 5.72% and business growth of 8%. R&M expense works out to 1.69% of the GFA in 2010-11. Of Rs.175.32 crore projected for 2010-11, Rs.76.97 crore is for consumption of stores and balance Rs.99.35 crore is for payment to contractors for carrying out R&M works. The details provided by the Board is as follows:

R&M expenses proposed for 2010-11 (Rs. Crore)

| Sl. No. | Particulars | 2008-09 | 2009-10 | | | 2010-11 | | |
|---------|-------------------|---------|---------|-------|---------|----------------------------------|----------------|-------|
| | | Prov. | ARR | KSERC | Revised | Projection | | |
| | | | | | | Consumption of stores, fuel etc. | Other Expenses | Total |
| 1 | Plant & Machinery | 41.12 | 36.93 | 36.93 | 42.15 | 18.26 | 29.37 | 47.63 |
| 2 | Buildings | 3.69 | 5.01 | 5.01 | 4.35 | 2.32 | 2.60 | 4.92 |
| 3 | Other Civil works | 4.99 | 5.53 | 5.53 | 5.53 | 2.82 | 3.40 | 6.25 |
| 4 | Hydraulic works | 1.79 | 3.62 | 3.62 | 1.88 | 1.02 | 1.10 | 2.12 |

| | | | | | | | | |
|---|-----------------------|---------------|---------------|---------------|---------------|--------------|--------------|---------------|
| 5 | Lines, Cable networks | 81.29 | 95.12 | 95.12 | 95.12 | 48.16 | 59.33 | 107.49 |
| 6 | Vehicles | 5.18 | 5.92 | 5.92 | 5.32 | 2.96 | 3.05 | 6.01 |
| 7 | Furniture & fixtures | 0.22 | 0.10 | 0.10 | 0.25 | 0.12 | 0.16 | 0.28 |
| 8 | Office equipment | 0.51 | 0.51 | 0.51 | 0.55 | 0.28 | 0.34 | 0.62 |
| | Total | 138.80 | 152.74 | 152.74 | 155.15 | 76.97 | 99.35 | 175.32 |

6.7.1. Objections of stakeholders

The HT-EHT Association did not raise any objection on the R&M expenses proposed by the Board.

6.7.2. Analysis and decision of the Commission

The Commission generally allows the R&M expenses as proposed by the Board in the absence of better details needed for regulatory scrutiny. The Commission on several occasions had directed the Board to prepare an R&M plan so as to effectively track the expenses. In 2009-10 the Commission allowed the higher provision (about 31%) considering the urgent R&M works necessary in the system. However, it seems that the Board is now making it a practice to project substantially higher R&M expenses without properly substantiating the claims. The Commission has noted that as a percentage of GFA, the R&M expenses have been increasing over the years. In 2007-08 R&M expense was 1.46% of GFA, where as it was 1.44% in 2006-07. The proposed level for 2010-11 is 1.69%. It should also be noted that the GFA has been inflated by about Rs. 1490 Crore in 2009-10.

Without properly assigning reasons, the Board has projected the R&M expenses considerably high. The components of R&M expenses such as consumption of store is increased by 12% and payment to contractors is increased by 21% between 2008-09 and 2009-10. The function wise R&M expenses and its growth from 2007-08 is as follows:

Growth in R&M Expenses

| Function | R&M Expenses (Rs. Crore) | | | |
|---------------------------|--------------------------|---------|---------|---------|
| | 2007-08 | 2008-09 | 2009-10 | 2010-11 |
| Generation | 7.02 | 14.92 | 20.93 | 24.47 |
| Transmission | 29.75 | 36.65 | 34.91 | 37.40 |
| Distribution | 78.33 | 86.30 | 98.54 | 112.67 |
| Others | 1.16 | 0.93 | 0.77 | 0.78 |
| Total | 116.26 | 138.80 | 155.15 | 175.32 |
| Annual Growth rate | | | | |
| Generation | | 113% | 40% | 17% |
| Transmission | | 23% | -5% | 7% |

| | | | | |
|--------------|--|------|------|-----|
| Distribution | | 10% | 14% | 14% |
| Others | | -20% | -17% | 1% |
| Total | | 19% | 12% | 13% |

As per the details given by the Board, the Commission has attempted to correlate the growth rate in the system with the R&M expenses. As shown in the table below, the growth in physical infrastructure is not commensurate with the growth in R&M expenses. Growth in the installed capacity over the last four years is less than 1%, annual sales, and growth of lines and transformers is between 2.2% to 6.8%, where as R&M expenses projected are at 13% on a compounded level.

Growth of the power system

| Year | | 2005-06 | 2006-07 | 2007-08 | 2008-09 | CAGR |
|--|------------------------------|---------|---------|---------|---------|--------|
| Installed capacity (within the State) | Hydel (MW) | 1849.60 | 1849.60 | 1851.60 | 1886.50 | 0.7% |
| | Thermal (Incl. IPPs) (MW) | 591.60 | 591.60 | 591.60 | 591.60 | 0.0% |
| | Wind (MW) | 2.00 | 2.00 | 2.00 | 23.90 | 128.6% |
| | Total (MW) | 2443.20 | 2443.20 | 2445.20 | 2502.00 | 0.8% |
| Annual Sales | MU | 10906 | 11331 | 12050 | 12414 | 4.4% |
| No of Consumers | (Lakhs) | 82.98 | 87.14 | 90.3 | 93.6 | 4.1% |
| Per Capita Consumption | kWh | 427 | 465 | 470 | 470 | 3.2% |
| EHT lines | Ckt Kms | 10178 | 10593 | 10650 | 10855 | 2.2% |
| EHT S/s | (Nos) | 269 | 276 | 281 | 299 | 3.6% |
| HT lines | Ckt Kms | 35060 | 37891 | 38227 | 41245 | 5.6% |
| LT lines | Ckt Kms | 215152 | 223370 | 234252 | 241888 | 4.0% |
| Dist transformers | (Nos) | 38193 | 39872 | 42401 | 46510 | 6.8% |

In the absence of proper details to quantify the required R&M expenses, the Commission approves Rs.161.47 crore which is 1.69% of GFA re-estimated by the Commission. This estimate makes about 5.7% increase over the approved level in 2009-10, and may amply cover the inflation as proposed by the Board.

R&M Expenses approved for the year 2010-11

| Asset Category | R&M expenses proposed in the ARR | Revised GFA at the beginning of the year | R&M Expenses Approved | %of GFA |
|-------------------|--|---|-----------------------------|---------|
| | Rs. Crore | Rs. Crore | Rs. Crore | |
| Buildings | 4.92 | 508.83 | 4.53 | 0.94% |
| Hydraulic Works | 2.12 | 912.65 | 1.95 | 0.23% |
| Other Civil Works | 6.25 | 334.62 | 5.76 | 1.65% |
| Plant & Machinery | 47.63 | 3,677.77 | 43.87 | 1.20% |
| Cable Network etc | 107.49 | 4,077.14 | 99.00 | 2.38% |

| | | | | |
|------------------------|---------------|-----------------|---------------|--------------|
| Vehicles | 6.01 | 14.32 | 5.54 | 37.47% |
| Furniture and Fixtures | 0.28 | 14.55 | 0.26 | 1.82% |
| Office Equipments | 0.62 | 38.41 | 0.57 | 1.45% |
| Total | 175.32 | 9,578.31 | 161.47 | 1.69% |

The higher provision of R&M can be justified only if performance benchmarks are achieved progressively. The Commission has already introduced standards of performance for distribution licensees. The Commission has directed the Board to provide the base level of SoP achieved by the Board, which is yet to be furnished. In its absence, it is difficult to assess the R&M requirement for maintaining the standards. Hence, the Board shall with all supporting details provide the actual base level of performance standards at the sections for the year 2009-10, by the end of the first quarter of 2010-11. Unless such details are provided, any increase in R&M expenses cannot be entertained. Similar exercise would be extended for Generation and Transmission also.

6.8. Other Expenses

The other expenses include prior period expenses and other debits. The net prior income projected for the year 2010-11 is Rs.1.60 crore, as shown below.

Prior Period Expenses proposed by the Board for 2010-11 (Rs. Crore)

| Particulars | 2008-09 | 2009-10 | | | 2010-11 |
|--|---------|---------|-----|--------|---------|
| | | Actual | ARR | SERC | |
| I Income relating to previous Year | | | | | |
| 1. Receipt from consumers | 60.06 | 30.00 | | 64.50 | 65.00 |
| 2. Excess provision for Depreciation in prior period | 0.00 | 0.00 | | 0.00 | 0.00 |
| 3. Excess interest & Finance charges | 0.00 | 3.50 | | 0.00 | 0.00 |
| 4. Other excess provision | 0.05 | 45.00 | | 1.00 | 1.00 |
| 5. Other income relating to prior period | 570.58 | 60.00 | | 50.00 | 55.00 |
| Total | 630.69 | 138.50 | | 115.50 | 121.00 |
| II Expenditure relating to previous years | | | | | |
| 1. Short provision for purchase | 49.44 | 100.00 | | 75.00 | 100.00 |
| 2. Fuel related expenses relating to prior period | 0.00 | 1.30 | | 1.50 | 1.60 |
| 3. Operating expenses relating to prior period | 0.80 | 2.50 | | 3.00 | 5.00 |
| 4. Employee cost relating to prior period | 0.00 | 50.00 | | 0.00 | 0.00 |
| 5. Depreciation under provided in prior period | 0.00 | 0.00 | | 0.00 | 0.00 |
| 6. Interest & Finance charges | 50.99 | 1.00 | | 1.00 | 1.00 |
| 7. Other charges relating to previous years | 1.52 | 11.00 | | 10.00 | 15.00 |
| Total | 102.75 | 166.80 | | 90.50 | 122.60 |
| Net prior period credit/charges(I-II) | | | | | |
| | 527.94 | -27.30 | | 25.00 | -1.60 |

6.8.1. Other debits:

Other debits include expenses relating to research and development, bad and doubtful debts and miscellaneous losses and write offs. The Board has proposed expenses under this head as follows:

Other debits proposed by the Board for 2010-11

Rs. in Crore

| | Particulars | (2008-09) | (2009-10) | (2010-11) |
|---|--------------------------------------|---------------|---------------|--------------|
| 1 | Research and Development Expenses | 0.13 | 0.25 | 0.40 |
| 2 | Provision for Bad and Doubtful debts | 364.47 | 126.12 | 6.70 |
| 3 | Miscellaneous Losses and write-offs | 2.38 | 2.50 | 3.00 |
| | Total | 366.98 | 128.87 | 10.10 |

For the year 2008-09, the Board had provided Rs.366.98 Crore under other debits and Rs.128.87 Crore for 2009-10. For 2010-11, Rs.10.10 Crore is earmarked as other debits.

6.8.2. Analysis and decision of the Commission

The Commission as it has been doing in the previous orders, is inclined to disallow the provision under prior period charges as the same could be covered in the truing up exercise. Regarding other debits, as against the practice in previous years, comparatively low level is projected under this head apparently due to the high revenue gap. The Commission is inclined to accept the provision proposed by the Board. Thus the other debits approved by the Commission is as follows:

Other expenses approved for 2010-11

| Other debits | 2010-11 | |
|--------------------------------------|-----------|-----------|
| | ARR | Approved |
| | Rs. Crore | Rs. Crore |
| Net prior period credit/charges | 1.60 | 0.00 |
| Research & Development expenses | 0.40 | 0.40 |
| Provision for Bad and Doubtful debts | 6.70 | 6.70 |
| Miscellaneous Losses and write-offs | 3.00 | 3.00 |
| Total | 11.70 | 10.10 |

6.9. Return on Equity

The Board has projected the return on equity of Rs.286.99 crore for 2010-11. According to the Board, the Tariff Policy and CERC regulations permit them to claim a return on the 30% contribution made from its internal resources. From 2010-11 onwards KSEB is giving due attention on capital investment and it is finding it difficult to meet the fund requirements for 30% contribution. Hence from 2010-11 onwards return as per CERC norms for the investment made by KSEB from its own resources has to be allowed. Accordingly, KSEB estimated that of the capital expenditure proposed of Rs.995.17 crore, 30% ie., Rs.298.55 crore is treated as from own resources. Thus the total equity will be Rs.1851.55 crore. As per the revised CERC norms the return on equity is at 15.5%, thus Rs.286.99 crore is claimed as RoE. In support of the claim KSEB has also provided a copy of the letter from the Secretary, Ministry of Power Government of India, which expresses concern over the state utilities foregoing the permissible RoE. According to KSEB, in the said letter, the Central Government had directed the State Governments to issue directions to SERCs to initiate regulatory initiatives in line with CERC Tariff Regulations, 2009.

6.9.1. Objections of stakeholders

M/s Southern Railway stated that the return on equity of 15.5% should be allowed only if the performance parameters are achieved by the Board.

6.9.2 Analysis and Decision of the Commission

The proposal of KSEB that 15.5% return on normative Debt Equity Ratio is surprising. The Commission has given a thought to the contentions of KSEB so as to examine its legality. According to the Board it is difficult to meet the funds for capital expenditure to maintain DE ratio of 70:30. In the petition KSEB estimated that Rs.286.99 Crore should be the investment from own sources in 2010-11. Generally returns are allowed/claimed for the amount actually invested in the regulated business. In this case KSEB has not made any investment. Further no evidence is available that 30% of the funds have been generated from own sources. In this respect it is interesting to see the provision in the CERC Regulations, 2009. Clause 3(2), which is as follows:

Clause 3(2) 'expenditure incurred' means the fund, whether the equity or debt or both, actually deployed and paid in cash or cash equivalent, for creation or acquisition of a useful asset and does not include commitments or liabilities for which no payment has been released;

KSEB's claims do not fall under the above definition. The guiding principles on determination of tariff under Clauses (a) to (h) of the Section 61 of the Act are as follows:

- (a) commercial principles
- (b) competition, efficiency, economical use of resources, good performance and optimum investments
- (c) balance between consumer interest and recovery of the cost of electricity in a reasonable manner
- (d) reward of efficiency of performance
- (e) multi-year tariff principles
- (f) tariff progressively reflects cost of generation and reduces cross subsidies
- (g) promotion of cogeneration and generation from renewable resources
- (h) National Electricity Policy
- (i) Tariff Policy

Para 5.8.5 of the National Electricity Policy provides as under:

“All efforts will have to be made to improve the efficiency of operations in all the segments of the industry. Suitable performance norms of operations together with incentives and disincentives will need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. This will ensure protection of consumer interests on the one hand and provide motivation for improving the efficiency of operations on the other.”

Hence, KSEB must realize that the provisions in the Regulations, need not automatically make them eligible to get return which are passed on to the consumers. The Board has no right or permission under the regulations to claim returns without any basis. The regulations are clear in this respect that the licensees/generating companies become eligible for return on their investment based on the performance. No regulation guarantees any return for non-performance. Hence, in a performance based regulatory regime, return on equity is not a right of the licensee, but it has to be directly linked with the fulfillment of the duty cast upon the licensee and the efficiency with which they carryout such business. The intention of the Act, Policies and Regulations is very clear in this respect. The generating companies and licensees are ensured adequate return to attract sufficient funds for investment. The 'adequacy of return' thus depends on the ability to attract investment. As far as the Commission knows, KSEB has no difficulty in attracting funds for investment. As long as KSEB exists as a monolithic entity, there is limited scope for investment by any other sector. Hence the argument based on attracting investment for a high rate of return is not sustainable. As has been made out

elsewhere in the Order, the performance of KSEB in many areas are tardy and unsatisfactory hence its eligibility for the return on equity at the rate claimed cannot be admitted without reference to the performance and efficiency and own capital employed.

The Commission also perused the letter from Government of India cited by the Board. The letter is mainly for the "State utilities which are either claiming less than permissible RoE or conveying SERCs that State Governments has directed them to operate on non-profit no loss basis." KSEB does not fall under the list and the reference to the letter is irrelevant.

In the Audited Accounts of KSEB for 2006-07, C&AG has reported on the claimed Equity capital of Rs.1553 Crore (Schedule 33A) as follows:

"The above represents loan and interest due to Government as on 31-3-1998 converted as equity as per G.O.No.27/98/ED dated 14-9-1998. Eventhough subsequently through order No. G.O.(MS) No.25/02/PD dated 9-10-2002 the Government modified the earlier order and converted the loan and interest (Rs.1553 crore) as grant, the Board continued to show this amount as equity. Further the concept of equity is applicable to KSEB only if the State Government issues notification under Section 12A(1) of Electricity (Supply) Act 1948 directing the Board to be a body corporate with a capital not exceeding Rs. 10 crore. The Government has not issued such notification so far (May 2008). Thus the equity capital of Rs.1553 crore accounted for is against the provisions of Electricity (Supply) Act 1948 and in contravention of the aforesaid Government order dated 9-10-2002. Consequently, account of Rs.142.33 Crore as regulatory Asset/ revenue gap (Schedule 4(a) of Revenue account) being 14% return on equity capital does not exhibit a true and fair view in conformity with the provisions of aforesaid Act and Government Orders".

In the light of the above remarks of C&AG on the Equity Capital of KSEB, the Commission sought remarks of the Board and the status of GO. dated 9-10-2002, which converted the equity capital to grant. The Board vide letter dated 5-3-2010 stated that the said G.O. was based on the provisional figures and there are many discrepancies in the G.O. was with the consent of the Government, Board has not implemented the G.O.. The Board clarified that subsequent to the issue of the said G.O, Government has constituted a high level committee, to finalise the netting off, which suggested to write off dues from the Government in 5 years. The Board stated

that the decision taken by the committee was for netting off without considering the proposal of converting equity into grant as per the order dated 9-10-2002. According to the Board, since the Order dated 9-10-2002 is not implemented, the order dated 14-9-1998 ordering conversion of Government loans to equity prevails. Since grant is grouped under reserves and reserve funds, it is also a component of equity capital. Board has also given similar arguments to C&AG.

The Commission analysed the arguments of the Board and came to the conclusion that the arguments are too weak to substantiate the claim of the Board. According to the Board the Order dated 9-10-2002 had several 'discrepancies' and is not implemented hence the order dated 14-9-1998 is valid and in existence. Further, the Board stated that with the consent of the Government, Board did not implement the order. The Commission is surprised at the arguments of KSEB that non-implementation of an order amounts to non-issuance of an order. The Board stated that there are discrepancies in the Order but none was pointed out. The Board could not produce any document to prove that Government has consented for non-implementation of the G.O. dated 9-10-2002. It is evident that Board at its will did not implement the G.O. The non-implementation of the Order does not automatically render it null and void.

Though the Board has stated that there are several 'discrepancies' in the said G.O and 'non-implementation', the same G.O is used as a base for forming a High Level Committee for netting off the dues from the Government. If the G.O. is not implemented and it is non-existence, how can a High Level Committee be formed for netting off of dues. Hence the argument of the Board is not logical and fair.

It is interesting to note that the Government even after repeated requests from the Board did not review the order or issue any direction to keep it in abeyance. Further, the Government apparently did not accept the decisions taken by the High Level Committee constituted vide order dated 16-7-2005 which recommended write off, but constituted another committee to study the matter. Thus it is clear that the decisions of the Committee have not reached any finality and cannot be accepted for any purpose.

The C&AG has cited two reasons for denying equity to the Board – one, the G.O dated 9-10-2002 reversed the decision of creating equity capital and converted the equity into grant. Two. the statutory requirement of issuing a notification under Electricity (supply) Act, 1948 is not fulfilled for conversion of loans to equity. Since the statutory requirement is not fulfilled, the process of creating equity is not logically

concluded. The Government Order dated 9-10-2002 also clearly specifies this aspect. Para 2 of the order states that as per the Government accounts since the subsequent action was not taken after conversion of equity, the amount still exists as loan on the capital side. Further it is clear that Government in the said order intended to use the grant (by conversion of loans to equity) to net off the dues as on 31-3-2002 without cash transaction.

The arguments of the Board that conversion of equity to grant does not make any difference in equity cannot be accepted on merits. Grant as equity is not eligible for calculating the return. Grant is given for a specific purpose without the intention of any returns from it. Hence, grant from any entity in the books of account may form part of the reserves, but does not make it eligible for getting statutory returns.

The Commission accepts with due seriousness the observation made by the C&AG on the equity of the Board. C&AG has observed that since the legal requirement under Electricity (Supply) Act, 1948 was not followed for conversion of the Government loans, the same amount cannot be legally treated as equity. Further the Government Order dated 9-10-2002 points out this legal impediment in conversion of equity, and hence treated the Government loans as grant to the Board. The Board has conveyed the decision of the Government on constituting a committee for further examining the matter after the same has been taken up by the Board. As the matter stands on this date, the Commission is not in a position to consider Rs.1553 crore as Equity of the Board. However, the Commission is committed to provide enabling environment for attracting funds in the sector. Hence, as an interim measure, the Commission allows a notional return of Rs.100 Crore to Board. This provision will be treated as provisional and will be refixed on the basis of real equity or what can be treated as equity for the purpose calculating return on investment, which will be submitted by the Board on the basis of a study by a reputed agency with approval of the Commission.

6.10. Expenses and Interest Capitalized

The Board has provided Rs.23.24 Crore towards interest and financing charges capitalized and Rs.94.10crore towards expenses capitalized. The Commission provisionally allows these items in the ARR for 2010-11 as proposed by the Board.

6.11. Aggregate Revenue Requirements:

The summary of Aggregate Revenue Requirements projected by the Board and approved by the Commission for 2010-11 is as follows:

Aggregate Revenue Requirements for 2010-11

| Items | 2010-11 (Rs. Crore) | |
|-----------------------------------|-----------------------|----------------------------|
| | Proposed by the Board | Approved by the Commission |
| Generation of Power | 536.58 | 263.17 |
| Purchase of power | 3,824.75 | 3,439.56 |
| Interest & Finance Charges | 391.62 | 268.29 |
| Depreciation | 532.89 | 490.53 |
| Employee Cost | 1,690.42 | 1,247.31 |
| Repair & Maintenance | 175.32 | 161.47 |
| Administration & General Expenses | 171.05 | 68.76 |
| Other Expenses | 11.70 | 10.10 |
| Gross Expenditure (A) | 7,334.33 | 5,949.19 |
| Less: Expenses Capitalized | 94.10 | 94.10 |
| Less: Interest Capitalized | 23.24 | 23.24 |
| Net Expenditure (B) | 7,216.99 | 5,831.85 |
| Return | 286.99 | 100.00 |
| ARR (D) = (B) + (C) | 7,503.98 | 5,931.85 |

CHAPTER – 7

REVENUE FROM TARIFFS AND NON-TARIFFS

7.1 Introduction

The Board estimated the revenue based on the revised tariffs. The Board estimated Rs.4867.25 Crore as revenue from the sale of energy within the State. Summary of sales estimations provided by the Board is given below.

Revenue from sale of power proposed for 2010-11

| Category | 2009-10 | | 2010-11 | |
|-------------------------|------------------|---------------------|-----------------|---------------------|
| | Revised estimate | | Estimate | |
| | Sale of energy | Revenue from tariff | Sale of energy | Revenue from tariff |
| | (MU) | (Rs. Cr) | (MU) | (Rs. Cr) |
| Domestic | 6574.00 | 1249.82 | 7072.00 | 1362.99 |
| Commercial | 1706.00 | 1197.52 | 1886.00 | 1318.72 |
| Public Lighting | 305.00 | 61.00 | 325.00 | 65.00 |
| Irrigation & Dewatering | 238.00 | 21.90 | 250.00 | 22.75 |
| Industrial LT | 1131.00 | 445.23 | 1211.00 | 472.63 |
| NPG | 6.00 | 0.00 | 6.00 | 0.00 |
| HT&EHT | 3355.10 | 1357.10 | 3495.10 | 1417.00 |
| Railway Traction | 161.00 | 64.33 | 168.00 | 66.80 |
| Bulk Supply | 394.00 | 134.26 | 417.00 | 141.36 |
| Total | 13870.10 | 4531.16 | 14830.10 | 4867.25 |

7.2. Non-Tariff Income:

The Board estimated the Non-Tariff income as Rs.417.13 Crore which is inclusive of meter rent/service line rental, wheeling charges, miscellaneous charges etc., The details are given below:

Non Tariff Income (Rs. in Crore)

| Sl. No. | Particulars | 2008-09 | 2009-10 | | | 2010-11 |
|---------|--------------------------------|----------|---------|--------|---------|---------|
| | | Accounts | ARR | KSERC | Revised | |
| 1 | Meter Rent/Service Line Rental | 142.54 | 152.00 | 152.00 | 147.00 | 152.00 |
| 2 | Wheeling Charges Recoveries | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | |
|----|--|---------------|---------------|---------------|---------------|---------------|
| 3 | Miscellaneous Charges. (UCM, Service connection fee, Fee for maintenance of Public lighting, Testing fee, Reconnection fee, Penalty charges, Minimum Guarantee charges, Charges for Service connection minimum, Meter Box charges, Power allocation charges etc. | 61.92 | 100.00 | 100.00 | 65.00 | 70.00 |
| 4 | Interest on Staff Loans and Advances | 0.63 | 0.60 | 0.60 | 0.42 | 0.25 |
| 5 | Income from Investments | 0.50 | 1.15 | 1.15 | 1.15 | 1.30 |
| 6 | Interest on Advances to suppliers/ Contractors | 4.24 | 1.30 | 1.30 | 0.43 | 0.00 |
| 7 | Interest from Banks | 142.84 | 130.30 | 130.30 | 105.33 | 88.58 |
| 8 | Rebate Received | 58.50 | 65.66 | 65.66 | 60.00 | 60.00 |
| 9 | Income from Trading | 12.76 | 10.00 | 10.00 | 10.00 | 10.00 |
| 10 | Miscellaneous Receipts | 31.38 | 30.00 | 30.00 | 32.00 | 35.00 |
| | Grand Total | 455.31 | 491.01 | 491.01 | 421.33 | 417.13 |

7.3. Analysis and decision of the Commission

The Board has projected the income based on the existing tariffs. The Commission noted the objections raised by the consumers on the estimation of revenue by the Board by making adjustments in slabwise consumption in the domestic category. Considering the information available, the Commission approves the revenue from sale and miscellaneous charges as proposed by the Board. In the order dated 5-4-2010 the Commission has allowed 25 paise fuel surcharge and excess charges for the consumption of power above the fixed quota. As per the Order the revenue from surcharge will be about Rs.190 Crore, which is also considered in the income for 2010-11. The additional revenue on account of power restrictions are not included in the income estimates of 2010-11 because, it is applicable for only for a short period and the additional cost of procuring power is also not considered in the ARR. The total income expected in 2010-11 is as follows:

Approved Revenue from tariff & Non Tariff

| Nature of Revenue | 2010-11 | |
|----------------------------|----------------|----------------|
| | ARR | Approved |
| Tariff Income | 4867.25 | 4867.25 |
| Income from fuel surcharge | | 190.00 |
| Non Tariff Income | 417.13 | 417.23 |
| Total Income | 5284.38 | 5474.38 |

CHAPTER – 8

SUMMARY OF ARR & ERC FOR 2010-11

The Board in the ARR&ERC for 2010-11 estimated the revenue gap as Rs.2219.60 Crore considering the ARR of Rs.7503.98 Crore and ERC of Rs.5284.38 Crore. The Board has requested the Commission to approve the revenue gap estimated by them and permit them to submit suitable proposals for bridging the gap. The Board has also requested to accept the concept of regulatory asset in managing the revenue gap.

However, several stakeholders have objected to the proposal of KSEB to convert the revenue gap into regulatory Asset. According to them the concept of regulatory assets is used for cost variations due to uncontrollable factors and not to meet the revenue deficit. As per the estimates of the HT-EHT Association, the total revenue gap will be only Rs.181 crore since the revenue requirements would only be Rs.5250 Crore instead of Rs.7504 Crore projected by the Board. According to Shri. S.P.Ravi,Chalakudi Puzha Samrakshana Samithi, the revenue gap is on account of other expenses since the power generation purchase cost is almost same over the years.

The Commission is of the view that Tariff Policy provides guidelines for creation of regulatory asset. Regulatory asset is not generally meant for recovering the revenue gap. Further, it is used only as an exception rather than a rule. As detailed in the previous chapters, the Commission has approved the Aggregate Revenue requirement of Rs.5931.85 Crore as against Rs.7503.98 Crore proposed by the Board. The revenue from sale of power and non tariff income has been approved at Rs.5474.38 Crore as against Rs.5284.38 Crore projected by the Board. The summary of the approved ARR & ERC for 2010-11 is as follows:

| Items | 2010-11 (Rs. Crore) | |
|-----------------------------------|-----------------------|----------------------------|
| | Proposed by the Board | Approved by the Commission |
| Generation of Power | 536.58 | 263.17 |
| Purchase of power | 3,824.75 | 3,439.56 |
| Interest & Finance Charges | 391.62 | 268.29 |
| Depreciation | 532.89 | 490.53 |
| Employee Cost | 1,690.42 | 1,247.31 |
| Repair & Maintenance | 175.32 | 161.47 |
| Administration & General Expenses | 171.05 | 68.76 |
| Other Expenses | 11.70 | 10.10 |
| Gross Expenditure (A) | 7,334.33 | 5,949.19 |
| Less: Expenses Capitalized | 94.10 | 94.10 |
| Less: Interest Capitalized | 23.24 | 23.24 |
| Net Expenditure (B) | 7,216.99 | 5,831.85 |
| Return | 286.99 | 100.00 |
| ARR (D) = (B) + (C) | 7,503.98 | 5,931.85 |
| Income | | |
| Non-Tariff Income | 417.13 | 417.13 |
| Revenue from Tariff | | |
| (a) Revenue from sale of power | 4,867.25 | 4,867.25 |
| (b) Revenue from Fuel Surcharge | | 190.00 |
| Total Income | 5,284.38 | 5,474.38 |
| Revenue Gap | 2,219.60 | 457.47 |

Based on the approved ARR & ERC the Commission provisionally arrives at a revenue gap of Rs.457.47 Crore for 2010-11.

Bridging of revenue gap

The Commission is of the view that the revenue gap provisionally arrived at by the Commission may be bridged through the following measures to avoid tariff revision.

- a. As suggested by the Commission, if the Board reduces the dependence of liquid fuel stations by about 50 MU per month from June, the power purchase cost could be reduced by about Rs.150 Crore to Rs. 200 crore since the price difference is about Rs.3 to 4 per unit. From the beginning of the financial year itself, the Board must plan and take action for this through short term and medium term agreements for purchases
- b. The Board is collecting section 4 duty from the consumers as an agent of the Government. The consumers pay duty on the assumption that the Board may remit the same promptly to the Government. However, the Board has not

transferred the duty collected to the Government and the excess cash is never reflected in the regulatory accounts thereby providing excess liquidity. It is clearly a violation of confidence placed in the Board by the consumers. Since the Board is retaining the money collected from the consumers and is using it, the same has to be accounted properly in the system. In a transparent regulatory regime substantial amounts cannot be kept in hidden pockets. Hence, it is an additional source to be accounted for bridging the revenue gap. As and when the Board pays the amount to the Government or the Government passes it on to the Board consistent with the provisions of the Act, the Commission will appropriately account the same.

- c. The Board has filed for adjustment of fuel surcharge for the months from October to December for an amount of Rs.100 Crore. Similarly, claim for the period from January 2010 to March 2010 is also pending, which would generate additional revenue of about Rs.150 crore in the financial year 2010-11.
- d. Adjustment of truing up: The Commission has already issued truing up orders for the years 2003-04 to 2006-07. The revenue surplus/gap available after the truing up is as follows.

| | Rs. Crore |
|--|-----------------|
| Revenue gap for 2009-10 | (335.30) |
| Revenue surplus after True up for 2005-06 | 181.36 |
| Balance Revenue gap | (153.94) |
| Additional revenue gap allowed for 2003/04 & 2004/05 | (73.87) |
| Provisional revenue gap for 2010-11 | (457.47) |
| Total revenue gap | (685.28) |
| Revenue surplus after True up for 2006-07 | 1035.85 |
| Net surplus | 350.57 |

The truing up for 2007-08 and 2008-09 are pending for want of petitions to be filed by the Board. The Commission will have to take a total view including the amount collected as duty before tariff revision is taken up to bridge any gap.

Order of the Commission

The Commission after considering the documents placed before it and having heard the views of the stakeholders and the Board, hereby approves an Aggregate Revenue Requirement of Rs.5931.85 Crore and a total Expected Revenue from Charges of Rs.5474.38 Crore as against Rs.7503.98 Crore and Rs.5284.38 Crore

respectively projected by the Kerala State Electricity Board in the Petition TP70 of 2010 for the year 2010-11, subject to the observations and conditions mentioned in this Order. Accordingly the Commission arrives at a provisional revenue gap of Rs.457.47 Crore as against the revenue gap of Rs.2219.60 Crore projected by the Board. The revenue gap arrived at is subject to the adjustment based on the truing up for 2006/07, efficiency gains, adjustment of electricity duty under section 4 and the outcome of the truing up exercise pending for the years 2007-08 and 2008-09. Till such time, **the existing tariff will continue.**

CHAPTER – 9

DIRECTIVES

The Commission has issued several directives since the first ARR&ERC Order in 2003-04. However, the Board has not followed up the directives diligently and the status of compliance is unsatisfactory as shown in chapter 2.. The Commission would like to give the Board another chance for complying with the directives, which are consolidated and compiled below. The Board shall comply with the directives scrupulously within the stipulated time and progress/compliance reports shall be filed as specified. The difficulties if any in the compliance shall be brought to the notice of the Commission promptly. It is also made clear that the failure to provide information or to furnish the reports and non-adherence to time limit may lead to invocation of the penal provisions of the Act.

1. T&D loss:

- a. Separation of Transmission and distribution loss: The Board shall estimate transmission losses and distribution losses at different voltage levels with supporting details along with all ARR & ERC filing.
 - b. Board shall initiate a study for assessing loss levels in 33kV/11kV system and LT system separately. The estimates with supporting details shall be filed along with ARR & ERC filing
 - c. Separation of technical and commercial loss : The Board shall study and submit along with ARR & ERC separate estimates for technical and commercial losses with supporting details.
2. As given in section 5.3, the Board shall chalk out plans for loss reduction to the targeted level by fixing section wise /monthwise targets for execution of capital works for loss reduction and faulty meter replacement and continuous monitoring of the same. The monthly target for each section shall be reported to the Commission within 2 months.
3. The Board shall prepare scheme/project wise details with date of commencement, funding pattern, physical and financial progress, target date of completion etc., are and submit along with ARR&ERC. For all new projects, an analytical report showing cost and benefit shall also be furnished. Further, Board shall within one month furnish the status report on the R-APDRP and RGGVY schemes for evaluation and monitoring.

4. The Board shall within one month initiate a work study to assess the reasonable level of employee strength and cost taking into consideration improvement in technology, possibility of outsourcing, mechanization, improved management strategies etc. Progress shall be intimated in the first week of August 2010.
5. The Board shall take steps for the establishment of pension funds and efforts for reducing pension liabilities immediately. The progress shall be intimated in the end of August 2010.
6. The Board shall revive the Task Force for overseeing arrear collection as directed in Chapter 2.3 and file a first report for the first quarter by 20th of the July 2010. Further quarterly report will be filed by 20th of succeeding month.
7. The Board shall furnish benchmark Performance parameters for diesel stations for determining the fuel surcharge within one month as given in section 6.2.6.1
8. As given in section 2.4 the Board shall within three months furnish comprehensive proposal for determining the operation norms for generating and transmission system with all supporting details with detailed analysis of actual performance.
9. As given in Section 2.6, the Board shall within in one month prepare a status report on implementation of standards of performance regulation at the circle level and the monitoring mechanism if any created by higher offices. The baseline data on standards shall also be provided for each circle along with the status report. Also report on the amount of compensation paid to consumers may be submitted monthly as envisaged in Section 59(b) of the Act.
10. The Board shall prepare separate ARR&ERC for each licensed business from 2011-12. The Board shall also propose transmission tariff, SLDC charges, and open access charges along with the ARR for 2011-12.
11. The Board shall revise the budget for 2010-11 based on this order and submit the same within one month from the date of this order.
12. The Board shall study and report the impact of the revised ToD tariff for HT-EHT consumers within two months.
13. The Board shall prepare an implementation plan including procurement plan for all the important capital projects under generation, transmission and distribution with information to the Commission. The SCMS shall be fully operational within 6 months and the status should be reported in six months.

14. The Board shall file a Proposal for new bill payment mechanism and other customer satisfaction measures within two months.

15. The Board shall propose programs for achieving the 5% energy sales through renewable sources by encouraging private/own renewable generation within three months.

If the Board has any genuine grounds causing difficulty in implementing the above directives it may approach the Commission for a review within one month.

Annexure-1

KERALA STATE ELECTRICITY REGULATORY COMMISSION

MINUTES OF THE 21ST STATE ADVISORY COMMITTEE MEETING HELD ON FEBRUARY 18, 2010 AT MINI CONFERENCE HALL, GOVT. GUEST HOUSE, THYCAUD

Members Present

1. K.J Mathew, Chairman, KSERC
2. C. Abdulla, Member, KSERC
3. M. P Aiyapan, Member, KSERC
4. K.S. Premachandra Kurup, Secretary, KSERC
5. Mathew George, Member (F) KSEB
6. E.M Najeeb, President, Trivandrum chamber of Commerce
7. Mammen J. Additional GM, NTPC
8. Dr. P.T. Nandakumar, President, Trivandrum Management Association
9. M Ravindran Nair, Executive Director, CONTIPS
10. Dr. D. Balakrishnan, Chairman, Institution of Engineers
11. N.T Nair, Editor Executive Knowledge
12. Shaji Sebastain, KSSIA
13. George Thomas, President, HT-EHT Association
14. T. Elengovan, Director Grade Scientist, NATPAC
15. V.S Suresh Kumar, Under Secretary, FCS and CA Department
16. K. Sukesan, KAEB Workers Association
17. V.R Balu, Kinfra Export Park

Meeting started at 10:30 AM

Meeting started with the opening remarks of Shri K.J. Mathew, Chairman, KSERC. Chairman welcomed all the participants to the 21st SAC meeting, the first being chaired by him. In his welcome address, he said the Commission was committed to uphold the provisions of the Act, and the interest of the consumers. At the same time licensees have to function efficiently and in a financially viable manner. He stressed the importance and relevance of the SAC in the functioning of the Commission and the objects of the SAC as has been laid down in the Electricity Act 2003. He sought the advice and direction of the Committee for efficiently carrying out the functions assigned to the Commission.

After the initial remarks, the Chairman took up the agenda for the meeting. As the first item, approval of the minutes of the previous meeting was taken up. The members approved the minutes after incorporating the correction suggested by Shri. Shaji Sebastain.

Discussion of ARR & ERC of KSEB for 2010-11 was taken up as the next item for detailed discussion. Shri, Mathew George, Member (Finance), KSEB gave a brief over view of the ARR & ERC. He mentioned the methodology adopted for projecting the income & expenses in the ARR. He attributed the increase in ARR over the previous year to the increase in power purchase cost and employee cost. Many items are unavoidable in nature hence cannot be reduced. Shri. Abdulla Member, KSERC after highlighting the important aspects of the ARR mentioned that the major issue is increase in the cost of power purchase mainly due to the increase in liquid fuel cost and dependence on imports from traders and exchange. He suggested that the Committee should discuss whether Kerala is able to afford such high cost power and alternatively, option of limiting the use and imposing the power restrictions may be explored so as to limit the cost within reasonable limits. He sought the opinion of the SAC on this issue.

Shri. Najeeb, commenting on the ARR & ERC, stated that the ARR is about 42% higher than the previous year's approved levels, where as the employee cost alone shows 58% increase. Such vast increase without corresponding increase in productivity is not acceptable. The Board, while showing such enormous increase did not show any proposal for containing the cost. He also attributed the increase in cost due to delay & cost over run of projects. He stressed the need for long term planning for KSEB immediately. Responding to the suggestion of Shri. Abulla, member, he stated that industry is not in a position to take more power cuts. Shri. Nandakumar, President, TMA, while supporting the argument of Shri. Najeeb, stated that projections are seen to be arbitrary and KSEB should explore alternate sources of energy.

Shri. Ravaindran Nair, ConTips, opined that the hydro projections of KSEB could be slightly higher if long term average considering 20 years past data is used. According to him it would be ideal to use average power purchase cost than cost existing in November, as used by KSEB. Regarding technical loss he suggested to have a comprehensive study on improvement in power factor, controlling harmonics etc. He was of the view that employee cost of KSEB is comparable with other utilities in India, but expressed concern over the capital investment and suggested to encourage captives and other sources. Further he was of the view that the proposal of KSEB on conversion of all single phase to three phase will not yield any results. Regarding power restrictions, he welcomed the suggestion of member, KSERC. Shri. V.R Balu, Kinfra stated that power restrictions are welcome, but the rates should be comparable.

Shri. K. Sukesan, KSEBWA, stated the Board has presented realistic documents in support of ARR & ERC. However, he felt that long term policy is required to address the issues. In the case of employees, the productivity has increased. Earlier, 28 lakhs consumers were served by 26000 employees, and now the consumers have increased to 90 lakhs, but the no.of employees remain more or less the same. Dr.D Balakrishnan, Chairman, Institution of Engineers, stated that it would be ideal to provide an executive summary of the documents. He also favoured selective imposition of power restriction. Shri. Balakrishnan also suggested that KSEB should have more interactions with R&D institutions. Shri. NT Nair, stated that KSEB should state from their side what steps could be possible to reduce the costs. The consumers are generally willing to share the cost which are not under control of KSEB. He insisted that more thrust should be given to utilising solar power since, the cost of generation is coming down rapidly due to improvements in technology. According to him incentive system should be devised for consumers to reduce the consumption.

According to Shri. Shaji Sebastain, steps taken to introduce TOD tariff in LT industrial consumers are welcome. The concepts such as model sections, interactive proposal for power planning etc., should be appreciated. According to him high rise buildings shall be given single point supply to avoid distribution costs.

Shri. George Thomas of HT & EHT Association stated that the ARR&ERC proposal of the Board should be rejected since it is not in accordance with regulations especially Multi Year Tariff regulations issued by the Commission. The revised figures provided by the Board for the current year was completely misleading and should be avoided. Further no proposal on meeting the revenue gap was also filed by KSEB. The Commission has ordered to conduct study on segregation of losses and it is not complied yet. Hence baseline information is denied by the Board. Regarding employee cost, though revenue per employee Rs.17.2 lakhs but the cost per employee is more than 35% ie., Rs.6.2 lakhs. Tariff rationalisation to be initiated to increase the base load in the system. The high cost power from liquid fuel stations can be avoided if the ongoing projects are completed immediately.

Shri. Elangovan, NATPAC opined that internal generation should be enhanced. Further wind power potential should be properly tapped. If power restrictions are introduced, HT-EHT consumers may be given an option so that they plan their production considering the cost. He suggested that, domestic consumers should be exempted from restrictions. Shri. Mammen.J, Additional GM (Commercial), NTPC, noted that KSEB should be complemented for not having power cuts and reducing the interest

costs. Considering the social/political issues and elections, it is not feasible to implement power cuts in 2010.

Chairman, KSERC sought clarifications on some issues from the Board. He desired to know the details of transmission constraints for importing power and statutory provision for higher return on equity, which necessarily has to be linked to performance. He also sought clarification how the interest on arrears are accounted and the issues regarding time and cost over run of capital projects.

Shri. Mathew George, Member, KSEB gave clarifications on the issues raised by the members. He explained that transmission constraints are due to advance booking of transmission corridors by TNEB, though it will not affect the import of CGS share, however, additional imports would be difficult. Interest on arrears are now accounted as income as part of Sale of Power. Regarding capital projects, he stated that Board is taking earnest efforts to complete the projects on time. Already 60% of the transmission and 50% of distribution works are complete. Main delay is in generation projects, which is mostly due to environmental factors. Kuttiadi Additional extension will be completed in March. In the case of small hydro projects, the project costs are high and then the per unit cost would also be high.

After the discussions, the Chairman thanked the members for their active participation. He stated that the suggestions of the members will be given very serious consideration while taking decisions on ARR & ERC.

The Committee noted the regulations issued by the Commission.

Meeting came to a close at 1:00 PM.

Sd/-

SECRETARY

Annexure-II

List of Persons who have filed written objections

| Sl. No. | Name and Address of person |
|---------|--|
| 1 | The Chief Electrical Engineer, Southern Railway, Chennai 600 003 |
| 2 | The Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association, Productivity House, Jawaharlal Nehru Road, Kalamassery 683 104 |
| 3 | Shri. Ratheesh.K.Pai, Manager (Electrical), Sree Sakthi Paper Mills Ltd, "Sree Kailas", 57/2993-94, Paliyam Road, Ernakulam, Cochin 682 016 |
| 4 | The Vice President, H.N.L Employees Association, Newsprint Nagar P.O, Kottayam, Kerala 686 616 |
| 5 | The Vice President, Kerala Newsprint Employees' Union (CITU), Newsprint Nagar, Kottayam 686 616 |
| 6 | The Vice President, Hindustan Paper Corporation Employees Association, Newsprint Nagar.P.O, Kottayam Dist 686 616 |
| 7 | The Secretary, Binani Zinc Employees Organisation, Binani Zinc Ltd, Binanipuram 683 502 |
| 8 | The Joint Secretary, Cominco Binani Zinc Employees Union, Binanipuram, Ernakulam |
| 9 | The Secretary, Cominco Binani Zinc Employees' Association, Binanipuram 683 502 |
| 10 | Shri.K.B.Muraleedaran, Muppathadam P.O, Aluva 683 110 |
| 11 | Shri.A.A.Mohamed Nawaz, Asst. Vice President (Electrical & Instrumentation), Binani Zinc Ltd, Binanipuram, Ernakulam |
| 12 | The General Secretary, Sud-kemi Employees' Union, Binaipuram |
| 13 | Shri.K.K.Jinnas, State Secretary, Indian National Trade Union Congress, TC.15/504, Udarasiromani Road, Vellayambalam, Sasthamangalam P.O, Thiruvananthapuram 695 010 |
| 14 | The Standing Council of Trade Union, Ernakulam |
| 15 | KSEB Officers' Association |
| 16 | Kerala Vyapari Vyavasai Ekopana Samithi, South Kalamassery Unit |
| 17 | The General Manager Technical, The Travancore – Cochin Chemicals Ltd, P.B.No. 4, Udyogamandal P.O, Kochi 683 501 |
| 18 | The Hindustan Newsprint Limited |
| 19 | Shri.Krishnan Vennala, Vennala P.O, Kochi |
| 20 | Kalamassery Mandalam Youth Congress Committee |
| 21 | Shri.S.P.Ravi, Chalakudy Puzha Samrakshana Samithi, Chaithanya, Moozhikkakadavu, Pariyaram, Chalakudy |
| 22 | The Chief Engineer(Electrical), The Fertilisers and Chemicals Travancore Ltd, Udyogamandal Division, Kochi 683 501 |
| 23 | The Secretary, Kerala Chamber of Commerce and Industry, Chamber Corner, Shanmugham Road, Cochin 682 031 |
| 24 | The President, INTUC Koratti Mandalam Committee |
| 25 | The General Secretary, Aluminum Factory Worker's Union, Alupuram P.O, Kalamassery 683 504 |
| 26 | Shri.K.Kumaravel, Head-Alupuram Works, Hindalco Industries Ltd, Alupuram Smelter, Post Box No. 30, Kalamassery 683 104 |
| 27 | The Joint Council of Trade Union, G.T.N Textiles Ltd, Aluva |
| 28 | The Sr. Vice President, GTN Textiles Limited, Aluva 683 112 |
| 29 | The General Secretary, Titanium Products Labour Union, I.N.T.U.C House, Kunnumpuram, Thiruvananthapuram 695 001 |
| 30 | The General Secretary, Titanium General Labour Union, CITU |
| 31 | The Chief Engineer, Travancore Titanium Products Ltd, P.B.No.1, Thiruvananthapuram 695 021 |
| 32 | The General Secretaries, Travancore Cochin Chemicals Ltd, Udyogamandal |
| 33 | The General Manager (Technical), Travancore Cochin Chemicals Ltd, P.B.No. 4, Udyogamandal P.O, Kochi 683 501 |
| 34 | The General Manager-Works, Indsil Hydro Power and Manganese Ltd, Palakkad |
| 35 | The Plant Manager, MRF Ltd, P.B.No.2, Vadavathoor P.O, Kottayam 686 010 |
| 36 | Shri. Eloor Gopinath, Consumer |
| 37 | The General Manager – E&I, Apollo Tyres Ltd, Kalamassery, Ernakulam |
| 38 | Shri.Sujith Panikkar, G171, Panampilly Nagar, Kochi 682 036 |
| 39 | Shri.AR Satheesh, Carborundum Universal Ltd, Kalamassery |

| | |
|----|---|
| 40 | <ul style="list-style-type: none">a. Shri.M.P.Salim, General Secretary, KEL Employees Congress, Mamalab. Shri.K.K.Chandran, General Secretary, Ernakulamc. Shri.V.K.Vilson, Secretary, AICTU, Ernakulamd. Shri.K.K.Chandran, "Chandrakantham", Muvattupuzhae. Shri.K.O.Antappan, Secretary, Carborundum Universal Employees' Union, Korattyf. Shri.M.Sumesh, Vice President, Carborundum Universal Labour Union, Korattyg. Shri.K.K.Chandran, General Secretary, Kerala Artisans Union, Ernakulamh. The Secretary, Carborundum Universal Employees Assn. |
|----|---|

ANNEXURE - III

Comments on responses of stake holders on ARR&ERC for the year 2010-11.

| 1. Chief Electrical Distribution Engineer, Southern Railway, Chennai | |
|---|--|
| <p>In the ARR&ERC 2010-11, KSEB has not adequately addressed the following:</p> <p>Methods to avoid purchase of costly power by fixing attractive tariff for renewable energy sources like wind power</p> <p>Proposal to encourage power consumption by subsidizing class of consumers to reduce revenue gap.</p> <p>Reduction of revenue gap by tariff rationalization</p> <p>Issue of payment of subsidy by Government of Kerala</p> <p>(v)Declaring cost of service to different class of consumers.</p> | <p>State Government and KSEB has been taken various initiatives for promoting energy from renewable sources. KSEB itself has implementing SHPs in the State. About 209 MW of SHPs are under various stages of development. KSEB has already entered into agreement with various wind developers to procure 27.9MW of power at a competitive rate of Rs. 3.14/unit. But energy available from renewable such as SHP and Wind are seasonal, and such sources are not available during summer months when electricity consumption is extremely high. KSEB has been taking all possible steps to procure energy from cheaper sources.</p> <p>As directed by the Hon'ble Commission, KSEB had already introduced power factor incentives, rationalized TOD tariff for HT&EHT consumers. Further as proposed by KSEB, KSERC has approved ToD tariff for LT Industrial consumers with connected load above 30kW as an optional scheme from 1st April-2010.</p> <p>Usually there was wide variation between the revenue gap proposed by KSEB and the same approved by KSERC. This is mainly due to the methodology followed by the Board in preparing the ARR based on Electricity (Supply) Annual Accounts Rules –1985 and methodology adopted by the Commission for approving the same. Hence KSEB requested before the Commission to allow to file the proposal to bridge the revenue gap once Hon'ble Commission approves the revenue gap for the year 2010-11.</p> <p>As per the section-65 of the Electricity Act-2003, subsidy is to be provided by the Government only on the tariff determined by KSERC. Hon'ble Commission is yet to make a full fledged tariff revision after its inception.</p> <p>There are lots of data required to determine the cost of supply to different class of consumers. Since the Electricity Act-2003 or Tariff policy notified by the Central Government does not mandate to fix the tariff truly based on cost of supply, KSEB has yet to start data collection and arrive the cost of supply truly based on cost of supply.</p> |
| <p>Trifurcate the accounts of Generation, Transmission and Distribution and to publish the cost to serve different category of consumers at different voltage levels</p> | <p>KSEB is continuing as a single utility invoking the transitional provisions under section-172 of the Electricity Act-2003. Government vide the notification G.O (Ms).37/2008/PD dated 25th September,2009 has vested the assets and liabilities of KSEB with the Government. As part of the re-vesting the assets and liabilities of Board into a new company, KSEB has engaged a consultant to segregate the assets and liabilities of KSEB.</p> <p>As stated earlier, cost of supply is not mandatory for the time being. However, if Hon'ble Commission insists for cost of supply, KSEB shall determine the same as per the provisions of the Electricity Act-2003,</p> |

| | |
|--|---|
| | Tariff Policy and Regulations issued by the Commission under section 61(g) of the Electricity Act-2003. |
| Wide gap between the projections of KSEB in the ARR, approved figures of SERC and the revised estimates of KSEB based on actual figures achieved | As stated earlier, there was wide variation between the revenue gap proposed by KSEB and the same approved by KSERC. This is mainly due to the methodology followed by the Board in preparing the ARR based on Electricity (Supply) Annual Accounts Rules –1985 and methodology adopted by the Commission for approval of ARR |
| KSEB has not paid adequate attention to increase generation capacity. Since 2003-04 there is only about 4.4% increase in hydel generation and 4.22% in overall generation capacity. Considering the demand supply gap in electricity in this state, it is essential that the utility looks for capacity addition in the shortest possible time. By suitably encouraging IPPs with attractive tariffs, KSEB can harvest enough wind power to meet the demand of the state. | The statement is without appraising the facts. The respondent may please note that, Kerala do not have any coal reserve or fossil fuels. The only natural resources available in the State is hydel. But after the promulgation of the Forest Conservation Act-1980, KSEB was not able to start new hydel projects in the state. The respondent may please note that, about 66% of the hydel potential of the State is yet to be tapped. But due to the objections from environmentalist and other interested groups, most of the medium storage projects like Puyankutty (240MW), Manathvady (225MW), Kerala Bhavani (150MW), Pathrakadavu (60MW) etc are shelved. Last 10 years, KSEB has been struggling hard to obtain approval and to implement the Athirappilly SHP (163 MW) for which all statutory clearances were once obtained is again under review. However, KSEB has been targeting to add about 500MW of SHP and medium hydel projects during 11 th and 12 th plan period. KSEB is also entering PPA with various CGS for procuring power at competitive rates. The respondent may please note that, as a distribution utility, KSEB donot get accelerated depreciation benefits and other incentives offered by MNRE for developing wind projects. Also as stated earlier, wind power is only seasonal and energy will not be available during summer months. But KSEB has been encouraging private developers to develop wind power through IPP route. KSEB had already entered into PPA with all the developers who had started wind projects in the state. |
| KSEB has not come up with any plan to encourage growth of industries in the state, who are subsidising consumers contributing to reduce the revenue gap. | As directed by the Hon'ble Commission, KSEB had already introduced power factor incentives, rationalized TOD tariff for HT&EHT consumers. Further as proposed by KSEB, KSERC has approved ToD tariff for LT Industrial consumers with connected load above 30kW as an optional scheme from 1 st April-2010. Like other distribution utilities, KSEB also facing severe energy shortage especially during summer months. KSEB may offer further incentive, once the energy position of the state improves. |
| KSEB has not submitted any proposal for bridging the revenue gap. | As stated earlier, usually there was wide variation between the revenue gap proposed by KSEB and the same approved by KSERC. Hence KSEB communicated before the Commission that, the proposals on bridging the revenue gap will be filed once the Hon'ble Commission approves the revenue gap and also after getting the concurrence of Government on the issue. |
| The average cost of energy from all sources for 2010-11 works out to Rs 2.45/unit and the average realisation Rs 3.28/unit, Average cost of Rail way for 2009-10 Rs 3.98/unit. This average cost is exorbitantly high compared to the neighbouring states | The statement is totally wrong. As per the methodology followed by the Board, various cost components of own generation from hydel plants is not shown separately, but it is accounted as part of the A&G expenses, R&M cost, interest cost etc. The cost of generation provided in the ARR is only the fuel cost used at BDPP and KDPP. As per the ARR for the year 2010-11, the average cost of supply is Rs 5.06 per unit, but the average tariff |

| | |
|--|--|
| | of the respondent is only Rs 3.98 per unit, ie; 21.34% less than the average cost. |
| Charging MD for the same load at many substations is illogical and artificially inflated energy bill | Not connected with ARR and it can be dealt separately. |
| Section 61 (d)&(g) empowers the commission to fix the tariff in reasonable manner related to CoS .Section 62 empowers the Commission to discriminate the consumers based on LF,PF and the purpose for which supply is availed | Hon'ble Commission is yet to notify regulation on reduction of cross subsidy under section 61(g) of the Electricity Act-2003. As per the section 61(d) of the EA-2003, all the consumers has to pay reasonable cost of electricity they consume |
| Southern Railway avails power at 110KV, hence transmission loss incurred by KSEB due to traction energy are negligible | The average transmission loss at EHT supply is about 6%. |
| Southern Rail way draws power uniformly through out the 24 hrs of the day and hence contributes much for the base load during the night hours when there is no demand on the grid. This improves the load factor of KSEB system. | The respondent may please note that, KSEB has been procuring energy at rates more than Rs 8.00 per unit during night off-peak hours to provide supply to the consumers including the respondent. |
| Rail fare is fixed on all India basis and Railways have no pass through mechanism to pass on the extra burden due to high tariff being charged by KSEB | The respondent rightly point out the fact. The respondent may kindly verify the traction tariff prevailing other States. The tariff prevailing in Kerala is the one among the lowest compared to other States. |
| If simultaneous maximum demand is difficult to implement, consider fixing of single part tariff based on cost to serve | The issue may be dealt separately/ |
| Cross subsidy | As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6 th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply, which is yet to take place in Kerala. |
| Direct KSEB to accept the full amount of security deposit in cash and pay interest for all the amounts in cash or accept BG for the entire amount of Security deposit. | The issue may be dealt separately. |
| 2. Kerala HT & EHT Industrial Electricity Consumers' Association, | |
| A2.VALIDITY OF FILING (Para 3.1-3.4), The objector requests before the | As a State Electricity Board, the accounts of the Board is being audited and certified by C&AG. Even though Electricity (Supply) Act, 2003 is repealed with Electricity Act-2003, invoking the provisions of repeal |

| | |
|--|--|
| <p>Commission to consider the objectives and provisions of the Act, the NEP 2005 ,the NTP 2006,the regulations formulated by the CERC and the regulations formulated by the Commission to decide on which regulations are applicable to the Board in the State of Kerala, once and for all.</p> | <p>and savings under section 185(2)(d) of the Electricity Act-2003, KSEB is still preparing the Accounts and ARR as per the Electricity (Supply) Annual Accounting Rules – 1985. Hon’ble Commission also not specified any regulation to estimate the ARR and ERC for KSEB as a single utility doing Generation, Transmission and Distribution business.</p> <p>KSEB has been filing the ARR &ERC as per the KSERC Tariff regulation- 2003 notified under notification No. 1/3/KERC-2003/II dated 3rd January-2004.</p> <p>As a single utility doing Generation, Transmission and Distribution business, Hon’ble Commission has not insisted KSEB to adopt KSERC(Terms and Conditions of Tariff for Retail sale of Electricity) Regulations, 2006, which is specifically applicable to distribution utilities. Further, since KSEB is under transitional stage and the future organisational set up of the Board is yet to be decided, the KSERC (Terms and Conditions for Determination of Tariff for Distribution and Retail sale of electricity under MYT Framework) Regulation , 2006.</p> |
| <p>3.5 The development of the industrial sector in the State has become stunted and is in decline and one of the primary reason for that is the unreliable power supply, demand restrictions, exorbitant price of power on account of the inefficient operations of the Board etc</p> | <p>Kind attention of the respondent is invited to the power supply position prevailing in other part of the Country. KSEB is one among the very few distribution utility not introduced any power cut or load shedding during 2009-10. Further, tariff of electricity to industrial segment in the State is one of the lowest in the Country.</p> <p>The respondent may well aware of all these facts. In order to tarnish the image of KSEB as a Government utility, the respondent is raising such baseless argument during the deliberation of the ARR. The respondent may note that, Kerala is one of the very few states where no power cut is prevailing. As a State Government owned entity, even if KSEB has been procuring power at high cost it is providing cheaper supply by incurring huge losses.</p> |
| <p>para(3.6-3.23) Non compliance to MYTregulations The objector requests before the Commission not to consider the filings of the Board for 2010-11 as they are not as per provisions of the Act,NEP05, NTP 06 ‘regulations and the lawful directives of the Commission</p> <p>para(3.24) The objector requests before the Commission to initiate a suo-moto ARR ,ERC and tariff setting process based on multi year tariff principles</p> | <p>As stated earlier, KSEB is under transitional stage. The assets and liabilities of KSEB is now vested with the Government and the Government is yet to take a decision on the organizational structure of the new Company. Moreover, the said regulation is for distribution utilities and not directly applicable to KSEB as a utility engaged in generation, transmission and distribution business.</p> |
| <p>Para(3.25-3.37) Non compliance to requirement of filing tariff proposal</p> <p>The application of KSEB may be treated as incomplete and invalid and it should be rejected, direct the Board to file a complete application clearly indicating how it plans to bridge the revenue gap.</p> | <p>The respondent may note that, over the years there is wide variation in the revenue gap proposed by KSEB and the same approved by Hon’ble Commission. This is mainly due to the methodology followed by the Board in preparing the ARR based on Electricity (Supply) Annual Accounts Rules –1985 and methodology adopted by the Commission. Moreover, KSEB is a Government Utility and the policies and priorities of the Government is a deciding factor in filing tariff proposals before KSERC. Hence KSEB communicated before the Hon’ble Commission that the tariff proposal shall be filed once Hon’ble Commission approves the revenue gap and also after obtaining concurrence of the State Government on</p> |

| | |
|--|--|
| <p>The objector requests before the Commission to be serious with respect to the tariff petitions that need to be filed by the licensee initiating tariff rationalisation measures. Repeated default of the licensee shows that it is the intention of the licensee to delay cross subsidy reduction thereby aiding the Government in violating section 65 of the Act.</p> | <p>the issue. It may please be noted that, as per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply. But the Commission is yet to notify the regulation on this matter</p> |
| <p>Para(3.38-3.40)Violation of timelines for submission of Application for ARR&ERC filing</p> | <p>ARR has been submitted within the time extension granted by the Commission.</p> |
| <p>Para 4.1-4.9 Segregation of accounts for Generation, Transmission, Distribution and supply</p> | <p>KSEB is continuing as a single utility invoking the transitional provisions under section-172 of the Electricity Act-2003. Government vide the notification G.O (Ms).37/2008/PD dated 25th September,2009 the assets and liabilities of KSEB has vested with the Government. As part of the re-vesting the assets and liabilities of Board into a new company, KSEB has engaged a consultant to segregate the assets and liabilities of KSEB.</p> |
| <p>Para (4.10-4.18)Cross subsidy-The objector request before the Commission to clearly specify the cross subsidy reduction plan and targets, determine category or voltage wise cost of service and ensure cross subsidy reduction plan targets and consumer category wise cost recovery</p> | <p>As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply, which is yet to take place in Kerala.</p> |
| <p>The objector requests the Commission to determine two sets of tariff one is Commission Determined Tariff , covering the cost of supply in the absence of any subsidy. The second one is Retail Supply Tariff, to be paid by the consumers after capturing subsidies ,if any</p> | <p>The Commission may take an appropriate decision</p> |
| <p>Para (4.19-4.32)Subsidy- The Commission and the Board had conspired to attempt to write off of subsidy dues to the Board from the Government, of approximately Rs 2000 crores, resulting in the Board proposing write-offs since 2006-07resulting in an increase of ARR to the tune of Rs 400 crores every year</p> | <p>The objector may note that, the subsidy receivable form the Government is mainly on accounts of maintaining 3% RoR under section-59 of the Electricity (Supply) Act, 1948 in vogue ,prior to the enactment of Electricity Act, 2003. If KSEB with the approval of the Government had increased the tariff, the issue of providing subsidy by the Government may not arise. The objector is also benefited by not increasing the tariff in the previous years for maintaining 3% return. The net subsidy of Rs 2000/- is the amount receivable from Government of Kerala, after adjusting the duty payable by the Board to the Government.</p> |
| <p>Regulatory Asset para(4.33-4.39)The Boards request to treat the revenue gap as regulatory asset cannot be allowed in advance as it can be allowed only for cost variations due to uncontrollable factors in previous</p> | <p>The concept of regulatory asset is addressed under para 8.2.2 of the Tariff Policy notified by the Central Government vide notification dated 6th January-2006. The relevant portion is quoted below. 8.2.2. The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as exception, and subject to the following guidelines</p> |

| | |
|--|--|
| <p>years.</p> | <p>The circumstances should be clearly defined through regulations, and should only include natural causes or force majeure conditions. Under business as usual conditions, the opening balances of uncovered gap must be covered through transition financing arrangement or capital restructuring;</p> <p>Carrying cost of Regulatory Asset should be allowed to the utilities;</p> <p>Recovery of Regulatory Asset should be time-bound and within a period not exceeding three years at the most ,and preferably within control period;</p> <p>The use of the facility of Regulatory Asset should not be repetitive.</p> <p>In cases where regulatory asset is proposed to be adopted, it should be ensured that the return on equity should not become unreasonably low in any year so that the capability of the licensee to borrow is not adversely affected.</p> |
| <p>Para (4 .40 4.45)Revised filings for FY 2009-10</p> <p>Revised ARR for 2009-10 as part of the filing for 2010-11 is not maintainable. The objector requests the Commission not to consider the revised filing for 2009-10,direct the Board to approach the Commission with a true up petition when provisional accounts are available</p> <p>The objector also requests the Commission to initiate suo moto proceedings for true –up of accounts within 3 months of the closure of a financial year</p> | <p>As stated earlier, KSEB has been filing the ARR &ERC as per the KSERC Tariff regulation- 2003 notified under notification No. 1/3/KERC-2003/II dated 3rd January-2004. As per the forms attached to the regulation, KSEB has to furnish the actuals of the previous year, revised estimate of the current year and estimate of the ensuing year in the ARR filing.</p> <p>KSEB has already filed the Truing Up of accounts up to the year 2006-07. The True Up of accounts for the year 2007-08 and 2008-09 are at the final stage. In this matter, the objector may note that, till date KSEB has been filing True up of accounts based on the Auditted Accounts. As a Government Utility, the accounts of KSEB is being audited and certified by C&AG of India. There is always a time delay of about 1 ½ years to get the account audited by C&AG after the financial year. However, as directed by the Hon’ble Commission, from the year 2008-09 onwards KSEB has decided to file True Up of accounts based on provisional accounts.</p> |
| <p>Non compliance to directives</p> <p>Cost of Service</p> <p>2.Capital expenditure</p> <p>3.Voltage wise loss</p> | <p>The Cost of Service study requires lot of data and man power. Also, without segregating the accounts of KSEB into Generation, Transmission and Distribution, it is not possible to assess the actual cost at different voltage levels . As part of the re-vesting the assets and liabilities of KSEB into a new company, the segregation of the assets in under progress.</p> <p>The objector may please note that, as per the prevailing laws in the Country, it is not mandatory to fix the tariff based on actual cost of supply.</p> <p>The details of the Capital projects under execution and proposed are discussed in detail under Chapter-3 of the ARR. The financial evaluation of the projects proposed in the ARR will be furnished to the Commission shortly.</p> |

| | |
|--|---|
| | The feeder metering at different voltage levels is yet to be completed. The feeder metering is addressed as a major item under R-APDRP schemes identified for execution. Once the feeder metering is completed , then the actual energy input and output can be accurately assessed. |
| A5-ARR Proposal review for 2010-11 | |
| Capital Investment | As discussed earlier, The details of the Capital projects under execution and proposed are discussed in detail under Chapter-3 of the ARR. The financial evaluation of the projects proposed in the ARR will be furnished to the Commission shortly. The objector may please note that, as a utility engaged in Generation, Transmission and Distribution, KSEB is responsible for implementing new projects in tune with increase in consumer strength and energy demand. The responsibility of the utilities on plan and implement new capital projects is being endorsed through various judgment by Hon'ble APTEL. |
| Capital Investment 1.KSEB failed to explain how the proposed investment meet the objectives stated by KSEB 2.The benefits which can be attained by the proposed investments is not mentioned 3.The physical and financial progress of the projects were not submitted for periodical monitoring. 4.The Board has not complied with the regulations of the Commission or directions 5.The objector requests the Commission to disallow all proposed capital expenditure of the Board and disallow the proposal for fresh borrowings for capital cost & interest. | The details of the Capital investments proposed by KSEB is given in details under Chapter-III of the ARR. As agreed in the ARR, KSEB shall furnish the details by April-2010 The physical and financial progress of the projects up to Sep-09 was already furnished to the Commission vide this office letter dated KSEB/TRAC/TF-07/740 dated 10-11-2009 Further, the Performa forwarded by the Commission for providing the physical and financial progress is being collected and as soon as the details from field offices are available , the same shall be furnished to the Hon'ble Commission This is a baseless argument raised by the objector continuously. Since the year 2008-09, KSEB has been identifying the Capital Investment proposal through interactive planning process, in which the objector and their members are actively participating. At one side the objector wants uninterrupted power at low cost and on the other hand the objector wants to disallow all the expenses including the essential capital projects. |
| Energy sale forecast The objector requests the commission to approve the sales for 2010-11 at 14173 MU , a reduction of 657 MU | All the details and statement of the objector are unscientific and baseless, with the sole intention of tarnishing KSEB. |

| | |
|--|--|
| <p>from the Boards projection. As per CAGR form FY 04 to FY 09, the sales is only 14173</p> | <p>The objector may note that, the anticipated energy sale for the year 2009-10 is 13870MU. The objector anticipates an increase of 303 MU only, i.e., 2.18% for the year 2010-11 and this is totally unrealistic. Even for the year 2008-09 with an average 20% restriction, the annual increase was 3.02% over previous year.</p> |
| <p>Aggregate Technical and Commercial loss The Board has always been unable to meet the loss reduction target set by the Commission The petitioner requests to the Commission to conduct an independent study of the Board's system to determine voltage wise losses</p> | <p>The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% with in a span of 7 years The entire benefit of loss reduction was passed on to the consumers of the State including the objector.</p> |
| | <p>As a public sector entity, KSEB has not been propogating its achievements through any media or public. Considering the ground realities of size and complexities ,a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is always mismatch between the loss reduction approved by KSERC and the same achieved by the Board.</p> <p>However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09. But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far.</p> |
| <p>The T&D loss for the year 2000-01 was 17.21% and for the year 2001-02 was 30.76%.</p> | <p>The objector has been raising similar arguments since the year 2003-04, i.e. from the deliberation of the first ARR &ERC and KSEB also giving explanation since then.</p> <p>Prior to 2001-02, the bi-annual slab system has been prevailing in the State. I.e, the energy consumption of the consumers was taken once in every six months only. Since the actual details are difficult to compile from the data collected once in every six months, the energy consumption of the LT consumers is being estimated based on the connected load.</p> <p>But, since the year 2001-02, bi-monthly spot billing was introduced in the State and the actual details of the energy consumption of the each LT category is being compiled from filed offices and that provides a more or less accurate result . The objector may also note that, KSEB is one of the very few utilities in the Country where 100% of the LT consumers are metered. It is true that, meter is an electronic device, a certain percentage (about 5 to 6 percentage) of the total meters are becoming faulty every year.</p> |

| | |
|---|---|
| | The objector may also be aware that, even now in AP and TN, the Agriculture consumers remain unmetered and their energy consumption is still being estimated based on the connected load. More over proportion of such consumers are also substantially high. |
| Power Purchase and Generation Cost | |
| Para-5.38 to para-5.39 The objector requests before the Commission to disallow the power purchase cost for any power purchased above 16856 MU | While verifying the ARR & actuals of the previous years it is clear that the consumer strength and consumption are steadily growing. Unless there is adequate power sourcing and also provide fund for power procurement, the state will land up on power crisis. The arguments put up by the objector are without considering such ground realities. The Hon'ble Commission may please note that the hypothetical and unrealistic target set by the objector is about 1347 MU less than the demand anticipated by the Board. The objector may note that the generation and power purchase for the year 2009-10 itself is above 17250 MU. |
| Para 5.40 to 5.45 The Board had not complied with the direction of the Commission to estimate the inflow of the current year based on the average inflow previous 20 years . | The objector may note that the entities like CEA, RLDCs and other statutory agencies are estimating hydel generation based on the 10 year moving average inflow. However, as directed by the Commission, KSEB had furnished the hydel generation based on the 20 year average inflow. It may be noted that, hydel generation based on the 20 year average inflow is slightly less than the same based on 10 year average inflow. The details given by the objector is totally fictitious and far from realities. The details of the monthwise hydel generation is given in detail under para 7.1.2 of the ARR. As detailed in the ARR, KSEB has estimated the hydel generation based on the storage position as on date and immediate past 10 year average inflow. KSEB has been estimating the hydel availability as detailed in the ARR and furnishing the same to SRLDC, SRPC etc. So far, these agencies has not raised any objection on the procedure followed by the Board. The projection given by the objector is unscientific and hence may be summarily rejected. |
| Para 5.46 to 5.49 Considering the CGS availability of 9229 MU, the total energy requirement is 16856.4 MU and power purchase cost is 2849.8 crores | The average availability from CGS estimated by the objector is highly unrealistic and most unlikely to materialize. KSEB has estimated, considering the ground realities like the availability from CGS based on the latest CERC norms applicable. Considering the coal shortages, problems associated with lignite mining etc, there is chances for further reduction in the energy availability from CGS. |
| Borrowings & Interest cost Interest on working capital | Almost all SERCs and CERC are allowing interest on working capital on normative basis. KSEB as a power utility engaged in Generation, Transmission and Distribution, also eligible to get interest on working capital on normative basis. The objector may be obviously aware of the fact that, due to the critical financial position of the Board, KSEB has been availing overdraft from financial institutions. The average monthly overdraft availed during |

| | |
|---|---|
| | the year 2009-10 during the year was about Rs 750 crore. |
| <p>Depreciation</p> <p>Board has not provided details of consumer contribution that forms part of the GFA .Direct the Board to provide the details of consumer contribution forming part of GFA and make appropriate changes to depreciation claim in the ARR</p> <p>In the ARR 2010-10 Board has claimed the depreciation as per CERC regulations. Request is to prevent this cherry picking of regulations, to suit the whims and fancies of the Board</p> | <p>The details of the consumer contribution is given as Data Form-U.</p> <p>The objector may be aware of the fact that, all the assets including that constructed through consumer contribution is being maintained by KSEB. Also , after its useful life the same is replaced by KSEB at its own cost. So KSEB has to claim depreciation for the assets created out of consumer contribution. Also, as per the provisions in the Electricity (Supply) (Annual Accounts) Rules, 1985, KSEB has to claim depreciation on the full cost of the assets.</p> <p>Board has claimed the Depreciation as per CERC regulations based on the direction issued from the Central Government to the State Government .</p> |
| <p>Employee expenses</p> <p>The objector requests the commission to direct the Board to provide detailed break up of the grade wise salary being paid to its employees currently, and the details of the pensioners of the Board</p> <p>The objector also requests the Commission to suggest to the Government that the GoK should take over the pension liabilities of the board as of date as well as for current employees who will retire in future</p> | <p>The employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. For the distribution utilities in other states the employee costs of generation and transmission are accounted in the power purchase cost of the distribution utility. More over the topography, demography and the consumption pattern etc. of KSEB is entirely different from other utilities . Considering the uniform distribution of consumers through out the entire length and breadth of the state, the HT&LT distribution system required in Kerala is much higher than many other similar utilities and so the man power required for maintaining the network also is higher.</p> |
| <p>A&G expenses</p> <p>Electricity duty- Disallow the claim for section 3(1) duty</p> | <p>The objector must be aware of the fact that, in the cost plus regime, all taxes and duties are pass through unless there is built in provision to account such expenses. The section 3(1) duty is a cash out flow, which had resulted on account of the electricity business of KSEB. Also, this is statutory levy payable to the Government. Hence, as per the prevailing laws in the Country, practices followed by other SERCs and prudent utility practices, section 3(1) duty is a necessary cash outflow and to be essentially included in the ARR.</p> |
| <p>ARR-The re estimated ARR is only RS 5250 crores, a reduction of Rs 2254 crores from the claim of KSEB.</p> <p>Revenue gap-The re estimated revenue gap is only Rs 181 crores against Rs 2220 cr estimated by the Board</p> | <p>The estimate of ARR by the objector is arbitrary and curtailing various essential expenses required to provide quality supply to the consumers of the State. In order to limit the expenses as projected by the objector, KSEB has to restrict its operation by</p> <ul style="list-style-type: none"> stopping all new capital investments not to provide any more new service connections impose power cut to limit the power purchase within the limit. allow to deteriorate the quality of supply. <p>But KSEB as a public sector utility, not performing purely on commercial principles as done by the objector ,operating only for profit making without considering social obligations. So, KSEB cannot curtail the</p> |

| | |
|--|--|
| | expenses as proposed by the objector. Hon'ble Commission may kindly appreciate the realities and allow the genuine various expenses as estimated by KSEB. |
| 3.Sree Sakthi paper Mills | |
| Late submission of ARR&ERC | The objector may be unaware of the fact that ARR has been submitted within the time extension granted by the Commission. |
| No proposal for bridging the revenue | The respondent may note that, there is wide variation in the revenue gap proposed by KSEB and approved by Hon'ble Commission. This is mainly due to the methodology followed by the Board in preparing the ARR based on Electricity (Supply) Annual Accounts Rules –1985 and methodology adopted by the Commission. Moreover, KSEB is a Government Utility and the policies and priorities of the Government is a deciding factor in filing tariff proposals before KSERC. Hence, KSEB has confirmed before the Hon'ble Commission that the tariff proposal shall be filed once Hon'ble Commission approves the revenue gap and also on concurrence of the State Government. |
| Segregation of accounts | KSEB is still continuing as a single utility invoking the transitional provisions under section-172 of the Electricity Act-2003. Government vide the notification G.O (Ms).37/2008/PD dated 25 th September,2009 has vested the assets and liabilities of KSEB with the Government. As part of the re-vesting the assets and liabilities of Board into a new company, KSEB has engaged a consultant to segregate the assets and liabilities of KSEB. |
| Dues from the Government Rs 2000 cr | The objector may note that, the subsidy receivable from the Government is mainly on accounts of maintaining 3% RoR under section-59 of the Electricity (Supply) Act, 1948 in vogue ,prior to the enactment of Electricity Act, 2003. If KSEB with the approval of the Government had increased the tariff, the issue of providing subsidy by the Government may not arise. The objector is also benefited by not increasing the tariff in the previous years for maintaining 3% return. The net subsidy of Rs 2000/- is the amount receivable from Government of Kerala, after adjusting the duty payable by the Board to the Government. |
| Cross subsidy | As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6 th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply, which is yet to take place in Kerala. |
| T&D loss have not been reduced from 17% which was in 2000-2001 | Prior to 2001-02, the bi-annual slab system has been prevailing in the State. I.e, the energy consumption of the consumers was taken once in every six months only. Since the actual details are difficult to compile from the data collected once in every six months, the energy consumption of the LT consumers is being estimated based on the connected load. But, since the year 2001-02, bi-monthly spot billing was introduced in the State and the actual details of the energy consumption of the each LT category is being compiled from filed offices and that provides a more or less accurate result . The objector may also note that, KSEB is one of the very few utilities in the Country where 100% of the LT consumers are metered. It is true that, meter is an electronic device, a certain percentage (about 5 to 6 percentage) of the total meters are becoming faulty every year. |

| | <p>The objector may also be aware that, even now in AP and TN, the Agriculture consumers remain unmetered and their energy consumption is still being estimated based on the connected load. More over proportion of such consumers are also substantially high.</p> | | | | | | | | | | | | | | | | | | | | |
|--|--|--------|------------------------|--|-----|--------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <p>Reassess the hydro power availability and CGS power availability</p> | <p>As directed by the Commission, KSEB had furnished the hydel generation based on the 20 year average inflow. It may be noted that, hydel generation based on the 20 year average inflow is slightly less than the same based on 10 year average inflow. As detailed in the ARR, KSEB has estimated the hydel generation based on the storage position as on date and immediate past 10 year average inflow.</p> <p>KSEB has estimated the availability from CGS based on the latest CERC norms and also considering the coal shortages, problems associated with lignite mining etc; so there are chances to further reduction in the energy availability from CGS.</p> | | | | | | | | | | | | | | | | | | | | |
| <p>Employee expense which comes to 1/3 of the total revenue has to be brought down</p> | <p>It may be noted that the employee cost of KSEB is the combined employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. For the distribution utilities in other states the employee cost of generation and transmission are accounted in the power purchase cost of the distribution utility. More over the topography, demography and the consumption pattern etc. of KSEB is entirely different from other utilities. Considering the uniform distribution of consumers through out the entire length and breadth of the state, the HT&LT distribution system required in Kerala is much higher than many of other similar utilities and so the man power required for maintaining the network also is higher.</p> | | | | | | | | | | | | | | | | | | | | |
| <p>Thermal cost should be calculated on an average pricing</p> | <p>The variable cost of energy from liquid fuel station is continuously increasing. A comparison of the variable cost adopted by KSEB in the ARR and actual as on 31-03-2010 is as given below</p> <table border="1"> <thead> <tr> <th rowspan="2">Source</th> <th colspan="2">Variable Cost (Rs/KWH)</th> </tr> <tr> <th>ARR</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>RGCCPP</td> <td>7.34</td> <td>7.48</td> </tr> <tr> <td>BSES</td> <td>7.16</td> <td>7.78</td> </tr> <tr> <td>KPCL</td> <td>7.26</td> <td>7.88</td> </tr> <tr> <td>BDPP</td> <td>7.21</td> <td>7.53</td> </tr> <tr> <td>KDPP</td> <td>7.38</td> <td>7.22</td> </tr> </tbody> </table> | Source | Variable Cost (Rs/KWH) | | ARR | Actual | RGCCPP | 7.34 | 7.48 | BSES | 7.16 | 7.78 | KPCL | 7.26 | 7.88 | BDPP | 7.21 | 7.53 | KDPP | 7.38 | 7.22 |
| Source | Variable Cost (Rs/KWH) | | | | | | | | | | | | | | | | | | | | |
| | ARR | Actual | | | | | | | | | | | | | | | | | | | |
| RGCCPP | 7.34 | 7.48 | | | | | | | | | | | | | | | | | | | |
| BSES | 7.16 | 7.78 | | | | | | | | | | | | | | | | | | | |
| KPCL | 7.26 | 7.88 | | | | | | | | | | | | | | | | | | | |
| BDPP | 7.21 | 7.53 | | | | | | | | | | | | | | | | | | | |
| KDPP | 7.38 | 7.22 | | | | | | | | | | | | | | | | | | | |

| | |
|---|---|
| <p>Claiming depreciation for assets of consumers should not be allowed</p> | <p>The objector may be aware of the fact that, all the assets including that constructed through consumer contribution is being maintained by KSEB. Also , after its useful life the same is replaced by KSEB at its own cost. So KSEB has to claim depreciation for the assets created out of consumer contribution. Also, as per the provisions in the Electricity (Supply) (Annual Accounts) Rules, 1985, KSEB has to claim depreciation on the full cost of the assets.</p> |
| <p>No 4,5,6,7,8,9,12,13,14,16,24,40a</p> | |
| <p>1.VALIDITY OF FILING 1.MYT Framework Board has filed the ARR for a single year,. The objector opined that since Board has to file the ARR on MYT frame work as per Electricity rules and KSERC regulation 2006, filing of ARR for a single year is a violation of the regulation , National tariff policy and Electricity Act 2003. The objector requests before the Commission to not to consider the filing of ARR for 2010-11</p> | <p>KSEB is now under transitional stage. The assets and liabilities of KSEB is now fully vested with the Government and the Government is yet to take a decision on the organizational structure of the new entity. Moreover, the said regulation is for distribution utilities alone and not directly applicable to a utility like KSEB engaged in generation, transmission and distribution business.</p> |
| <p>3.Non segregation of accounts The objector requests before the Commission not to consider the ARR since Board has not segregate the accounts for Generation ,Transmission, Distribution and supply. Unbundling is being delayed by the Board and the Government to avoid segregation of accounts and exposure of inefficiencies in operation</p> | <p>KSEB is still continuing as a single utility invoking the transitional provisions under section-172 of the Ele Act-2003. Government vide the notification G.O (Ms).37/2008/PD dated 25th September,2009 has vested assets and liabilities of KSEB with the Government. As part of the re-vesting the assets and liabilities of into a new company, KSEB has engaged a consultant to segregate the assets and liabilities of KSEB.</p> |
| <p>4. No Proposal for bridging Revenue gap The objector states before the Commission that it is illegal that Board has not filed the proposal for bridging the revenue gap along with ARR&ERC.</p> | <p>The respondent may note that, there is wide variation in the revenue gap proposed by KSEB and approved by Hon'ble Commission. This is mainly due to the methodology followed by the Board in preparing the ARR based on Electricity (Supply) Annual Accounts Rules –1985 and methodology adopted by the Commission. Moreover, KSEB is a Government Utility and the policies and priorities of the Government is a deciding factor in filing tariff proposals before KSERC. Hence, KSEB has confirmed before the Hon'ble Commission that the tariff proposal shall be filed once Hon'ble Commission approves the revenue gap and also on concurrence of the State Government.</p> |
| <p>5 Violation of timelines for submitting ARR&ERC.</p> | <p>The objector may be unaware of the fact that ARR has been submitted within the time extension granted by the Commission.</p> |

| | |
|--|--|
| <p>1.If the Commission approves the revenue gap and the revenue gap is to be bridged by tariff increase, there will be an increase of at least Rs 1.5/- in all tariff rates which will be a burden to the consumers</p> | <p>Board hasn't filed any proposal for hiking tariff. Once the Commission has approved the revenue gap necessary steps shall be taken for bridging revenue gap in consultation with the Government</p> |
| <p>2.Cross subsidy The objector requested before the Commission not to allow KSEB,s practice to pass on cross subsidy to consumers through tariff hike and also requests to reduce cross subsidy on a regular basis</p> | <p>As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply, which is yet to take place in Kerala.</p> |
| <p>3.Collect the due arrears and subsidy from GOK The objector requests before the Commission to request the Government of Kerala to remit the arrears due from Government institutions and thus bridge the revenue gap.The Government of Kerala should pay the already declared subsidy amount of Rs 2000 crore and it is not at all allowable to pass the same on consumers through tariff.</p> | <p>The objector may note that, the subsidy receivable form the Government is mainly on accounts of maintaining 3% RoR under section-59 of the Electricity (Supply) Act, 1948 in vogue ,prior to the enactment of Electricity Act, 2003. If KSEB with the approval of the Government had increased the tariff, the issue of providing subsidy by the Government may not arise. The objector is also benefited by not increasing the tariff in the previous years for maintaining 3% return. The net subsidy of Rs 2000/- is the amount receivable from Government of Kerala, after adjusting the duty payable by the Board to the Government.</p> |
| <p>4 KSEB has a chance to get the additional expenditure during the truing up of ARR& ERC while reconciling the actual expense with the projections. The objector pointed out that it is not agreeable to burden the consumers by claiming the past liabilities based on future tariff in the name of costly thermal energy.</p> | <p>The objection is fully baseless and misleading. KSEB has not claimed any past liability based on future tariff. KSEB is only demanding the excess financial expenditure incurred for purchasing the thermal energy due to variation in fuel price over the approved level. KSERC has given strict directions to reduce AT&C losses and fixed a target .Board has taken earnest efforts to attain the targets as ordered by KSERC and KSEB was able to reduce the T&D loss from 30.78% in 2001-02 to 18.83% in 2008-09 , a reduction of 11.93% over a span of 7 years.</p> |
| <p>6.Decrease of hydel thermal ratio The objector pointed out that it cannot agree with the view of KSEB of decrease in production of hydel power and reduction in allocated share of power from CGS leads to the increase of hydel thermal ratio from 85:15in 1992 to 40:60 in 2008</p> | <p>Failure of monsoon and reduction in allocation from CGS during 2008-09 has resulted in the purchase of costly thermal power in order to meet the demand. Also consumption is increasing over the years from 1992 . But the hydel capacity is not increasing proportionately as KSEB could not implement hydel projects as targeted due to the objections from environmentalist and other interested groups .</p> |
| <p>7 Share from CGS is available. KSEB has not been utilising the existing opportunities fully to produce more hydel power. While introducing thermal surcharge for costly thermal power , it is not correct for KSEB to monopolise the natural water resources.</p> | <p>Baseless argument. KSEB has been targetting to add about 500 MW of new hydel projects during 11th and 12th five year plan.But as stated earlier due to the objections from environmentalists etc , KSEB could not add more hydel projects in the State. KSEB solicit the cooperation and support of the objector to overcome such objections and start more hydel projects in the state</p> |
| <p>8.It is not scientific to calculate the revenue gap, and thereby tariff hike, based on the much hiked rate of</p> | <p>The variable cost of energy from liquid fuel stations is continuously increasing. A comparison of the variable cost adopted by KSEB in the ARR and actual as on 31-03-2010 is as given below</p> |

| thermal power in December rather than on average rate for one year. | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|--------|------------------------|--|-----|--------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| | | <table border="1"> <thead> <tr> <th rowspan="2">Source</th> <th colspan="2">Variable Cost (Rs/KWH)</th> </tr> <tr> <th>ARR</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>RGCCPP</td> <td>7.34</td> <td>7.48</td> </tr> <tr> <td>BSES</td> <td>7.16</td> <td>7.78</td> </tr> <tr> <td>KPCL</td> <td>7.26</td> <td>7.88</td> </tr> <tr> <td>BDPP</td> <td>7.21</td> <td>7.53</td> </tr> <tr> <td>KDPP</td> <td>7.38</td> <td>7.22</td> </tr> </tbody> </table> | Source | Variable Cost (Rs/KWH) | | ARR | Actual | RGCCPP | 7.34 | 7.48 | BSES | 7.16 | 7.78 | KPCL | 7.26 | 7.88 | BDPP | 7.21 | 7.53 | KDPP | 7.38 | 7.22 | |
| Source | Variable Cost (Rs/KWH) | | | | | | | | | | | | | | | | | | | | | | |
| | ARR | Actual | | | | | | | | | | | | | | | | | | | | | |
| RGCCPP | 7.34 | 7.48 | | | | | | | | | | | | | | | | | | | | | |
| BSES | 7.16 | 7.78 | | | | | | | | | | | | | | | | | | | | | |
| KPCL | 7.26 | 7.88 | | | | | | | | | | | | | | | | | | | | | |
| BDPP | 7.21 | 7.53 | | | | | | | | | | | | | | | | | | | | | |
| KDPP | 7.38 | 7.22 | | | | | | | | | | | | | | | | | | | | | |
| <p>9 Capital Expenditure</p> <p>Board has included a capital expense of 900 crores for the year 2010-11 in the ARR which is quite unreal and for getting more depreciation</p> | <p>As on 31-12-2009 , the expenditure incurred on capital works during the year 2009-10 was about Rs 502.11 Crores . KSEB has been expecting to accomplish the target of Rs 995 crores in capital investment for the year 2010-11 also.</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>10 Employee Expenses</p> <p>KSEB has included Rs 1690.42 crore in the ARR for the year 2010-11 as Employee expense for the year 2010-11.Is it correct. It is not fair to pass on the increase in employee expense to consumers. It has to meet by reducing production cost increasing efficiency & productivity and by reducing expenditure and other sources.</p> | <p>It may be noted that the employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. For the distribution utilities in other states, the employee cost of generation and transmission are accounted in the power purchase cost of the distribution utility. More over the topography, demography and the consumption pattern etc. of KSEB is entirely different from other utilities . Considering the uniform distribution of consumers through out the entire length and breadth of the state, the HT&LT distribution system required are much higher than many other similar utilities and so the man power required for maintaining the network also will be higher.</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>11.The objector requests before the Commission that Kerala's electricity tariff structure should aim on the development of agricultural and other social liabilities. Several industries has been shut down as a result of increase in tariff. This reduction in demand reflects in the KSEB' s accounts itself. EHT consumption has decreased from 1107 MW in 2003-04 to 966 MW in 2008-09. it is inevitable to calculate the resulting revenue loss for KSEB. This also led to huge loss for State itself.</p> | <p>The objector may note that the industrial tariff of Kerala is one among lowest in the country. The declining trend of industrial growth is never due to the high cost of electricity but due to several other factors , which are beyond the control of KSEB.</p> | | | | | | | | | | | | | | | | | | | | | | |
| <p>12. The objector requests before the Commission to allow only average growth rate in the energy consumption.They pointed out that Kerala is an industrially backward state and only domestic</p> | <p>ARR&ERC is prepared based on the average growth rate in the energy consumption of all categories of consumers. The average growth rate in energy consumption is calculated on the basis of billed energy. The sale figure given in the ARR is based on the billed energy excluding the thefts. It may be noted that</p> | | | | | | | | | | | | | | | | | | | | | | |

| | |
|--|---|
| consumption and theft of energy is increasing | the vigilance team of KSEB is headed by a senior Police officer in the rank of IG of police. |
| 12.KSEB has been submitting false statements on T&D losses. In spite of spending crores of Rs on this field, even 1 percentage decrease in loss cannot be achieved.. The objector pointed out that while KSEB has been installing crores of meters , lakhs of meters are getting faulty. | <p>The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% with in a span of 7 years The entire benefit of loss reduction was passed on to the consumers of the State including the objector.</p> <p>As a public sector entity, KSEB has not been propogating its achievements through any media or public. Considering the ground realities of size and complexities ,a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is always mismatch between the loss reduction approved by KSERC and the same achieved by the Board.</p> <p>However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09.But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far.</p> |
| 13.Depreciation KSEB is claiming depreciation for the assets created by consumer contribution.It is not correct | The objector may be aware of the fact that, all the assets including that constructed through consumer contribution is being maintained by KSEB. Also , after its useful life the same is replaced by KSEB at its own cost. So KSEB has to claim depreciation for the assets created out of consumer contribution. Also, as per the provisions in the Electricity (Supply) (Annual Accounts) Rules, 1985, KSEB has to claim depreciation on the full cost of the assets. |
| 14 The objector doubted that KSEB has been making deliberate attempt to reduce CGS power. Data from SRLDC strengthen this doubt. The CGS has started its generation normally and thus increase the availability of low cost power. Hydel generation statistics does not agree with previous year generation. | <p>The objector may note that , KSEB has been availing the full schedule from CGS over the years. As directed by the Commission, KSEB had furnished the hydel generation based on the 20 year average inflow. It may be noted that, hydel generation based on the 20 year average inflow is slightly lesser than the same based on 10 year average inflow. As detailed in the ARR, KSEB has estimated the hydel generation based on the storage position as on date and immediate past 10 year average inflow.</p> <p>KSEB has estimated the availability from CGS based on the latest CERC norms applicable. Considering the coal shortages, problems associated with lignite mining etc, there is chances for further reduction in the energy availability from CGS.</p> |
| 15. Sales forecast -KSEB has projected expected energy consumption Rs18,203.16 MU which is an exaggerating figure. The annual increase in energy sales from 2003-2009 is only 6.9%. Hence the Commission should allow the energy sales based on this rate only. | The objector may note that the energy sales forecast for the year 2010-11 has been estimated based on the average growth rate in the energy consumption for the last 4 years excluding the energy consumption for the year 2008-09 and the trend observed up to September 09. Due to power restrictions imposed during 2008-09 ,the energy sales details of 2008-09 was the restricted sale figures only. So the projected figure cannot be compared with the corresponding figure of 2008-09. Hence KSEB has excluded the consumption details for the year 2008-09 for estimating the sale forecast for the year 2010-11 . Average growth rate from 2003-04 to 2007-08 is 7.9%. Based on that the projected energy sale for the year 2010-11 is estimated as 14830.1 MU. The above figure is arrived without any load shedding and power cut.Further the objector may please note that average energy consumption during the year |

| | |
|--|---|
| | 2009-10 was about 15% higher than the same during 2008-09. |
| <p>AT& C loss Reduction</p> <p>16. Board hasn't segregated technical losses and commercial losses.</p> <p>The Board has always been unable to meet the loss reduction target set by the Commission</p> | <p>KSEB has initiated action for segregating technical losses and commercial losses. One of the main objective of RAPDRP scheme being implemented by the Central Government is the assessment and segregation of technical losses and commercial losses.</p> <p>The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% with in a span of 7 years The entire benefit of loss reduction was passed on to the consumers of the State including the objector.</p> <p>As a public sector entity, KSEB has not been propogating its achievements through any media or public. Considering the ground realities of size and complexities ,a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is always mismatch between the loss reduction approved by KSERC and the same achieved by the Board.</p> <p>However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09. But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far. Without considering these facts, the objector raising serious comments on the under achievement of the T&D loss reduction. The objector may aware that the loss reduction targets are set without any scientific study, economic analysis ,and hence not practicable to achieve within a span of single year.</p> |
| <p>17. As per KSEB data the T&D loss for the year 2000-01 is 17.21% and for the year 2001-02 is 30.76%. and that of 2009-10 is 17.7%. From these data it is inferred that KSEB achieved only .14% in loss reduction.</p> | <p>Prior to 2001-02, the bi-annual slab system has been prevailing in the State. I.e, the energy consumption of the consumers was taken once in every six months only. Since the actual details are difficult to compile from the data collected once in every six months, the energy consumption of the LT consumers is being estimated based on the connected load.</p> <p>But, since the year 2001-02, bi-monthly spot billing was introduced in the State and the actual details of the energy consumption of the each LT category is being compiled from filed offices and that provides a more or less accurate result . The objector may also note that, KSEB is one of the very few utilities in the Country where 100% of the LT consumers are metered. It is true that, meter is an electronic device, a certain percentage (about 5 to 6 percentage) of the total meters are becoming faulty every year.</p> <p>The objector may also be aware that, even now in AP and TN, the Agriculture consumers remain unmetered and their energy consumption is still being estimated based on the connected load. More over proportion of such consumers are also substantially high.</p> |
| <p>18. KSEB is trying to recover Rs 85.4 crore Rs as electricity duty. The Commission made it clear that as per section 3(3) of Kerala Electricity Duty Act and 23rd</p> | <p>The objector must be aware of the fact that, in the cost plus regime, all taxes and duties are pass through unless there is built in provision to account such expenses. The section 3(1) duty is a cash out flow, which had resulted on account of the electricity business of KSEB. Also, this is statutory levy payable to the</p> |

| | |
|---|---|
| act of 1963 it cannot be passed on to consumers. | Government. Hence, as per the prevailing laws in the Country, practices followed by other SERCs and prudent utility practices, section 3(1) duty is a necessary cash outflow and to be essentially included in the ARR. |
| 10 :KB Muraleedharan, Consumer No 8139 | |
| 1.KSEB do not show any interest in generating low cost hydel energy or starting new hydel projects. On the contrary KSEB has become a trading company by purchasing and distributing high cost thermal energy. | The objection is baseless. In the ARR for the year 2010-11 KSEB proposed a hydel generation of 6953.1 MU for the year 2010-11.The objector may note that hydel generation is not sufficient to meet even 50% of the annual energy requirement and the balance is being met from various other sources such as import from CGS,IPPS KSEB's own thermal stations and the balance is purchased from traders. The objector may be aware that various hydel projects proposed by KSEB could not start due to environmental causes and various other objections.KSEB has added around 108MW of new hydel projects in the state since 2001-02. Now KSEB has been targetting to add about 500 MW of new hydel projects during 11 th and 12 th five year plan. |
| 2. As per the objectors view KSEB is now functioning as a trading Company by purchasing high cost thermal energy and distributing it to consumers. Hence there is no need to keep this much employees The employee cost projected in the ARR for this year is 58% higher than that of last year. | The objector may note that KSEB is a generator ,transmission utility & a distribution licensee in the state. KSEB is a sole generator and energy procurer , for the whole 95 lakh consumers including the bulk consumers of the state. The objector may please note that ,more than 75% of the employees is in transmission and distribution sector. Also about 45% of the total employee cost is for meeting the pension liabilities. |
| 3 KSEB has been utilising more than one third of its revenue as employee expense, which is not a sustainable situation. KSEB is not at all interested in shifting to a more progressive professional approach in all its dealings using modern management techniques. On the contrary KSEB has been trying to pass on the additional expense to consumers | <p>The objector may note that the employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. Considering the uniform distribution of consumers through out the entire length and breadth of the state, the HT&LT distribution system required are much higher than other utilities and so the man power required for maintaining the network also will be higher.</p> <p>KSEB has made a provision of 7% on the basic salary of previous years towards normal increment for the serving employees and salary for new recruited staffs. One DA release is due for the year 2009-10 and 2 installments @ 9% is anticipated in the year 2010-11. The details are given in the ARR. If the percentage of DA declared by Central Government is higher than the provision made, there would be additional liability on this account. KSEB expected an increase of 12% in basic pension along with Dearness relief.</p> <p>The increase in pension was mainly due to the inclusion of Dearness relief anticipated in 2009-10 as well as 2010-11 (18% in each year). Further, the impact of retirements during the respective years and the terminal benefits were also considered.</p> <p>The objector may note the fact that unlike other industries electricity sector is a continuous growing industry. In line with the increased volume of consumers as well as the stringent supply conditions and performance standards enforced by the Hon'ble Commission, KSEB should have adequate number of employees to accomplish them.</p> |

| | |
|--|--|
| <p>4. Subsidy promised by the Government should be recovered from the Government or the subsidised consumers and should not be included in the revenue requirement</p> | <p>The objector may note that, the subsidy receivable from the Government is mainly on accounts of maintaining 3% RoR under section-59 of the Electricity (Supply) Act, 1948 in vogue ,prior to the enactment of Electricity Act, 2003. If KSEB with the approval of the Government had increased the tariff, the issue of providing subsidy by the Government may not arise. The objector is also benefited by not increasing the tariff in the previous years for maintaining 3% return. The net subsidy of Rs 2000/- is the amount receivable from Government of Kerala, after adjusting the duty payable by the Board to the Government.</p> |
| 11 BINANI ZINC Limited | |
| <p>Legal 1. Board hasn't submitted Multiyear Tariff proposal to bridge the revenue gap along with ARR</p> | <p>KSEB is under transitional stage. The assets and liabilities of KSEB is now vested with the Government and the Government is yet to take a decision on the organizational structure of the new entity. Moreover, the said regulation is for distribution utilities and not directly applicable as a utility like KSEB engaged in generation, transmission and distribution business.</p> |
| <p>2. As per Electricity Act 2003 and National Tariff policy the cross subsidy prevailing in electricity tariff has to be brought down. There should have been at least a marginal increase for LT domestic category above BPL and paying below the 50% of average cost of supply after the promulgation of EA 03.No such increase has been effected in the State.</p> | <p>As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply, which is yet to take place in Kerala.</p> |
| <p>Analysis 1.KSEB has been projecting huge revenue gaps in the ARR & ERC and after scrutiny by the Hon'ble Commission this gap either disappears or reduces. This year also KSEB has been projecting a gap of 2219 crores.</p> | <p>As stated earlier, there was wide variation between the revenue gap proposed by KSEB and the same approved by KSERC. This is mainly due to the methodology followed by the Board in preparing the ARR based on Electricity (Supply) Annual Accounts Rules –1985 and methodology adopted by the Commission</p> |
| <p>2.Energy Forecast Energy requirement for 2010-11 has been estimated based on the actual during 2008-09 and estimated for 2009-10. Even though there was a power restriction during 2008-09, the estimate for 2010-11, an increase of 19.45 over 2008-09 level is an over estimation .Considering the slow down in construction and slow growth rate of industries in Kerala the estimate seems to be higher by 3 to 4%</p> | <p>The objector may please note that the energy sales forecast for the year 2010-11 has been estimated based on the average growth rate in the energy consumption for the last 4 years excluding the energy consumption for the year 2008-09 and the actual trend observed up to September 09. Due to power restrictions imposed during 2008-09 ,the energy sales details of 2008-09 was the restricted sale figures only. So the projected figure cannot be compared with the corresponding figure of 2008-09. Hence KSEB has excluded the consumption details for the year 2008-09 for estimating the sale forecast for the year 2010-11 . Average growth rate from 2003-04 to 2007-08 is 7.9%. Based on that the projected energy sale for the year 2010-11 is estimated as 14830.1 MU. The above figure is arrived without anticipating load shedding and power cut. Further the objector may please note that average energy consumption during the year 2009-10 was about 15% higher than the same during 2008-09.With the present trend of energy consumption , KSEB expects that the actuals may exceed the estimate given in the ARR.</p> |

| | |
|---|--|
| <p>3. Hydel Generation</p> <p>It can be seen that during all the years except 2008-09 the actual hydel generation was more than projected by 10-18% KSEB projected a hydel generation of 19.5 MU/day during Jan 2010. But actually it was only 16.3 MU/day. Considering normal monsoon and generation from new hydel stations an increase of 100 MU over the projected can be expected which would naturally reduce the purchase of costly thermal energy</p> | <p>KSEB has estimated the hydel generation based on the storage position as on 30th November-2009 and also by expecting average inflow for the ensuing year 2010-11. Based on the above, the average hydel generation possible from Dec-09 to May-10 was about 19.5MU per day.</p> <p>Generally, the energy demand in the State is maximum during February to May every year. The short term energy prices also reach maximum rate during the month of March, April and May. Considering the increase in energy demand and exorbitant price, KSEB usually conserve maximum water in the reservoirs during the period from November to January every year for the use of extreme summer months of March, April and May. The objector may note that, the average hydel generation for the month of Mar-10 was 23MU per day against the target of 19.50MU in the ARR when the average short term market rate is above Rs 7 per unit. This was possible only because of conserving more water by limiting hydel generation upto the month of January-2010.</p> <p>Kuttiadi Addl Extension is the only major hydel station expected to start commercial operation by April-2010. Since the Kuttiadi power station is being utilizing the stored water in the existing Thariode reservoir, KSEB not expecting additional energy during this summer due to the Commissioning of Kuttiadi Addl Ext. Scheme.</p> |
| <p>Power Purchase From CGS</p> <p>PLF for CGS station considered for different stations vary from 68.5% to 80%. This is unrealistically low. Yearly load factor of some stations is higher than 92%.</p> | <p>The statement is false. KSEB has estimated the availability from CGS as per the CERC norms, for coal based stations, an average PLF of 85% and NLC stations 75% and 80% where considered for estimating energy availability.</p> |
| <p>Improvement in atomic fuel availability is another factor to be considered</p> | <p>The PLF and energy availability from Nuclear Stations MAPs and KAIGA are continuously less than the PLF adopted in the ARR. However, KSEB has adopted a PLF of 68.5% for MAPS and 75% for KAIGA for estimating energy availability.</p> |
| <p>The auxiliary Consumption of 8-10% projected is on the higher side</p> | <p>The objector may note that, auxiliary consumption based on the norms fixed by CERC for CGS station has been adopted for estimating the energy availability from CGS.</p> |
| <p>The transmission loss from CGS power transmission was 3.6% during 2004-05 and 4.2% in 2007-08. How can it be increase to 4.6%</p> | <p>4.6% Transmission loss is the actual loss in the PGCIL lines in the southern grid and approved by SRLDC for regional energy accounting</p> |
| <p>Additional power availability of around 1000 MU can be expected more than that projected by the licensee considering new CGS stations also.</p> | <p>Even during the year 2009-10, the energy availability from CGS was less by about 300MU from the target approved by the Commission, and also when fuel scarcity is not likely to resolve in the forthcoming year, the projections stated by the objector is most unlikely.</p> |
| <p>Fuel cost for own stations and IPPs</p> <p>Average cost of fuels for one year will be more realistic in arriving at the power purchase cost from IPPs and generating cost from own stations</p> | <p>The variable cost of energy from liquid fuel station has been continuously increasing. A comparison of the variable cost adopted by KSEB in the ARR and actual as on 31-03-2010 is as given below</p> |

| | | ARR | Actual |
|--|--|------|--------|
| | RGCCPP | 7.34 | 7.48 |
| | BSES | 7.16 | 7.78 |
| | KPCL | 7.26 | 7.88 |
| | BDPP | 7.21 | 7.53 |
| | KDPP | 7.38 | 7.22 |
| <p>Capital Projects</p> <p>The objector points out that the capital outlay planned in the ARR for 2009-10 was reduced from 1377 crore to 948 crore in revised estimate . KSEB plans too high but achieves little. The capital outlay planned for 2010-11 is 995.15 crore which seems too unrealistic. The objector requests before the Commission to trim to realistic amount.</p> | <p>As on 31-12-2009 , the expenditure incurred on capital works was about Rs 502.11 Crores . KSEB has been expecting to accomplish the target of Rs 995 crores in capital investment for the year 2010-11 also.</p> | | |
| <p>Interest and Finance charges</p> <p>KSEB's projected interest and finance charges for the year 2010-11 is higher by around 20%.The objector requests before the commission to redetermine the charges to a more realistic amount.</p> | <p>The objector may appreciate the fact that KSEB was able to reduce the interest burden from Rs 622.16 crores in the year 2003-04 to Rs 151.31 crores to the year 2008-09. This was achieved through swapping off high cost loans as well as by repaying a substantial portion of the capital liabilities. The objector may also note the fact that , through the dedicated efforts, KSEB was able to reduce the interest burden from Rs 622.16 crores in the year 2003-04 to Rs 151.31 crores to the year 2008-09. Ther is no scope for reducing the interst liabilities further. The The objector may also note the fact that as per the prevailing norms KSEB can avail 70% of the capital cost through debts from financial institutions and can claim interest for the same.</p> | | |
| <p>Employee Cost</p> <p>KSEB's employee cost is on a higher side.The Commission has directed KSEB to outsource non essential jobs, improve productivity and to consider a new pension scheme for new employees. KSEB repeatedly washes off its hands placing all the blame on Government of Kerala.</p> <p>KSEB has projected an employee cost of Rs 1690.42 crores which is more than the previous year's projected expense by 58%. The objector requests the Commission to undertake an independent study about the reason for high employee cost and steps to arrest this upward trend.</p> | <p>The objector may note that the employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. Considering the uniform and widely scattered distribution of consumers through out the entire length and breadth of the state, the proportionate HT&LT distribution system required are much higher than that of other utilities and so the man power required for maintaining the network also will be higher.</p> <p>KSEB has made a provision of 7% on the basic salary of previous years towards normal increment for the serving employees and salary for new recruited staffs. One DA release is due for the year 2009-10 and 2 installments @ 9% is anticipated in the year 2010-11. The details are given in the ARR. Hon'ble Commission may please note that, if the percentage of DA declared by Central Government is higher than the provision made, there would be additional liability on this account. KSEB expected an increase of 12% in basic pension along with Dearness relief.</p> | | |

| | |
|---|---|
| | <p>The increase in pension was mainly due to the inclusion of Dearness relief anticipated in 2009-10 as well as 2010-11 (18% in each year). Further, the impact of retirements during the respective years and the terminal benefits were also considered.</p> <p>The objector may note the fact that unlike other industries electricity sector is a continuous growing industry. In line with the increased volume of consumers as well as the stringent supply conditions and performance standards enforced by the Hon'ble Commission, KSEB should have adequate number of employees to accomplish them.</p> |
| <p>AT& C losses</p> <p>KSEB has compared losses in Kerala with other states where unmetered consumption by farmers much higher and hence much higher losses. The statement of KSEB that 7% of total meters becoming faulty every year is not true. Instead of replacing the complete meters in an area with new ones and moves on to next area. KSEB should concentrate on replacing the faulty meters first. This would reduce commercial losses. The objector requested before the Commission to revise the loss reduction target to at least 1.5%.</p> | <p>The objector's view upon faulty meter replacement is made without understanding the matter in full.</p> <p>The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% with in a span of 7 years The entire benefit of loss reduction was passed on to the consumers of the State including the objector.</p> <p>As a public sector entity, KSEB has not been propogating its achievements through any media or public. Considering the ground realities of size and complexities ,a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is always mismatch between the loss reduction approved by KSERC and the same achieved by the Board.</p> |
| | <p>However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09. But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far. Without considering these facts, the objector raising serious comments on the under achievement of the T&D loss reduction. The objector may aware that the loss reduction targets are set without any scientific study, economic analysis ,and hence not practicable to achieve within a span of single year. Ther is considerable variation</p> |
| <p>Non compliance of Directives</p> <p>Segregate voltage wise losses</p> | <p>In view of the cost involved the feeder metering is addressed as a major item under R-APDRP schemes. Only after such an extensive system metering the actual energy input and output can be accurately assessed and computing segment wise loss.</p> |
| <p>15 KSEB Officers Association</p> | <p>The Commission may consider the suggestions</p> |
| <p>1. Transparency and reasoning</p> <p>The objector opined that the Commission lacks</p> | |

| | |
|--|---|
| transparency and reasoning in some of the previous proceedings especially the one regarding fuel price adjustment formula | |
| 2.Power Sector at cross roads | |
| 3.Ensuring commercial viability | |
| 4.Analysis of ARR | |
| 5.Increase in cost of Generation | |
| 17,33Travancore Cochin chemicals | |
| The Commission's analysis reveals that sufficient surplus will be available to meet the estimated revenue gap for the year 2009-10 once truing up exercise is carried out for the year 2006-07,2007-08 and 2008-09 | The objector may note that, the accounts of the Board is being audited and certified by CAG of India. Since 2003-04 State commission has been curtailing expenses from the accounts audited certified by CAG . As per the audited accounts ,the revenue gap for thre year 2006-07, 2007-08,2008-09 are 142.23 crores,91.28 crores and 749.17 crores respectively. |
| 1. Capital investment Board has revised the proposal of capital investment for the year 2009-10 to 947 crores and has proposed a target of Rs 995 crores for the year 2010-11. The Commission has repeatedly expressed its concern in mismanagement by the Board in project implementation. The commission shall insist the board to submit the physical and financial progress of the project for periodical monitoring. | As on 31-12-2009 , the expenditure incurred on capital works was about Rs 502.11 rores . KSEB has been expecting to accomplish the target of Rs 995 crores in capital investment for the year 2010-11 also. The comments by this objector is based on half baked information without applying mind for learning ground realities.The physical and financial progress of the projects up to Sep-09 was already furnished to the Commission . |
| Cost of supply As per provisions of Electricity Act and National tariff policy, the tariff should reflect the cost of supply for each category. The Commission may direct the board to conduct COS study for each category and to submit the methodology to be followed for conducting the COS. | The Cost of supply includes cost of power and cost of allied services. In a utility operating in a dynamic market only the fixed part of cost, which is a minor share can be predetermined. More over such a Cost of Service study requires lot of data and man power. Also, without segregating the accounts of KSEB into Generation, Transmission and Distribution, it is not possible to assess the actual cost at different voltage levels . As part of the re-vesting the assets and liabilities of KSEB into a new entity, segregation of the assets is under progress. The objector may note that, as per the prevailing laws in the Country, it is not mandatory to fix the tariff based on actual cost of supply, which is cumbersome and highly variant too. |
| 5.T&D losses In spite of substantial feeder metering, energy audit | In view of the cost involved the feeder metering is addressed as a major item under R-APDRP schemes. Only after such an extensive system metering the actual energy input and output can be accurately |

| | |
|---|--|
| <p>data has not been submitted by the Board. In the absence of data, actual and projected distribution losses cannot be substantiated. Though the Commission has directed the Board to provide separate estimate for transmission and distribution, Board has so far not complied with. The commission may direct the Board to conduct loss estimation and energy audit studies to ascertain the loss levels more accurately.</p> | <p>assessed and computing segment wise loss.</p> |
| <p>6. Employee Cost. Employee cost works out to about 21% of Overall expenditure in 2009-10 and 23% in 2010-11. there is an increase of Rs 621 crores as compared to the amount approved by Commission for year 2009-10. The employee cost per unit sale works out to be 63 Ps while in most states it is in the range of Ps 20-40. Employee cost per unit of energy for KSEB is still among the highest in the country. In spite of repeated objections Board has not taken any steps to reduce the employee cost.</p> | <p>The objector has usually comparing the employee cost KSEB with that of other states. It may be note that the employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. But the employee cost of the comparing utilities is the cost of employees engaged in direct distribution sector alone and excluding capital works. The distribution utilities in other states the employee cost of generation and transmission is accounted in the power purchase cost of the distribution utility. More over the topography, demography and the consumption pattern etc. of KSEB is entirely different from other utilities. Considering the uniform distribution of consumers through out the entire length and breadth of the state, the HT&LT distribution system required are much higher than other utilities and so the man power required for maintaining the network also will be higher.</p> |
| | <p>KSEB has made a provision of 7% on the basic salary of previous years towards normal increment for the serving employees and salary for new recruited staffs. One DA release is due for the year 2009-10 and 2 installments @ 9% is anticipated in the year 2010-11. The details are given in the ARR. Hon'ble Commission may please note that, if the percentage of DA declared by Central Government is higher than the provision made, there would be additional liability on this account. KSEB expected an increase of 12% in basic pension along with Dearness relief.</p> <p>The increase in pension was mainly due to the inclusion of Dearness relief anticipated in 2009-10 as well as 2010-11 (18% in each year). Further, the impact of retirements during the respective years and the terminal benefits were also considered.</p> <p>The objector may note the fact that unlike other industries electricity sector is a continuous growing industry. In line with the increased volume of consumers as well as the stringent supply conditions and performance standards enforced by the Hon'ble Commission, KSEB should have adequate number of employees to accomplish them.</p> |
| <p>7. Repair & Maintenance In spite of Commission's earlier directive, Board has not furnished the function wise details of R&M</p> | <p>Repair & Maintenance expense is an expense for the upkeeping and maintenance of the assets of KSEB. Since Board is continuing as a single utility, it is difficult to segregate the R&M expense separately. However KSEB shall provide a copy of budget estimate for information.</p> |

| | |
|--|---|
| <p>expenses. Without giving details for prudent check it would not be possible for the Commission or the stake holders to validate the increase in expenditure.</p> | |
| <p>8.Administration and General Expenses The major component booked under A&G expenses as the Section 3(1) duty payable by KSEB to Government. The duty under this section of sales of energy which is statutorily should be borne by licensee and shall not be passed on to the Consumer</p> | <p>The objector must be aware of the fact that, in the cost plus regime, all taxes and duties are pass through unless there is built in provision to account such expenses. The section 3(1) duty is a cash out flow, which had resulted on account of the electricity business of KSEB. Also, this is statutory levy payable to the Government. Hence, as per the prevailing laws in the Country, practices followed by other SERCs and prudent utility practices, section 3(1) duty is a necessary cash outflow and to be essentially included in the ARR</p> |
| <p>9 Regulatory assets The revenue gap for the year 2010-11 cannot be treated as regulatory Asset ,as it can be allowed only for cost variations due to controllable factors in previous years. Accounting of regulatory assets can be considered at the truing up stage while reconciling the actual performance with the projections and therefore cannot be allowed for the year 2010-11 in advance.</p> | <p>The concept of regulatory is addressed under para 8.2.2 of the Tariff Policy notified by the Central Government vide notification dated 6th January-2006. The relevant portion is quoted below. 8.2.2. The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as exception, and subject to the following guidelines</p> <ol style="list-style-type: none"> a. The circumstances should be clearly defined through regulations, and should only include natural causes or force majeure conditions. Under business as usual conditions, the opening balances of uncovered gap must be covered through transition financing arrangement or capital restructuring; b. Carrying cost of Regulatory Asset should be allowed to the utilities; c. Recovery of Regulatory Asset should be time-bound and within a period not exceeding three years at the most and preferably within control period; d. The use of the facility of Regulatory Asset should not be repetitive. e. In cases where regulatory asset is proposed to be adopted, it should be ensured that the return on equity should not become unreasonably low in any year so that the capability of the licensee to borrow is not adversely affected. |
| <p>18 Hindustan Newsprint Ltd</p> | |
| <p>Segregation of accounts for Generation, Transmission, Distribution and supply</p> | <p>KSEB is still continuing as a single utility invoking the transitional provisions under section-172 of the Ele Act-2003. Government vide the notification G.O (Ms).37/2008/PD dated 25th September,2009 has vested assets and liabilities of KSEB with the Government. As part of the re-vesting the assets and liabilities of into a new company, KSEB has engaged a consultant to segregate the assets and liabilities of KSEB..</p> |
| <p>Cross subsidy-Neither the Board nor the Commission is making any effort to reduce the cross subsidies as per the principles of Act and the National tariff policy</p> | <p>As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply, which is yet to take place in Kerala.</p> |

| | |
|---|---|
| <p>The objector requests the Commission to determine two sets of tariff one is Commission Determined Tariff ,covering the cost of supply in the absence of any subsidy. The second one is Retail Supply Tariff, to be paid by the consumers after capturing subsidies , if any.</p> | <p>The Commission may take an appropriate decision</p> |
| <p>Subsidy- The interest cost incurred on additional borrowings due to non payment of subsidy should not be allowed to pass through in tariff</p> | <p>The objector may note that, the subsidy receivable form the Government is mainly on accounts of maintaining 3% RoR under section-59 of the Electricity (Supply) Act, 1948 in vogue ,prior to the enactment of Electricity Act, 2003. If KSEB with the approval of the Government had increased the tariff, the issue of providing subsidy by the Government may not arise. The objector is also benefited by not increasing the tariff in the previous years for maintaining 3% return. The net subsidy of Rs 2000/- is the amount receivable from Government of Kerala, after adjusting the duty payable by the Board to the Government.</p> |
| <p>Regulatory Asset</p> | <p>The concept of regulatory is addressed under para 8.2.2 of the Tariff Policy notified by the Central Government vide notification dated 6th January-2006. The relevant portion is quoted below. 8.2.2. The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as exception, and subject to the following guidelines</p> <ol style="list-style-type: none"> a. The circumstances should be clearly defined through regulations, and should only include natural causes or force majeure conditions. Under business as usual conditions, the opening balances of uncovered gap must be covered through transition financing arrangement or capital restructuring; b. Carrying cost of Regulatory Asset should be allowed to the utilities; c. Recovery of Regulatory Asset should be time-bound and within a period not exceeding three years at the most and preferably within control period; d. The use of the facility of Regulatory Asset should not be repetitive. e. In cases where regulatory asset is proposed to be adopted, it should be ensured that the return on equity should not become unreasonably low in any year so that the capability of the licensee to borrow is not adversely affected. |
| <p>Revised filings for FY 2009-10</p> <p>The objector also requests the Commission to initiate</p> | <p>As stated earlier, KSEB has been filing the ARR &ERC as per the KSERC Tariff regulation- 2003 notified under notification No. 1/3/KERC-2003/II dated 3rd January-2004. As per the forms attached to the regulation, KSEB has to furnish the actuals of the previous year, revised estimate of the current year and estimate of the ensuing year in the ARR filing.</p> <p>KSEB has already filed the Truing Up of accounts up to the year 2006-07. The True Up of accounts for the year 2007-08 and 2008-09 are at the final stage. In this matter, the objector may note that, till date KSEB has been filing True up of accounts based on the Audited Accounts. As a Government Utility, the accounts</p> |

| | |
|--|--|
| suo moto proceedings for true –up of accounts within 3 months of the closure of a financial year | of KSEB is being audited and certified by C&AG of India. There is always a time delay of about 1 ½ years to get the account audited by C&AG from the end of the financial year. However, as directed by the Hon'ble Commission, from the year 2008-09 onwards KSEB has decided to file True Up of accounts based on provisional accounts. |
| Non compliance of directives | An action taken report on various directives issued by the Commission is given as Annexure to ARR&ERC for the year 2010-11. |
| Direct the Board to file scheme-wise details of the projects for 2009-10 | The schemewise physical and financial progress of the projects up to Sep-09 was already furnished to the Commission |
| Energy sale forecast The objector requests the commission to approve the sales for 2010-11 at 14173 MU , a reduction of 657 MU from the Boards projection. | The statement of the objector is unscientific and baseless, with the sole intention of tarnishing KSEB. The objector may note that, the anticipated energy sale for the year 2009-10 is 13870MU. But the objector anticipates an increase of 303 MU only, i.e., 2.18% for the year 2010-11 and this is totally unrealistic. Even for the year 2008-09 with an average 20% restriction, the annual increase was 3.02% over previous year. |
| Aggregate Technical Commercial loss The Board is unable to meet the loss reduction targets set by the Commission | The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% with in a span of 7 years The entire benefit of loss reduction was passed on to the consumers of the State including the objector. |
| | As a public sector entity, KSEB has not been propogating its achievements through any media or public. Considering the ground realities of size and complexities ,a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is always mismatch between the loss reduction approved by KSERC and the same achieved by the Board. |
| | However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09. But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far. |
| Power purchase and generation cost-The inflow data over a period of 20 years would be used to estimate the inflow for the year under consideration. But the Board has not complied with this directive of the Commission | The objector may note that the entities like CEA, RLDCs and other statutory agencies are estimating hydel generation based on the 10 year moving average inflow. However, as directed by the Commission, KSEB had furnished the hydel generation based on the 20 year average inflow. It may be noted that, hydel generation based on the 20 year average inflow is slightly less than the same based on 10 year average inflow. |
| | The details of the monthwise hydel generation is given in detail under para 7.1.2 of the ARR. As detailed in the ARR, KSEB has estimated the hydel generation based on the storage position as on date and immediate past 10 year average inflow. KSEB has been estimating the hydel availability as detailed in the ARR and furnishing the same to SRLDC, SRPC etc. So far, these agencies has not raised any objection on the procedure followed by the Board. The projection given by the objector is unscientific and hence |

| | |
|---|--|
| | may be summarily rejected. |
| Estimated Hydel generation | As directed by the Commission, KSEB had furnished the hydel generation based on the 20 year average inflow. It may be noted that, hydel generation based on the 20 year average inflow is slightly less than the same based on 10 year average inflow. As detailed in the ARR, KSEB has estimated the hydel generation based on the storage position as on date and immediate past 10 year average inflow. |
| Estimated CGS energy availability- The total cost of generation and power purchase works out to Rs 2849.8 crores against the Boards projection of Rs 4361.33 cr a reduction of Rs 1512 cr Board had assumed the losses in the PGCIL southern grid at 4.7% which is on the high side. Request is to verify the losses in the PGCIL lines with both PGCIL and SRLDC | The average availability from CGS estimated by the objector is highly unrealistic and most unlikely to materialize. KSEB has estimated, considering the ground realities like the availability from CGS based on the latest CERC norms applicable. Considering the coal shortages, problems associated with lignite mining etc, there is chances for further reduction in the energy availability from CGS. 4.6% transmission loss is the actual loss in the PGCIL lines in the southern grid and approved by SRLDC for regional energy accounting. |
| Borrowings& Interest cost | Almost all SERCs and CERC are allowing interest on working capital on normative basis. KSEB as a power utility engaged in Generation, Transmission and Distribution is also eligible to get interest on working capital on normative basis. The objector may also aware of the fact that, due to the critical financial position of the Board, KSEB has been availing overdraft from financial institutions. The average monthly overdraft availed during the year 2009-10 was about Rs 750 crore. |
| Depreciation The Board has not provided the details of consumer contribution that forms part of GFA .Direct the Board to provide the details of consumer contribution forming part of GFA and make appropriate changes to depreciation claim in the ARR | The details of the consumer contribution is given as Data Form-U. The objector may be aware of the fact that, all the assets including that constructed through consumer contribution is being maintained by KSEB. Also , after its useful life the same is replaced by KSEB at its own cost. So KSEB has to claim depreciation for the assets created out of consumer contribution. Also, as per the provisions in the Electricity (Supply) (Annual Accounts) Rules, 1985, KSEB has to claim depreciation on the full cost of the assets. |
| Employee expenses 58% increase in employee cost in 2010-11 compared to the previous year is not acceptable | The objector may note that the employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. Considering the uniform and widely scattered distribution of consumers through out the entire length and breadth of the state, the proportionate HT< distribution system required are much higher than that of other utilities and so the man power required for maintaining the network also will be higher. KSEB has made a provision of 7% on the basic salary of previous years towards normal increment for the serving employees and salary for new recruited staffs. One DA release is due for the year 2009-10 and 2 installments @ 9% is anticipated in the year 2010-11. The details are given in the ARR. Hon'ble Commission may please note that, if the percentage of DA declared by Central Government is higher than |

| | |
|--|--|
| | <p>the provision made, there would be additional liability on this account. KSEB expected an increase of 12% in basic pension along with Dearness relief.</p> <p>The increase in pension was mainly due to the inclusion of Dearness relief anticipated in 2009-10 as well as 2010-11 (18% in each year). Further, the impact of retirements during the respective years and the terminal benefits were also considered.</p> <p>The objector may note the fact that unlike other industries electricity sector is a continuous growing industry. In line with the increased volume of consumers as well as the stringent supply conditions and performance standards enforced by the Hon'ble Commission, KSEB should have adequate number of employees to accomplish them.</p> |
| <p>A&G Expenses Electricity duty-Recovery of section 3(1) duty from consumers is unacceptable</p> | <p>The objector must be aware of the fact that, in the cost plus regime, all taxes and duties are pass through unless there is built in provision to account such expenses. The section 3(1) duty is a cash out flow, which had resulted on account of the electricity business of KSEB. Also, this is statutory levy payable to the Government. Hence, as per the prevailing laws in the Country, practices followed by other SERCs and prudent utility practices, section 3(1) duty is a necessary cash outflow and to be essentially included in the ARR.</p> |
| <p>ARR-The re estimated ARR is only RS 5250 crores, a reduction of Rs 2254 crores from the claim of KSEB. Revenue gap-The re estimated revenue gap is only Rs 181 crores against Rs 2220 cr estimated by the Board</p> | <p>The estimate of ARR by the objector is arbitrary and curtailing various essential expenses required to provide quality supply to the consumers of the State. In order to limit the expenses as projected by the objector, KSEB has to restrict its operation by</p> <ul style="list-style-type: none"> stopping all new capital investments not to provide any more new service connections impose power cut to limit the power purchase within the limit. allow to deteriorate the quality of supply. <p>But KSEB as a public sector utility, not performing purely on commercial principles as done by the objector ,operating only for profit making without considering social obligations. So, KSEB cannot curtail the expenses as proposed by the objector. Hon'ble Commission may kindly appreciate the realities and allow the genuine various expenses as estimated by KSEB.</p> |
| No 19 Krishnan Vennala | |
| <p>The objector pointed out that by repairing the damaged generating plants recovering arrears detecting theft of energy giving permission to industries for captive generation, the energy deficit can be minimized and can avoid the power purchase. If no alternate ways are there then Board can approach Commission for tariff hike</p> | <p>At present one unit of Sabarigiri HEP is under break down. KSEB has been taking efforts for the collection of arrears. As on date the collection efficiency is more than 96%. The major defaulters are major HT and EHT industries, government departments and public sector undertakings. But due to social reason and court intervention Board is not in a position to disconnect the above categories.</p> |

| Objection No: 20 : Kalamasserry youth Congress Committee | |
|--|--|
| By projecting huge revenue gap of 2219 crores Board is attempting to increase the tariff . | Board hasn't filed any proposal for hiking tariff. Once the Commission has approved the revenue gap the necessary steps for bridging revenue gap shall be taken in consultation with the Government |
| The objector's allegation is that Board is selling energy to other states . Instead of generating energy for our state, Board has been purchasing energy from other states and earning commission. | The objector's allegation is quite baseless. |
| The objector requests that Board should withdraw from the tariff hike proposal since on hiking tariff ,industries will suffer heavy losses which results in the shutdown of industries.this will increase unemployment | Board hasn't proposed any tariff hike while submitting ARR. |
| 21 Chalakudy Puzha Samrakshana Samithy | |
| 1.KSEB has asked to revise the revenue gap for the current year from Rs 330 crores to Rs 1928 crores. The additional expense includes Rs 1067.67 crores towards power purchase. The additional expense for power generation/purchase for first 6 months amounts to RS 311 crores for additional power purchase to th tune of 220 MU.The additional cost for scheduled purchase /generation amounts only to 200 crores (Incidentally the Board in its petition for imposing thermal surchargehas shown the additional expense as Rs 311 crores and conveniently not showing the additional revenue of at least Rs 60 crores due to excess consumption.The Board is neither expecting excess consumption for remaining period nor expecting reduction in hydel generation.The assumption that there'll be shortage of more than 700 MU from October 2009 to march 2010 cannot be considered at this stage. Hence the additional cost for power generation foir the last 6 months of current year cannot be accepted.) | The objector may note that as per the ARR & ERC for the year 2009-10 filed by KSEB on 29-12-2008, the revenue gap for the year 2009-10 was 1099.28 crores. While approving the ARR , Hon'ble Commission has reduced the revenue gap to 330 crores by curtailing various expenses. As per the revised estimate , the revenue gap is increased to 1928.66 crores due to the following reasons. 1. increase in cost of thermal generation and power purchase due to price hike of liquid fuels. 2. incorporating provision for the increase in employee cost due to pay revision. The objector may note that the average cost of power purchase from liquid fuel station was about Rs 6.00 per unit during the period from April 09 to September 2009 which is increased to Rs 7.5 now. Moreover the objector may note that the energy demand has reached its evertime record maximum during summer months. |
| 2.The objector pointed out that the other expenses which shows an increase over the amount approved by the Commission is admitted at this | KSEB has been preparing the ARR &ERC based on the KSERC tariff regulations 2003. As per the format and data forms attached as annexure to the regulations where in KSEB has to furnish the actuals of the |

| | |
|---|--|
| <p>stage, the whole process of finalizing and issuing order on ARR&RC will be meaningless.</p> | <p>previous year , revised estimate for the current year and projection for the ensuing year</p> |
| <p>3. The hydro generation for the months of April, May and June for the current year was less than the anticipated even if adequate storage levels are there in reservoir. Irrespective of summer flow in 2009 Board can generate more electricity in April and May as there was a storage of 2366.602 MU equivalent of water in reservoirs. The objector requests before the Commission to examine this and disallow the cost for procuring additional quantity of electricity due to shortage in generation from hydel stations.</p> | <p>This is a baseless and biased argument. The objector may note that the strategy adopted by the Board is to conserve maximum water in the storage reservoirs during monsoon months for the use of summer. KSEB has arrived the average hydro availability considering the storage position as on 1st November 2009 and also anticipating the average inflow during the summer months.</p> |
| <p>5. KSEB has been always falling short of the targets set for T&D loss reduction set by KSERC . Over a period of 4 years the shortfall from target set by KSERC is 2.59% and that of KSEB's target is 1.68%. If targets had been achieved the demand should have been reduced by 400 MU which results in substantial savings.. The objector request before the Commission to direct the Board to furnish the cost of T&D loss reductions achieved so far and plans with detailed cost for further reductions.</p> | <p>The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% within a span of 7 years. The entire benefit of loss reduction was passed on to the consumers of the State including the objector.</p> <p>As a public sector entity, KSEB has not been propagating its achievements through any media or public. Considering the ground realities of size and complexities , a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is always mismatch between the loss reduction approved by KSERC and the same achieved by the Board.</p> <p>However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able to reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09. But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far.</p> |
| <p>6. The objector requests before the Commission to scrutinize the figures for average generation from proposed/ongoing projects by either Commission or any other independent agency in the light of higher energy output shown for controversial Athirappally HEP (In table 3.3 it is shown as 386 MU whereas has approved for 233 MU only)</p> | <p>The objector may note that CEA is the statutory body empowered for giving techno & economic clearance for the projects. CEA has approved the firm power for Athirappally 233 MU where as average generation expected is 386 MU.</p> |
| <p>7. The objector requests before the Commission to do an option assessment regarding the utilization of coal at Baitharani. The proposal to bring coal from Baitharani to Kerala need not be the best option</p> | <p>The objector and other interested groups are opposing all types of power development in the state. The development of Cheemeni project is being entrusted with the consortium under KSIDC. They may give due consideration for the suggestion.</p> |

| | |
|---|--|
| <p>available. The possibility of using the reserves over a long period by reducing the installed capacity shall also be looked into from a long term perspective. It may be noted that the proposed project at Cheemeni is already facing stiff public opposition.</p> | |
| <p>8.The objector pointed out that the actual availability of electricity from IPPs is more than the figures shown in the petition .The IPPs if run at full capacity can generate at least 200MU extra. The targeted availability of BDPP and KDPP is also less.</p> | <p>As directed by the Hon'ble commission KSEB has been scheduling the generation and power purchase strictly based on the merit order. The scheduling from IPPs is being done based on the monthly requirement and considering the merit order of dispatch.</p> |
| <p>9. The objector requests before the Commission to direct KSEB to prepare a draft campaign plan for energy conservation with the involvement of educational institutions ,NGOs,Media etc and seek suggestions from the public on the draft</p> | <p>The suggestion may be looked into. The objector may please note that KSEB has been taking number of initiatives such as advertisement through mass media, distribution of CFL as part of energy conservation etc</p> |
| <p>Objection No 22. The fertilizers and Chemicals Travancore limited</p> | |
| <p>1.As per 2003 Act, national Tariff policy and various Orders of Appellate Tribunal for Electricity ,Cross subsidy has to be reduced and brought to level of $\pm 20\%$ of average cost of supply by the year 2010-11. KSEB should be directed to take initiatives in this regard.</p> | <p>As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6th January- 2006, SERC is expected to notify a road map to bring the tariff range within $\pm 20\%$ of the average cost of supply, which is yet to take place in Kerala.</p> |
| <p>2.Section 65 of the Electricity Act clearly specifies that subsidies due from State are to be given to the board in advance. But the history in Kerala is very dismal.more than 2000 crore is due from the government to KSEB.</p> | <p>The objector may note that, the subsidy receivable from the Government is mainly on accounts of maintaining 3% RoR under section-59 of the Electricity (Supply) Act, 1948 in vogue ,prior to the enactment of Electricity Act, 2003. If KSEB with the approval of the Government had increased the tariff, the issue of providing subsidy by the Government may not arise. The objector is also benefited by not increasing the tariff in the previous years for maintaining 3% return. The net subsidy of Rs 2000/- is the amount receivable from Government of Kerala, after adjusting the duty payable by the Board to the Government.</p> |
| <p>3. The cumulative annual growth of power sales from 2003-04 to 2008-09 is 6.9% only. Commission should allow sales projection computed at that level only.</p> | <p>The objector may please note that the energy sales forecast for the year 2010-11 has been estimated based on the average growth rate in the energy consumption for the last 4 years excluding the energy consumption for the year 2008-09 and the actual trend observed up to September 09. Due to power restrictions imposed during 2008-09 ,the energy sales details of 2008-09 was the restricted sale figures only. So the projected figure cannot be compared with the corresponding figure of 2008-09. Hence KSEB has excluded the consumption details for the year</p> |

| | |
|--|--|
| | <p>2008-09 for estimating the sale forecast for the year 2010-11 . Average growth rate from 2003-04 to 2007-08 is 7.9%. Based on that the projected energy sale for the year 2010-11 is estimated as 14830.1 MU. The above figure is arrived without anticipating load shedding and power cut. Further the objector may please note that average energy consumption during the year 2009-10 was about 15% higher than the same during 2008-09. With the present trend of energy consumption , KSEB expects that the actuals may exceed the estimate given in the ARR.</p> |
| <p>4.As per the directives of the commission KSEB is required to compute T&D losses and commercial losses separately</p> | <p>KSEB has initiated action for segregating technical losses and commercial losses. One of the main objective of RAPDRP scheme being implemented by the Central Government is the assessment and segregation of technical losses and commercial losses.</p> |
| <p>5.The Commission should order KSEB to reduce T&D losses by at least 1% in the coming year from the level of 16.92% approved by the Commission for this year</p> | <p>The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% with in a span of 7 years The entire benefit of loss reduction was passed on to the consumers of the State including the objector.</p> <p>As a public sector entity, KSEB has not been propogating its achievements through any media or public. Considering the ground realities of size and complexities ,a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is always mismatch between the loss reduction approved by KSERC and the same achieved by the Board.</p> |
| | <p>However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09. But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far. Without considering these facts, the objector raising serious comments on the under achievement of the T&D loss reduction. The objector may aware that the loss reduction targets are set without any scientific study, economic analysis ,and hence not practicable to achieve within a span of single year.</p> |
| <p>6. There seems to be a deliberate attempt on the part of KSEB to inflate energy demand ,shows lower availability of CGS power and low hydro generation with the motive to exaggerate the energy gap.</p> <p>Similarly KSEB has projected much lower power availability from CGS stations with the idea of inflating costs</p> | <p>Objection is baseless.</p> <p>As directed by the Commission, KSEB had furnished the hydel generation based on the 20 year average inflow. It may be noted that, hydel generation based on the 20 year average inflow is slightly less than the same based on 10 year average inflow. As detailed in the ARR, KSEB has estimated the hydel generation based on the storage position as on date and immediate past 10 year average inflow.</p> <p>KSEB has estimated, considering the ground realities like the availability from CGS based on the latest CERC norms applicable. Considering the coal shortages, problems associated with lignite mining etc, there is chances for further reduction in the energy availability from CGS.</p> |

| | |
|--|--|
| <p>7 KSEB's claim on depreciation for the assets created by consumers is not correct and cannot be allowed</p> | <p>The objector may be aware of the fact that, all the assets including that constructed through consumer contribution is being maintained by KSEB. Also , after its useful life the same is replaced by KSEB at its own cost. So KSEB has to claim depreciation for the assets created out of consumer contribution. Also, as per the provisions in the Electricity (Supply) (Annual Accounts) Rules, 1985, KSEB has to claim depreciation on the full cost of the assets.</p> |
| <p>8.The objector's view is that employee expense of Board are completely out of control and cannot be allowed as pass through with no bench marking to relevant parameters . KSEB claimed Rs 1069.96 crores towards employee cost in ARR&ERC 2009-10 and Hon'ble Commission approved the same despite objections from several stake holders From that level KSEB is claiming an increase of 58% to 1690.42 Cr in 2010-11 which is by any standard not acceptable</p> <p>Revenue per employee for 2010-11 is projected as Rs 17.62 lakhs.Total employee cost claimed by KSEB(Rs 1690.42 Cr)per serving employeecomes to Rs 6.12 lakhs which is 34.7% of revenue per employee. Spending more than 1/3rd of the revenue on the employee cost is not a sustainable situation.</p> | <p>The objector may note that the employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. Considering the uniform and widely scattered distribution of consumers through out the entire length and breadth of the state, the proportionate HT&LT distribution system required are much higher than that of other utilities and so the man power required for maintaining the network also will be higher.</p> <p>KSEB has made a provision of 7% on the basic salary of previous years towards normal increment for the serving employees and salary for new recruited staffs. One DA release is due for the year 2009-10 and 2 installments @ 9% is anticipated in the year 2010-11. The details are given in the ARR. Hon'ble Commission may please note that, if the percentage of DA declared by Central Government is higher than the provision made, there would be additional liability on this account. KSEB expected an increase of 12% in basic pension along with Dearness relief.</p> <p>The increase in pension was mainly due to the inclusion of Dearness relief anticipated in 2009-10 as well as 2010-11 (18% in each year). Further, the impact of retirements during the respective years and the terminal benefits were also considered.</p> <p>The objector may note the fact that unlike other industries electricity sector is a continuous growing industry. In line with the increased volume of consumers as well as the stringent supply conditions and performance standards enforced by the Hon'ble Commission, KSEB should have adequate number of employees to accomplish them</p> |
| <p>9. The identified hydro electric potential of 1965.59 MU in the state , remains untapped. KSEB and GOK should take urgent measures to complete these projects.The past record of KSEB in completing generation projects has been dismal.</p> | <p>The objection is baseless. In the ARR KSEB proposed a hydel generation of 6953.1 MU for the year 2010-11.The objector may note that hydel generation is not even sufficient to meet even 50% of the annual energy requirement and the balance is being met from various other high cost sources such as import from CGS,IPPS KSEB's own thermal stations and the remaining is purchased from traders. The objector may be aware that various hydel projects proposed by KSEB has been delayed due to environmental causes and various other objections. KSEB has added around 108MW of new hydel projects in the state since 2001-02. The objector may be aware of the fact that due to the objections from environmentalist and other groups , KSEB could not implement hydel projects as targeted. However KSEB has targeted to add about 500 MW of new hydel projects during 11th and 12th five year plan</p> |
| <p>23,26, 29,30,31,35.</p> | |
| <p>1.VALIDITY OF FILING</p> | <p>KSEB is now under transitional stage. The assets and liabilities of KSEB is now fully vested with the</p> |

| | |
|--|---|
| <p>Board has filed the ARR for a single year,. The objector opined that since Board has to file the ARR on MYT frame work as per Electricity rules and KSERC regulation 2006, filing of ARR for a single year is a violation of the regulation , National tariff policy and Electricity Act 2003. The objector requests before the Commission to not to consider the filing of ARR for 2010-11</p> | <p>Government and the Government is yet to take a decision on the organizational structure of the new entity. Moreover, the said regulation is for distribution utilities alone and not directly applicable to a utility like KSEB engaged in generation, transmission and distribution business.</p> |
| <p>2.The objector requests before the Commission not to consider the ARR since Board has not segregate the accounts for Generation ,Transmission, Distribution and supply</p> | <p>KSEB is continuing as a single utility invoking the transitional provisions under section-172 of the Electricity Act, 2003. Government vide the notification G.O (Ms).37/2008/PD dated 25th September,2009 the asset liabilities of KSEB has vested with the Government. As part of the re-vesting the assets and liabilities of KSEB into a new company, KSEB has engaged a consultant to segregate the assets and liabilities of KSEB.</p> |
| <p>3.The objector states before the Commission that it is illegal that Board has not filed the proposal for bringing the revenue gap along with ARR&ERC.</p> | <p>The respondent may note that, there is wide variation in the revenue gap proposed by KSEB and approved by Hon'ble Commission. This is mainly due to the methodology followed by the Board in preparing the ARR based on Electricity (Supply) Annual Accounts Rules –1985 and methodology adopted by the Commission. Moreover, KSEB is a Government Utility and the policies and priorities of the Government is a deciding factor in filing tariff proposals before KSERC. Hence, KSEB has confirmed before the Hon'ble Commission that the tariff proposal shall be filed once Hon'ble Commission approves the revenue gap and also on concurrence of the State Government.</p> |
| <p>4.The normal practice is to file the ARR &ERC petition before 30th November every year, the objector complained before the Commission that KSEB has been submitting it very late with the idea of denying the public the opportunity for studying the ARR and raising objections</p> | <p>The objector may be unaware of the fact that ARR has been submitted within the time extension granted by the Commission.</p> |
| <p style="text-align: center;">Key Objections</p> | |
| <p>5 The objector requests before the commission to take initiatives for reducing cross subsidy and brought to the level of 20% of average cost of supply by 2010-11</p> | <p>As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6th January- 2006, SERC is expected to notify a road map to bring the tariff with in +_20% of the average cost of supply. But the Commission is yet to issue the regulation on reduction of cross subsidies.</p> |
| <p>6.The subsidies due from Government are to be given to the Board in advance. More than Rs 2000 crores is due from GOK to KSEB</p> | <p>The objector may note that, the subsidy receivable form the Government is mainly on accounts of maintaining 3% RoR under section-59 of the Electricity (Supply) Act, 1948 in vogue ,prior to the enactment of Electricity Act, 2003. If KSEB with the approval of the Government had increased the tariff, the issue of providing subsidy by the Government may not arise. The objector is also benefited by not increasing the tariff in the previous years for maintaining 3% return. The net subsidy of Rs 2000/- is the amount</p> |

| | |
|---|--|
| | receivable from Government of Kerala, after adjusting the duty payable by the Board to the Government. |
| 7.KSEB is unnecessarily filing revised estimate for the current year in ARR&ERC for the next year which can be filed through Truing up petition | <p>KSEB has been filing the ARR &ERC as per the KSERC Tariff regulation- 2003 notified under notification No. 1/3/KERC-2003/II dated 3rd January-2004. As per the forms attached to the regulation, KSEB has to furnish the actuals of the previous year, revised estimate of the current year and estimate of the ensuing year in the ARR filing.</p> <p>KSEB has already filed the Truing Up of accounts up to the year 2006-07. The True Up of accounts for the year 2007-08 and 2008-09 are at the final stage. In this matter, the objector may please note that, till date KSEB has been filing True up of accounts based on the Auditted Accounts. As a Government Utility, the accounts of KSEB is being audited and certified by C&AG of India. There is always a time delay of about 1 ½ years to get the account audited by C&AG from the end of the financial year. However, as directed by the Hon'ble Commission, from the year 2008-09 onwards KSEB has decided to file True Up of accounts based on provisional accounts.</p> |
| 8.Non compliance of directives | An action taken report on various directives issued by the Commission is given as Annexure to ARR&ERC for the year 2010-11. |
| 9.Capital expenditure plans should be accompanied by complete details of all projects,KSEB hasn't submitted the same | The details of the Capital investments proposed by KSEB is given in details under Chapter-III of the ARR. As agreed in the ARR, KSEB shall furnish the details by April-2010 |
| 10.KSEB should take strict measures to harness the identified untapped hydro potential of 1965.59 MU for avoiding the projected purchase from IPPs. The past record of KSEB in completing generation projects has been dismal | . In the ARR KSEB proposed a hydel generation of 6953.1 MU for the year 2010-11.The objector may note that hydel generation is not even sufficient to meet even 50% of the annual energy requirement and the balance is being met from various other high cost sources such as import from CGS,IPPS KSEB's own thermal stations and the remaining is purchased from traders. The objector may be aware that various hydel projects proposed by KSEB has been delayed due to environmental causes and various other objections. KSEB has added around 108MW of new hydel projects in the state since 2001-02. The objector may be aware of the fact that due to the objections from environmentalist and other groups , KSEB could not implement hydel projects as targeted. However KSEB has targeted to add about 500 MW of new hydel projects during 11 th and 12 th five year plan. |
| 11. The projected energy demand of 17821.18 MU and including losses 18203.16 MU are inflated figures since the corg of sales from 2003-04to 2008-09 is only 6.9% | The objector may please note that the energy sales forecast for the year 2010-11 has been estimated based on the average growth rate in the energy consumption for the last 4 years excluding the energy consumption for the year 2008-09 and the actual trend observed up to September 09. Due to power restrictions imposed during 2008-09 ,the energy sales details of 2008-09 was the restricted sale figures only. So the projected figure cannot be compared with the corresponding figure of 2008-09. Hence KSEB has excluded the consumption details for the year 2008-09 for estimating the sale forecast for the year 2010-11 . Average growth rate from 2003-04 to 2007-08 is 7.9%. Based on that the projected energy sale for the year 2010-11 is estimated as 14830.1 MU. The above figure is arrived without anticipating load shedding and power cut. Further the objector may please note that average energy consumption during the year 2009-10 was about 15% higher than the same during 2008-09.With the present trend of energy |

| | |
|--|---|
| | consumption , KSEB expects that the actuals may exceed the estimate given in the ARR. |
| 12.Board hasn't obey the Commission's direction of separating T&D losses and commercial losses. Short fall in achieving the targeted T&D loss reduction set by the Commission | <p>KSEB has initiated action for segregating technical losses and commercial losses. One of the main objective of RAPDRP scheme being implemented by the Central Government is the assessment and segregation of technical losses and commercial losses.</p> <p>The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% with in a span of 7 years The entire benefit of loss reduction was passed on to the consumers of the State including the objector.</p> |
| | <p>As a public sector entity, KSEB has not been propogating its achievements through any media or public. Considering the ground realities of size and complexities ,a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is always mismatch between the loss reduction approved by KSERC and the same achieved by the Board.</p> <p>However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09.But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far.Without considering these facts, the objector raising serious comments on the under achievement of the T&D loss reduction. The objector may aware that the loss reduction targets are set without any scientific study, economic analysis ,and hence not practicable to achieve within a span of single year.</p> |
| 13 KSEB has been claiming 17.21 T & D loss in 2000-2001 and suddenly in 2001-2002 they increased to 30.76% now KSEB is claiming that they have reduced t & d losses from the level in 2000-2001 in all these years | <p>Prior to 2001-02, the bi-annual slab system has been prevailing in the State. I.e, the energy consumption of the consumers was taken once in every six months only. Since the actual details are difficult to compile from the data collected once in every six months, the energy consumption of the LT consumers is being estimated based on the connected load.</p> <p>But, since the year 2001-02, bi-monthly spot billing was introduced in the State and the actual details of the energy consumption of the each LT category is being compiled from filed offices and that provides a more or less accurate result . The objector may also note that, KSEB is one of the very few utilities in the Country where 100% of the LT consumers are metered. It is true that, meter is an electronic device, a certain percentage (about 5 to 6 percentage) of the total meters are becoming faulty every year.</p> <p>The objector may also be aware that, even now in AP and TN, the Agriculture consumers remain unmetered and their energy consumption is still being estimated based on the connected load. More over proportion of such consumers are also substantially high.</p> |
| 14.There seems to deliberate attempt on part of KSEB to inflate energy demand show lower availability of CGS power and low hydro generation | Objection is baseless. Objection is baseless. As directed by the Commission, KSEB had furnished the hydel generation based on the 20 year average inflow. It may be noted that, hydel generation based on the 20 year average inflow is slightly less than the same based on 10 year average inflow. As detailed in |

| with motive to exaggerate revenue gap. | <p>the ARR, KSEB has estimated the hydel generation based on the storage position as on date and immediate past 10 year average inflow.</p> <p>KSEB has estimated, considering the ground realities like the availability from CGS based on the latest CERC norms applicable. Considering the coal shortages, problems associated with lignite mining etc, there is chances for further reduction in the energy availability from CGS.</p> | | | | | | | | | | | | | | | | | |
|--|--|--------|------------------------|--|-----|--------|--------|------|------|------|------|------|------|------|------|------|------|------|
| 15. The Board has projected gross hydel generation of 6953.16 MU only based on their own assumptions. Hydro generation will be much more than the figure projected by KSEB, since there has been additions of hydropower capacity over the years. The Commission should assess the hydropower availability | The basis of estimating the hydel capacity is detailed in Chapter 7 of ARR . The availability from existing projects „SHP,and the capacity to be commissioned during the year 2010-11 has duly considered while estimating the hydel availability | | | | | | | | | | | | | | | | | |
| <p>19.KSEB has taken DEC 2009 fuel prices for computing thermal power costs which is not a correct method.</p> <p>One year average price should be taken for computing thermal power cost.</p> | <p>The variable cost of energy from liquid fuel station is continuously increasing. A comparison of the variable cost adopted by KSEB in the ARR and actual as on 31-03-2010 is as given below</p> <table border="1"> <thead> <tr> <th rowspan="2">Source</th> <th colspan="2">Variable Cost (Rs/KWH)</th> </tr> <tr> <th>ARR</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>RGCCPP</td> <td>7.34</td> <td>7.48</td> </tr> <tr> <td>BSES</td> <td>7.16</td> <td>7.78</td> </tr> <tr> <td>KPCL</td> <td>7.26</td> <td>7.88</td> </tr> <tr> <td>BDPP</td> <td>7.21</td> <td>7.53</td> </tr> </tbody> </table> | Source | Variable Cost (Rs/KWH) | | ARR | Actual | RGCCPP | 7.34 | 7.48 | BSES | 7.16 | 7.78 | KPCL | 7.26 | 7.88 | BDPP | 7.21 | 7.53 |
| Source | Variable Cost (Rs/KWH) | | | | | | | | | | | | | | | | | |
| | ARR | Actual | | | | | | | | | | | | | | | | |
| RGCCPP | 7.34 | 7.48 | | | | | | | | | | | | | | | | |
| BSES | 7.16 | 7.78 | | | | | | | | | | | | | | | | |
| KPCL | 7.26 | 7.88 | | | | | | | | | | | | | | | | |
| BDPP | 7.21 | 7.53 | | | | | | | | | | | | | | | | |
| 20.KSEB is claiming depreciation for the assets created by consumer contribution it is not correct hence it should be disallowed. | The objector may be aware of the fact that, all the assets including that constructed through consumer contribution is being maintained by KSEB. Also , after its useful life the same is replaced by KSEB at its own cost. So KSEB has to claim depreciation for the assets created out of consumer contribution. Also, as per the provisions in the Electricity (Supply) (Annual Accounts) Rules, 1985, KSEB has to claim depreciation on the full cost of the assets. | | | | | | | | | | | | | | | | | |
| 21.Board is trying to pass on Rs 84.4 Crores of electric duty to consumers .But the commission has disallowed this expense in the past on the ground that Sec 3(3) of the Kerala electricity duty act 1963 states that it should not be collected from the consumers. But Board is keeping on repeating the wrong argument | The objector must be aware of the fact that, in the cost plus regime, all taxes and duties are pass through unless there is built in provision to account such expenses. The section 3(1) duty is a cash out flow, which had resulted on account of the electricity business of KSEB. Also, this is statutory levy payable to the Government. Hence, as per the prevailing laws in the Country, practices followed by other SERCs and prudent utility practices, section 3(1) duty is a necessary cash outflow and to be essentially included in the ARR. | | | | | | | | | | | | | | | | | |
| Employee expenses 22.Employee expenses of the board are completely out | The objector may note that the employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution | | | | | | | | | | | | | | | | | |

| | |
|--|--|
| <p>of control and cannot be allowed as pass through with no bench marking to relevant parameters</p> <p>23.KSEB is claiming an increase of 58% to 1690.42 Crores towards employee costs in 2010-2011 which is not acceptable.</p> <p>Spending more than 1/3 of revenue on employee costs is not a sustainable situation.</p> | <p>sector includes the cost of employees engaged in capital works also. Considering the uniform and widely scattered distribution of consumers through out the entire length and breadth of the state, the proportionate HT&LT distribution system required are much higher than that of other utilities and so the man power required for maintaining the network also will be higher.</p> <p>KSEB has made a provision of 7% on the basic salary of previous years towards normal increment for the serving employees and salary for new recruited staffs. One DA release is due for the year 2009-10 and 2 installments @ 9% is anticipated in the year 2010-11. The details are given in the ARR. Hon'ble Commission may please note that, if the percentage of DA declared by Central Government is higher than the provision made, there would be additional liability on this account. KSEB expected an increase of 12% in basic pension along with Dearness relief.</p> <p>The increase in pension was mainly due to the inclusion of Dearness relief anticipated in 2009-10 as well as 2010-11 (18% in each year). Further, the impact of retirements during the respective years and the terminal benefits were also considered.</p> <p>The objector may note the fact that unlike other industries electricity sector is a continuous growing industry. In line with the increased volume of consumers as well as the stringent supply conditions and performance standards enforced by the Hon'ble Commission, KSEB should have adequate number of employees to accomplish them.</p> |
| No 25 Aluminium Factory Workers Union | |
| <p>If the Commission approves the revenue gap of Rs 2220 Crores and the revenue gap is to be bridged by tariff increase, then it'll adversely affect the industry</p> | <p>Board hasn't filed any proposal for hiking tariff. Once the Commission has approved the revenue gap necessary steps shall be taken for bridging revenue gap in consultation with the Government</p> |
| 27,28 GTN Textiles, Joint Council of Trade Unions | |
| <p>If the Commission approves the revenue gap of Rs 2220 Crores and the revenue gap is to be bridged by tariff increase, there'll be an increase of at least Rs 1.5/- in all tariff rates which 'll result in the shutdown of industry</p> | <p>Board hasn't filed any proposal for hiking tariff. Once the Commission has approved the revenue gap necessary steps shall be taken for bridging revenue gap in consultation with the Government</p> |
| 32. General Secretaries,TCC Ltd | |
| <p>Revised filing for the current year</p> | <p>KSEB has been filing the ARR &ERC as per the KSERC Tariff regulation- 2003 notified under notification No. 1/3/KERC-2003/II dated 3rd January-2004. As per the forms attached to the regulation, KSEB has to furnish the actuals of the previous year, revised estimate of the current year and estimate of the ensuing year in the ARR filing.</p> <p>KSEB has already filed the Truing Up of accounts up to the year 2006-07. The True Up of accounts for the year 2007-08 and 2008-09 are at the final stage. In this matter, the objector may please note that, till date</p> |

| | KSEB has been filing True up of accounts based on the Auditted Accounts. As a Government Utility, the accounts of KSEB is being audited and certified by C&AG of India. There is always a time delay of about 1 ½ years to get the account audited by C&AG from the end of the financial year. However, as directed by the Hon'ble Commission, from the year 2008-09 onwards KSEB has decided to file True Up of accounts based on provisional accounts. | | | | | | | | | |
|---|---|--------|--------|------------------------|--|-----|--------|--------|------|------|
| Non compliance of directives | An action taken report on various directives issued by the Commission is given as Annexure to ARR&ERC for the year 2010-11. | | | | | | | | | |
| Capital expenditure-Complete details of all projects | The details of the Capital investments proposed by KSEB is given in details under Chapter-III of the ARR. As agreed in the ARR, KSEB shall furnish the details by April-2010 | | | | | | | | | |
| Energy sales projection-The CAGR from 2003-04 to 2008-09 is only 6.9%.The Commission should allow the sales projection at that level only | The objector may please note that the energy sales forecast for the year 2010-11 has been estimated based on the average growth rate in the energy consumption for the last 4 years excluding the energy consumption for the year 2008-09 and the actual trend observed up to September 09. Due to power restrictions imposed during 2008-09 ,the energy sales details of 2008-09 was the restricted sale figures only. So the projected figure cannot be compared with the corresponding figure of 2008-09. Hence KSEB has excluded the consumption details for the year 2008-09 for estimating the sale forecast for the year 2010-11 . Average growth rate from 2003-04 to 2007-08 is 7.9%. Based on that the projected energy sale for the year 2010-11 is estimated as 14830.1 MU. The above figure is arrived without anticipating load shedding and power cut. Further the objector may please note that average energy consumption during the year 2009-10 was about 15% higher than the same during 2008-09.With the present trend of energy consumption , KSEB expects that the actuals may exceed the estimate given in the ARR. | | | | | | | | | |
| Availability of CGS power KSEB has projected much lower power availability from CGS with the idea of inflating cost. It is expected to get more power from CGS than what is projected by KSEB. | <p>Objection is baseless. As directed by the Commission, KSEB had furnished the hydel generation based on the 20 year average inflow. It may be noted that, hydel generation based on the 20 year average inflow is slightly less than the same based on 10 year average inflow. As detailed in the ARR, KSEB has estimated the hydel generation based on the storage position as on date and immediate past 10 year average inflow.</p> <p>KSEB has estimated, considering the ground realities like the availability from CGS based on the latest CERC norms applicable. Considering the coal shortages, problems associated with lignite mining etc, there is chances for further reduction in the energy availability from CGS.mining etc, there is chances to further reduction in the energy availability from CGS.</p> | | | | | | | | | |
| Computation of fuel price KSEB has taken the December 2009 fuel price for computing thermal power cost. It is not correct and hence it should be disallowed | <p>The variable cost of energy from liquid fuel station is being continuously increasing. A comparison of the variable cost adopted by KSEB in the ARR and actual as on 31-03-2010 is as given below</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Source</th> <th colspan="2">Variable Cost (Rs/KWH)</th> </tr> <tr> <th>ARR</th> <th>Actual</th> </tr> </thead> <tbody> <tr> <td>RGCCPP</td> <td>7.34</td> <td>7.48</td> </tr> </tbody> </table> | | Source | Variable Cost (Rs/KWH) | | ARR | Actual | RGCCPP | 7.34 | 7.48 |
| Source | Variable Cost (Rs/KWH) | | | | | | | | | |
| | ARR | Actual | | | | | | | | |
| RGCCPP | 7.34 | 7.48 | | | | | | | | |

| | | | | | |
|---|--|------|------|------|--|
| | | BSES | 7.16 | 7.78 | |
| | | KPCL | 7.26 | 7.88 | |
| | | BDPP | 7.21 | 7.53 | |
| Electricity duty- Disallow the claim for section 3(1) duty | The objector must be aware of the fact that, in the cost plus regime, all taxes and duties are pass through unless there is built in provision to account such expenses. The section 3(1) duty is a cash out flow, which had resulted on account of the electricity business of KSEB. Also, this is statutory levy payable to the Government. Hence, as per the prevailing laws in the Country, practices followed by other SERCs and prudent utility practices, section 3(1) duty is a necessary cash outflow and to be essentially included in the ARR. | | | | |
| 34.INDSIL Hydro power and Manganese Ltd | | | | | |
| Tariff hike | Board has not filed any tariff revision proposal before the Commission. After approving the revenue gap by the Commission, Board shall file the proposal to bridge the revenue gap ,in consultation with the Government. | | | | |
| 36 Shri.Eloor Gopinath, consumer | | | | | |
| Request is to exempt domestic consumers from tariff hike | Hon'ble Commission may take an appropriate decision | | | | |
| 37 Apollo Tyros Ltd. | | | | | |
| Cross subsidy has to be reduced and brought to the level of nearly 20% of average cost of supply | As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6 th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply, which is yet to take place in Kerala. | | | | |
| .Non compliance of directives | An action taken report on various directives issued by the Commission is given as Annexure to ARR&ERC for the year 2010-11. | | | | |
| Energy demand- Projected energy demand of 18203MU are inflated figures | The energy demand is arrived based on the energy sales estimated as 14830.1 MU and the loss reduction target of 16.78%. The details of energy forecast is given in Chapter 4 and the details of loss reduction is given in Chapter 5 of ARR. | | | | |
| T&D losses- Reduce the T&D loss by at least 1% in the coming year from the level of 16.92 %approved by the Commission for this year | The objector may try to verify the realities in the neighboring states. KSEB is the only utility that could achieve a loss reduction of 11.93% with in a span of 7 years The entire benefit of loss reduction was passed on to the consumers of the State including the objector. As a public sector entity, KSEB has not been propogating its achievements through any media or public. Considering the ground realities of size and complexities ,a realistic target of loss reduction is a better option. But, Commission as its own has been fixing ambitious but unrealistic loss reduction targets. It is a fact that loss reduction depends not only controllable factors such as faulty meter replacement, installation of transformer etc, but also have a strong footing on the energy sales, line loadings etc. So, there is | | | | |

| | |
|---|---|
| | <p>always mismatch between the loss reduction approved by KSERC and the same achieved by the Board.</p> <p>However the objector may appreciate the fact that, KSEB has been continuously reducing the T&D loss over the years since 2003-04. KSEB was able reduce the loss from 30.76% in 2003-04 to 18.83% in the year 2008-09. But State Commission has been not appreciating or providing any incentive to the utility for the loss reduction achieved so far. Without considering these facts, the objector raising serious comments on the under achievement of the T&D loss reduction. The objector may aware that the loss reduction targets are set without any scientific study, economic analysis, and hence not practicable to achieve within a span of single year</p> |
| Estimate the hydro power availability realistically and whatever capacity KSEB is having at various generating stations should be utilized to the maximum to bring down revenue gap | The objector may please note that KSEB has been estimating the hydel availability based on the prudent utility practices prevailing in the country. Ie; based on the 10 year monthly average inflow. |
| Employee cost-An increase in 58% is very high and should not be allowed | The objector may note that the employee cost of KSEB is the total employee cost of generation sector, transmission sector, distribution sector and corporate office. Moreover, the employee cost of distribution sector includes the cost of employees engaged in capital works also. Considering the uniform and widely scattered distribution of consumers through out the entire length and breadth of the state, the proportionate HT< distribution system required are much higher than that of other utilities and so the man power required for maintaining the network also will be higher. |
| | <p>KSEB has made a provision of 7% on the basic salary of previous years towards normal increment for the serving employees and salary for new recruited staffs. One DA release is due for the year 2009-10 and 2 installments @ 9% is anticipated in the year 2010-11. The details are given in the ARR. Hon'ble Commission may please note that, if the percentage of DA declared by Central Government is higher than the provision made, there would be additional liability on this account. KSEB expected an increase of 12% in basic pension along with Dearness relief.</p> <p>The increase in pension was mainly due to the inclusion of Dearness relief anticipated in 2009-10 as well as 2010-11 (18% in each year). Further, the impact of retirements during the respective years and the terminal benefits were also considered.</p> <p>The objector may note the fact that unlike other industries electricity sector is a continuous growing industry. In line with the increased volume of consumers as well as the stringent supply conditions and performance standards enforced</p> |
| Implement CDM in hydro projects which could bring additional revenue to KSEB | KSEB has already taken steps |
| Theft and non recovery of dues to be totally eliminated | Steps has already been taken. APTS squad is headed by a Police officer in the rank of IG of police |
| 38..Shri.Sujith Panikkar,Kochi | |

| | |
|--|--|
| Proposals to improve the quality and reliability of power by monitoring and monetization of the relevant parameters | KSEB has already started to implement the various performance standards envisaged by the Hon'ble Commission. |
| 39A.R.Satheesh Carborandum Universals Ltd | |
| Non compliance to MYT frame work regulations The objector requests the Commission not to consider the filing for 2010-11,Also requested to initiate a suo moto ARR,ERC and tariff setting process based on multi year tariff principles | KSEB is now under transitional stage. The assets and liabilities of KSEB is now fully vested with the Government and the Government is yet to take a decision on the organizational structure of the new entity. Moreover, the said regulation is for distribution utilities alone and not directly applicable to a utility like KSEB engaged in generation, transmission and distribution business. |
| Non compliance to requirement of filing tariff proposal- Direct the Board to file a complete application clearly indicating how it plans to bridge the revenue gap | The respondent may note that, there is wide variation in the revenue gap proposed by KSEB and approved by Hon'ble Commission. This is mainly due to the methodology followed by the Board in preparing the ARR based on Electricity (Supply) Annual Accounts Rules –1985 and methodology adopted by the Commission. Moreover, KSEB is a Government Utility and the policies and priorities of the Government is a deciding factor in filing tariff proposals before KSERC. Hence, KSEB has confirmed before the Hon'ble Commission that the tariff proposal shall be filed once Hon'ble Commission approves the revenue gap and also on concurrence of the State Government. |
| Cost escalation-The projected expenses for 2010-11 is 41% higher than that of the previous year | The objector may note that the increase was mainly on account of the ncrease in the cost of Generation and Power Purchase cost. |
| Delay in commissioning Projects The opportunity cost and time over run cost is substantially high when considering the high energy cost of liquid fuel stations. | The objector may note that, at present KSEB was successful in commissioning many of the capital projects within the time limit prescribed. |
| Alternate sources of Energy development- Time to tap potential energy sources such as solar wind ,small hydro Co-gen,Bio mass and encourage private and captive participation | The objector is well aware of the fact that the wind, SHP are seasonal and energy from such sources are not available during the summer months. However, KSEB has been giving due thrust for developing SHP's in the State. Further, KSEB has been encouraging the private developers to start wind projects through IPP route. |
| T&D loss in the system No plan to identify voltage wise losses and segregation of Technical and commercial losses | KSEB has initiated action for segregating technical losses and commercial losses. One of the main objective of RAPDRP scheme being implemented by the Central Government is the assessment and segregation of technical losses and commercial losses. |
| T&D Loss & Domestic consumption Upper slab shows reduction and lower slab shows increase. Domestic Slab Rate Ratio & T&D loss Reduction Shifting of 1 MU from >500 slab to 0-40 slab is 4.74 MU | The argument of the objector is baseless. As per the definition, the T&D loss is the energy input minus energy output. T&D loss has no relevance on the estimate of less quantity billed energy in the upper slabs of domestic consumers. The objector may note that, KSEB has been arriving the slab wise consumption based on the actuals for the previous years. The ARR&ERC for the year 2008-09 was prepared during November-2007, based on the actuals for the year 2006-07 and actuals during 2007-08 up to September-2008. But due to the critical |

| | |
|--|--|
| consumption in lower slab without change in revenue but reduction in T&D loss. | power situations during 2008-09, restrictions on energy consumptions was introduced during 2008-09. The respondent may be aware that, the restrictions are imposed on domestic consumers also and the excess consumption over 200 units month was charged at the actual cost of additional power purchase based on marginal cost principles. Due to the restrictions imposed, there was considerable reduction in the consumption of upper slabs and also considerable increase in the domestic consumption in and around the slab with consumption 200 units per month. Since, the ARR&ERC for the 2010-11 was prepared based on the actual slab wise consumption for the year 2008-09 and there was a reduction in the monthly consumption above 200 units per month. It appears that the objector is confused with the wrong notion that the shift of consumption from one slab to another contributes to changes in T&D loss levels. The matter may be true with regard to revenue and not T&D loss levels. |
| Cross Subsidy Reduction- KSEB has not taken any steps to reduce cross subsidy | As per section 61(g) read along with section 181(2)(zc) of the Electricity Act-2003, Commission has to make necessary regulation on the issue of reduction in cross-subsidies. As per the para 8.3.(2) of the National Tariff Policy dated 6 th January- 2006, SERC is expected to notify a road map to bring the tariff range with in +_20% of the average cost of supply, which is yet to take place in Kerala. |
| Hydel analysis Excess hydel availability for 2010-11 is 404 MU resulting in reduction in ARR of RS 295 Cr | This too ambitious target. As per the present storage position and inflow expected for the month of April and May-2010, the hydel availability is likely to be less than the estimate in the ARR. |
| Administration and General Expenses Disallow the Claim of Electricity duty | The objector must be aware of the fact that, in the cost plus regime, all taxes and duties are pass through unless there is built in provision to account such expenses. The section 3(1) duty is a cash out flow, which had resulted on account of the electricity business of KSEB. Also, this is statutory levy payable to the Government. Hence, as per the prevailing laws in the Country, practices followed by other SERCs and prudent utility practices, section 3(1) duty is a necessary cash outflow and to be essentially included in the ARR. |
| Low incentive and high penalty for pf-Incentive must be 50% of that of penalty | These issue may be addressed separately |
| Request is to implement KVAh billing in place of KWh billing | |
| Domestic tariff for the lower consumption slabs are far below the average CoS | Hon'ble Commission may take an appropriate decision. |
| Introduce prompt payment incentive | The present regulations do not envisages to provide incentive to consumers for prompt payment. |

Annexure-IV (A)

**LIST OF PERSONS ATTENDED THE PUBLIC HEARING HELD AT MUNICIPAL TOWN
HALL, KALAMASSERY ON 04.03.2010**

1. Shri George Thomas, HT & EHT President
2. Shri A.R.Satheesh, AGM Carborundum
3. Shri P.Suresh, Vice President, CITU HNL
4. Shri Shaji Sebastian, Convenor, KSSIA, Eranakulam
5. Shri K.N.Raveendran, Vice President, INTUC HNL
6. Shri Mathew Thomas, President, Kalamassery Ind Estate Association
7. Shri E.K.Mathew, Vice President, HNL Employees Association
8. Shri Navaz, Vice President, Binani Zinc
9. Shri K.N.Gopinath, CITU
10. Shri Alupuram Zakir, Convenor, Standing Counsel
11. Shri John Mathew, HNL
12. Shri K.K.Geore, Secretary, HT&EHT Association
13. Shri Madhavan Nair, Carborundum
14. Smt. Usha Raveendran, HNL
15. Shri K.O.Antappan, Secretary, CUEU
16. Shri M.Suresh, Secretary, CULU
17. Shri M.Suku, CUMI
18. Shri Rajesh.J.Kuruvila, Project manager, CUMI
19. Shri R.Rajeev, Chief Engineer, TCC Ltd
20. Shri G.N.Mohan, Vice President, TCC Employees Association
21. Shri A.P.Antony, Secretary, TCC Employees Union
22. Shri V.V.George, President, INTUC Koratty
23. Shri Khadher, CUMI Edappally
24. Shri Ramdas, CUMI Edappally
25. Shri Bose.V.Jose, CUMI Koratty
26. Shri K.A.Sivadasan, President, KSEB, OA
27. Shri N.R.Rajesh Kumar, CBZ Employees Union
28. Shri V.P.George, INTUC
29. Shri Arul Chandran, Binani Zinc
30. Shri P.V.Paulose, Assistant Manger, TELK Angamaly
31. Shri P.P.Joy, CBZ, Employees Organisation
32. Shri Jinas, INTUC
33. Shri Rajan.V.M, Binani Zinc
34. Shr Mukundan, Binani Zinc
35. Shri Anilkumar.C.P, BZL
36. Shri Shaji.M.A, CBZ Union
37. Shri Shajan Joseph
38. Shri Sivaprasad.C.S, Employees Organisation
39. Shri Babu.U, CII-Guardian
40. Shri Roshikh.P.A, Appollo Tyres, Perambra
41. Shri J.Joy, Workers Union
42. Shri Prasanth Kumar, Carborundum
43. Shri Jayprakash.E.G, AMTS GTNBMS
44. Shri C.A.Anilkumar, ATWUI, CITU GTN
45. Shri Lonappan.M.V, ATEA INTUC GTN
46. Shri Divas Samuel, GTN WA
47. Shri B.P.Stephen
48. Shri Girish Kumar, SSPML, Edayar, Unit-I
49. Shri Ratheesh K Pai, SSPML, Edayar, Unit-II
50. Shri O.P.Rajan, KEL Employees Union, CITU

51. Shri R.Suresh Kumar, IRE Employees Sangh (BMS)
52. Shri Jijo Kuriakose, Consumer
53. Shri Roshan.K, Binani Zinc Ltd
54. Shri Chamimala.R, SEPR Refractories, Palakkad
55. Shri M.K.Rajendran, TCC Staff and Worker's Association, AITUC
56. Shri V.R.Murali, TCC Thozhilali Union
57. Shri M.B.Sreenivasan, TCC Thozhilali Union
58. Shri V.Ramesh Babu, Chief Engineer, KSEB
59. Shri D.Dinesh, DLE, TRAC, KSEB
60. Shri P.V.Sivaprasad, EE, TRAC, KSEB
61. Shri Eloor Gopinath, Domestic Consumer
62. Shri R.Baiju, CUMI
63. Shri Ismail, CUMI
64. Shri M.S.Satheesh, ATL Appollo Tyres Ltd, Kalamassery
65. Shri Aneesh.R, ATL, Kalamassery
66. Shri K.Krishnakumar, Senior Manager, Engineering Services
67. Shri A.Anilkumar, GTN Textiles Ltd, Alwaye
68. Shri Sebastian.V.J, Binani Zinc
69. Shri A.U.Amithab, Sud-Chemie
70. Shri Babukuttan.C.A, Binani Zinc Ltd
71. Shri V.A.Anvarjan, KEL Mamala
72. Shri M.P.Saleem, KEL Mamala
73. Shri B.P.Stephen, BZL
74. Shri P.K.Thilakan, BZL, Binanipuram
75. Shri P.S.Mahin, Sud-Chemie Employees Union
76. Shri T.B.Hameed, Industrial Employee
77. Shri P.R.Manoj, BZL, Binanipuram
78. Shri K.B.Muraleedharan,
79. Shri Anilkumar.C.P, BZL, Binanipuram
80. Shri K.Madhukumar, BZL
81. Shri K.R.Vijayan, TCC Eloor, Udyogamandal
82. Shri V.K.Remesan, TCC Employees Association
83. Shri K.B.Menon, TCC Employees Association
84. Shri Kunjan.K.K, TCC Employees Association
85. Shri P.S.Gangadharan, TCC Employees Association
86. Shri P.V.Eldhose, FIT INTUC
87. Shri M.P.M.Sati, General Secretary, STU Ernakulam
88. Shri M.Sambasivam, Alumn Factory Workers' Union, CITU
89. Shri P.S.Krishnakumar, HINDALCO
90. Shri A.S.Sanalkumar, INTUC, SSPM, Edayar
91. Shri C.K.Ashokan, CITU, SSPM, Edayar
92. Shri T.M.Abdul Rahuman, BZL, Binanipuram
93. Shri Binny.P.J, Deputy Chief Engineer, FACT
94. Shri V.R.Vipinchandran, IRE Employees Union, CITU
95. Shri K.K.Ali, HINDALCO Ltd, INTUC
96. Smt.B.Girija, E.E, Electrical Division, Aluva
97. Shri C.A.Anilkumar, GTN, CITU
98. Shri P.M.Najeeb, Kalamassery
99. Shri K.V.Prabhakaran, HINDALCO, Kalamassery
100. Shri G.Varun, HOCL, Ambalamugal
101. Shri K.K.Chandran, AITUC
102. Shri P.K.Wilson, AITUC, DCS
103. Shri Abdul Azeez.C.H, INTUC
104. Shri S.A.Mansoor, Secretary, Kerala Chamber of Commerce & Ind.
105. Shri K.M.Hemam, KVVED, Kalamassery

Annexure-IV (A)

**LIST OF PERSONS ATTENDED THE PUBLIC HEARING HELD AT COMMISSION'S
OFFICE ON 06.03.2010 AT 11.00AM**

1. Shri Salahudeen.M, TTP Ltd, TPLU (INTUC)
2. Shri Anilkumar.N, TTP Ltd, TPLU (INTUC)
3. Shri S.Vijayakumar, Divisional Elec. Engineer (Traction), Southern Railway
4. Shri R.S.Shen , Senior Section Engineer (Traction), Southern Railway
5. Shri S.Ganesan, IOB
6. Shri C.J.Antappan, DGM, Electrical, Indsil Hydro power and Manganese Ltd
7. Shri B.Pradeep, General Secretary, KSEB Officers' Association
8. Shri V.Ramesh Babu, CE, KSEB
9. Shri Dinesh.D, Dy CE, KSEB
10. Shri Sivaprasad, EE, KSEB
11. Shri P.S.Premachandran, DA, TRAC, KSEB
12. Shri Pradeepkumar, Dy Manager, MRF Ltd
13. Shri V.Vikraman, KSEB WA
14. Shri G.Rajendrakumar, KSEB WA
15. Shri Ajeesh.A.M, KSEB WA
16. Shri Rajasekharan, KSEB WA
17. Shri Sajith.M.S, Dy CE, Titanium
18. Shri Clinus, Secretary, Titanium General Labour Union
19. Shri Edward.P.B, AE, TRAC, KSEB
20. Shri B.Nina, Dy CE (Commercial), KSEB
21. Shri Seema.P.Nair, AE, TRAC, KSEB
22. Shri Mehrunisa.M, AEE, KSEB
23. Shri George Mathew, EE, KSEB, General Secretary, KSEB Engineers' Asscn.
24. Shri G.S.Ajikumar, President, KSEB Engineers' Association
25. Shri Radhakrishnan, KSEB, TRAC
26. Shri Sreekumar, EE, KSEB