

CHAPTER – 4

ANALYSIS OF ERC AND TARIFF FILING OF BESCO

4.0 Proposal of the BESCO in the ERC for FY06/ Tariff filing

The BESCO in its ERC for FY06 has requested the Commission to approve its ARR of Rs.4648.63 Crs. for FY06. The revenue at existing tariff for FY06 is Rs.4188.03 Crs. and the BESCO has proposed tariff revision to an extent of 11.04% to bridge the revenue gap of Rs. 460.60 Crs.

4.1 Compliance to Directives and Performance of the BESCO

The Commission, in its earlier Tariff Orders, has issued several directives to the BESCO and the compliance to these directives is enclosed at **Annexe-3**. The performance of BESCO in the areas of computerisation and MIS. Metering, transformer failures, accidents, collection performance, cost coverage and energy audit is discussed here under:

4.1.1 Computerisation and MIS

1. As reported by the BESCO, billing activity has been computerized in all the 98 sub-divisions of the BESCO. Out of 98 sub-divisions, the BESCO has outsourced spot billing and total revenue management in 46 sub-divisions.
2. BNC software has been used in the sub-divisions of BMAZ & BRAZ and the consumer data from these sub-divisions are uploaded to the Central Server at Bangalore. Consumer account information is put in place by the BESCO and has been made available on its website, which helps the consumers to view their billing history.

3. The Commission notes that there are many billing errors as reported by the consumers. Further, the Commission's staff have observed during their visit to a few sub-divisions that there are still some problems in the billing software. Despite having computerised the billing, the BESCOM is unable to furnish slab wise consumption details based on billing software in their ERCs, inspite of specific request by the Commission. Instead, data on sample basis is furnished. Therefore, the BESCOM should take action to complete the programme in all respects.

 4. **Any Time Payment (ATP) kiosks** have been started in 31 sub-divisions of the BMAZ as on 01.05.2005. Further the BESCOM has implemented IVRS and Mobile Messaging Service for lodging of complaints. The Commission appreciates these consumer friendly measures of the BESCOM.

 5. **The BESCOM has reported that it has implemented the following packages**
 - (i) Transformer Information Management System to monitor the movement of transformers right from their receipt in the store to their final disposal including the intermittent repairs and maintenance.
 - (ii) Cash Management System to ascertain its day-to-day cash flow.
 - (iii) Works Management System to monitor capital works and to reduce time & cost over runs.
 - (iv) Initiated steps to implement HR & Pay roll, Material management package, Financial accounting software, GIS and audit software.

 6. The Commission notes the above initiatives of the BESCOM and it would review and monitor the progress of implementation of these packages.
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4.1.2 Metering

- As per the EA 2003, no installation should be supplied with electricity without a correct meter after two years from the date of coming into force of the Act (i.e. after 09.06.2005). The BESCOM has stated that it has already undertaken universal metering programme from 2002 itself as per the policy directive of the GoK. The progress of metering in the BESCOM is as below:

Table-4.1
Progress of metering in the BESCOM

Category	No of installations existing as on 31.03.2005	Number of installations for which meters are fixed as on 31.03.2005	Percentage of progress
IP sets	489630	21746	4.44%
BJ/KJ installations	367841	227436	61.82%
Street Lights	18389	13342	72.55%

- The Commission notes that the progress of metering of IP sets is not satisfactory and directs the BESCOM to comply with the requirement of the Electricity Act to provide meters to all the installations.
- Regarding DC/MNR installations under metered category, the status in the BESCOM is as indicated below:

% of DC & MNR meters

4 th quarter of 2004:	1.64%
4 th quarter of 2005:	0.06%

4. The Commission appreciates the efforts of the BESCOM in reducing the DC/ MNR installations substantially.

4.1.3 Transformer Failure Rate

As per the information available with the Commission, the distribution transformer failure rate in FY 05 is 13.27% as against 12.98% in FY04. This indicates that the failure rate of transformers in the rural areas of the BESCOM has increased in spite of zero failure rate in BMAZ. The Commission once again directs the BESCOM to take necessary action to reduce the failure rate of transformers within 12% in its rural areas.

4.1.4 Accidents

1. Review of electrical accidents in the BESCOM indicates that total number of accidents has increased from 206 in FY04 to 299 in FY05. The Commission further notes that fatal accidents have increased from 86 in FY 04 to 119 in FY05 accounting for 38% increase.
2. The Commission has been stressing the need for reduction of electrical accidents and has clearly stated in the suo motu proceedings that the tariff is inextricably linked with the operation of the power sector in an efficient manner and efforts to improve safety standards.
3. The Commission in its review meetings has also directed the BESCOM to prepare a time bound action plan to prevent accidents and also to make adequate provision in the capital investment programme. The BESCOM has not furnished the time bound action plan so far, to the Commission.
4. The BESCOM has submitted that it has taken the following measures to prevent accidents:

- i) To identify hazardous spots which are prone to accidents and take rectification works like providing intermediate poles in case of long spans, providing spacers for loose spans, replacement of damaged poles, conductor and tree trimming etc.,
 - ii) To use Aerial Bunched Cables in highly congested and accident prone areas.
 - iii) Training of personnel on safety aspects.
 - iv) The BESCO has made a provision of Rs.100 Crs. under Extension & Improvements to cover the above aspects.
5. The Commission notes that many fatal accidents have been reported and the BESCO's apathy has been exposed. This is a matter of serious concern requiring immediate attention by the BESCO to prevent accidents. The Commission directs the BESCO that the officers in charge of the area shall be made accountable for non-compliance to the safety standards.

4.1.5 Revenue Collection Performance

The following is the summary of revenue billing and collection performance of the BESCO based on the DCB furnished to the Commission for the period from FY02 to FY05:

Table-4.2
Collection Performance

Year	Revenue Demand (Rs crs)	Collection (Rs crs)	Collection as a percentage of Current year Demand
FY02	2276.44	2089.45	91.79
FY03	2704.81	2682.76*	99.18
FY04	3163.05	3199.07**	101.14
FY05	3632.03	3455.19	95.13

*with BRP Adjustments

** Includes waiver of IP set arrears.

4.1.6 Cost Coverage:

The cost coverage in the BESCOM for the last 3-years, i.e from the year of its formation, is as indicated below:

Table-4.3
Cost Coverage

Year	Energy Input to BESCOM [MU]	Energy Sales [MU]	Average Power Purchase cost Rs/Unit	Average cost of supply Rs/Unit	Demand per Unit [Revenue demand/energy sales] Rs./Unit	Realisation/unit on Energy input [Collection/energy input] [Rs./unit]
FY03*	12379	9343	2.26	3.46	2.95	2.17
FY04	13758	10121	2.17	3.38	3.20	2.33
FY05	14670	11309	2.28	3.36	3.25	2.36

*As per ERC filing

From the above table, it may be seen that while the revenue realised covers the power purchase cost in FY04 and FY05, there is a gap between the average cost of supply and revenue demand in all the years.

4.1.7 Energy Audit

1. Commission is monitoring the losses in the 15 towns/cities on a monthly basis. BESCOM has not furnished reports of Sira town. The losses in the 14 towns /cities is indicated as under.

Table-4.4
Loss in 14 towns/cities of BESCOM

	Input to Town in MU	Metered Sales in MU	Metered Sales in %age	Un-metered sales in MU	Unmetered sales in %age	Total Sales in FY 05 In MU	Loss in FY 05 %
BANGALORE	5717.27	4801.37	83.98	213.02	3.73	5014.40	12.29
TUMKUR	131.22	109.22	83.23	13.33	10.16	122.55	6.61
KOLAR	55.48	28.63	51.60	14.17	25.54	42.80	22.86
TIPTUR	23.74	13.66	57.54	3.54	14.93	17.20	27.52

	Input to Town in MU	Metered Sales in MU	Metered Sales in %age	Un-metered sales in MU	Unmetered sales in %age	Total Sales in FY 05 In MU	Loss in FY 05 %
K.G.F.	46.51	25.85	55.58	9.03	19.43	34.88	24.99
D.BALLAPUR	32.94	24.87	75.50	5.40	16.41	30.27	8.09
HOSKOTE	20.54	9.75	47.44	7.66	37.29	17.41	15.26
RAMANAGAR	30.04	17.46	58.13	6.93	23.07	24.39	18.80
CHANNAPATNA	18.68	10.20	54.60	3.46	18.50	13.66	26.90
CHINTAMANI	23.21	15.28	65.83	4.73	20.38	20.01	13.79
C.BALLAPUR	17.52	12.69	72.44	2.44	13.93	15.13	13.63
DAVANGERE	131.41	104.58	79.58	8.68	6.60	113.25	13.82
HARIHARA	26.21	20.04	76.43	1.73	6.59	21.76	16.98
CHITRADURGA	54.02	42.72	79.08	3.18	5.89	45.90	15.03
TOTAL	6328.78	5236.31	82.74	297.31	4.69	5533.62	12.56

- The Commission notes that in BESCOM out of the 14 towns, the losses are more than 15% in 7 towns/cities. In spite of directive from the Commission, BESCOM has not achieved the 15% loss level target in 7 towns/cities. Necessary action shall be initiated by BESCOM to reduce loss level to 15% in these towns/cities and ensure that the losses in the remaining towns/cities are reduced/at least maintained at FY 05 level.

4.2 Objections

A summary of the objections received and the responses from BESCOM are discussed separately in **Annexe-2**.

4.3 The Commission's Analysis of ERC/Tariff Filing

4.3.1 Financial Year 2004 in Retrospect

- The Commission had approved the ERC of the BESCOM for FY04 in the Tariff Order dated 10.03.2003. Subsequently the KPTCL/ESCOMs

applied for amendment of tariff arising out of additional power purchase cost due to change in Hydro-Thermal mix. The Commission issued the Tariff Amendment Order on 15.12.2003 approving the BST from 193.57 paise per unit to 209.35 paise per unit for supply of electricity to the ESCOMs /Hukkeri Society. The revised BST came into effect from 01.01.2004. Consequent to this change in the BST, the Commission in the said Order also revised the retail tariff for LT2b- Pvt. Professional & other Pvt. Educational Institutions, LT3- Commercial, LT5- Industries, HT2a- Industries and HT2b- Commercial categories.

2. The BESCOM has furnished the audited annual accounts for FY04 and as such the Commission would consider the same for the purpose of finding out the actual revenue gap for FY04. The differences between the approved ERC figures and the actuals are as indicated below:

a) Sales forecast

- i) The BESCOM had estimated sales of 9750 MU against which the Commission had approved sales of 10085 MU, which included additional metered sales of 243 MU due to efficiency improvements. The actual sales as per the Audited Accounts is 10121 MU. The category wise sales approved and the actuals as per the audited accounts are indicated below:

Table-4.5

Approved Energy sales and the actual sales for FY04

(Million Units)

Category	Approved as per ERC (1)	Actuals as per the audited accounts (2)	Difference (2) – (1)
Bhagya Jyothi	120	100	-20
Domestic Lighting	2213	2142	-71

Category	Approved as per ERC (1)	Actuals as per the audited accounts (2)	Difference (2) – (1)
Commercial	472	479	07
IP Sets unmetered (up to 10 HP) LT-4 a, b & d	3402	3495	93
IP sets –LT-4c	4	01	-3
LT Industries	850	853	03
Water Supply	184	207	23
Street Lights	209	213	04
Temporary	29	41	12
LT –Total	7483	7532	49
HT- Water supply	351	399	48
HT- Industries	1508	1565	57
HT- Commercial	443	561	118
HT-Irrigation	02	02	0
HT- Residential	55	62	7
HT-Total	2359	2589	230
Additional metered sales due to efficiency improvement	243		
Metered Sales including additional sales	6354	6313	-41
Unmetered Sales	3731	3808	77
Grand Total [Metered + Unmetered]	10085	10121	36

- ii) It is noted that there is an overall increase in sales by 36 MU as against the approved sales. There is a decrease of 41 MU in the metered sales and increase of 77 MU in the unmetered sales in comparison to the approved figures. The decrease in metered sales indicates that the efficiency improvements proposed by the Commission have not been fully achieved. There is a reduction in sales to domestic category

and increase in sales to IP sets, HT water supply, HT industries and HT commercial.

b) Distribution loss & Energy Input for FY04

- i) The Commission had approved 12823 MU as input energy to the BESCOM for FY04. As against this the actuals as per the BESCOM's annual report is 13758 MU [including wheeling of 147 MU]. The Commission notes that there is a difference of 935 MU between the accounts and the approved figures.
- ii) Regarding distribution loss for FY04, the Commission had approved 21.35% as against the proposed loss of 23.65% by the BESCOM in Tariff Order 2003. The actuals as per accounts is 26.44%. This indicates that the loss has actually increased by 5.09% above the approved level instead of reducing.
- iii) One of the factors that affects the distribution loss is the estimated IP set consumption. In the Tariff Order 2003, the Commission estimated the IP set consumption for FY04 as follows vis-à-vis the figures projected by the BESCOM:

Table –4.6

IP Set consumption for FY04

No. of IP sets(Mid year) as per monthly reports	Projection by the BESCOM		Estimation by the Commission	
	Specific consumption (kwh)	Total consumption in MU	Specific consumption (kwh)	Total consumption in MU
4,82,200	6863	3310	7055	3402

- iv) The above-assessed IP set consumption for FY 04 had been worked out considering the quantum of restricted power supply during FY03.

- v) The actual IP set consumption for FY 04 as per the annual accounts is 3495 MU and the year-end number of installations is 4,84,405. The specific consumption would be 7247 units/IP set considering the FY 04 mid-year figure of 4,82,259. Thus, the actual specific consumption has increased by 192-units/IP set and the total IP set consumption by 93 MU. Based on the figures furnished in the monthly reports submitted to the Commission, the specific consumption works out to 7320 Units/IP/Year for FY04.
- vi) The cumulative effect of the above has resulted in increase in actual distribution loss level as per accounts by 5.09% as against the approved figure. Even though the total sales have remained almost at the approved level, the actual input has increased by 7.29% over the approved input energy to the BESCOM for FY04. This indicates that additional power purchase is largely meeting the losses incurred in the BESCOM despite capital investment for system improvement to the tune of Rs.74.75 Crs. during FY04.
- vii) In the ERC filing the BESCOM has stated that the assessment of IP set consumption was reviewed by them recently and that many anomalies were observed in the readings such as not recording meters, burnt CTs, slow recording meters and application of wrong CT constants etc. The BESCOM has also stated that during May 04 all the pilot meters were calibrated and the defects were set right and IP set consumption was recomputed giving an overall error of 1.0687. The BESCOM has furnished IP set consumption figures for FY 04 with correction factor as 3779 MU against their own audited annual accounts figure of 3495 MU.
- viii) In this regard, the Commission observes that the BESCOM has not exercised proper diligence in the matter of assessment of IP set consumption, which has a direct bearing on the assessment of distribution loss. The BESCOM should have taken proper steps to

calibrate the meters of sample DTCs periodically, which are only 651 in numbers. The Commission therefore cannot accept the implication of correction.

c) Review of Capital Investment Program

- i) In the Tariff Order 2003, the Commission had approved the Capital Investment programme of the BESCOM amounting to Rs. 381.61 Crs. for FY04, subject to detailed scheme-wise review and also subject to obtaining approval of the Commission for all the schemes costing more than Rs.1 crore. The BESCOM submitted scheme reports in respect of the APDRP works covering Bangalore South and North Circles, Davanagere City and Robertsonpet Town amounting to Rs. 372.20 Crs. vide their letter dated 12.06.2003. Approval to the Scheme was communicated to these APDRP schemes amounting to Rs.372.20 Crs. subject to the condition that after completion of the APDRP scheme, the BESCOM shall get certified through an independent assessing agency, that the benefits that it has claimed in the DPRs have actually been accrued and if not, the Commission will be constrained to disallow the expenditure, in respect of such works as may be considered appropriate by the Commission. The BESCOM has so far not furnished details of benefits accrued by completing various capital works especially those pertaining to APDRP works.
- ii) It is noted that the actual expenditure incurred towards capital investments during FY04 is Rs.74.75 Crs. as per the annual accounts as against an outlay of Rs.381.61 Crs. approved by the Commission. The BESCOM has not furnished any reasons for this shortfall.

d) Annual Revenue requirement

The Commission had approved a net annual revenue requirement of Rs. 3173.75 Crs. for FY04 as against the BESCOM's proposal of Rs.

3467.54 Crs. The Commission notes that the actual expenditure for FY04 is Rs. 3418.21 Crs. The comparison between actuals as per the audited accounts and as approved by the Commission is indicated below:

Table-4.7**ARR approved by the Commission and ARR as per actuals for FY04**

Rs. Crs.

Particulars	Expenses approved by the KERC	Actuals as per audited accounts	Difference
Expenditure			
Power Purchase	2721.55	2980.64	259.09
Repairs & Maintenance	41.49	31.27	-10.22
Employee Costs	234.53	248.75	14.22
A & G expenses	22.10	26.96	4.86
Depreciation	93.79	94.35	0.56
Interest & Finance Charges	56.65	34.10	-22.55
LESS:			
Expenses Capitalised	-1.65	0	1.65
Other Charges/ Debits	0	15.43	15.43
Net prior period credits/Debits	0	0.86	0.86
Provision for taxation	0	8.71	8.71
Add: Return on NFA	18.50	0	-18.50
Total Expenses	3186.96	3441.07	254.11
Less other income	13.21	22.86	9.65
Net ARR	3173.75	3418.21	244.46

The variations in the expenditure are discussed below:

i) Power Purchase cost

The Commission in its Tariff order 2003 had approved Rs. 2721.55 Crs as power purchase cost [with a BST of 193.57 paise per unit and Transmission tariff of 18.67 paise per unit] for an input energy requirement of the BESCOM of 12823 MU. The actuals for FY04 as per audited the accounts is Rs. 2980.64 Crs. for an input of 13758 MU, indicating an increase in power purchase cost by Rs. 259.09 Crs. an increase by 9.52%. The Commission notes that the increased cost in power purchase is on the following accounts:

- i. Increased quantum of power purchase by 935 MU
- ii. Revision of BST to 209.35 paise per unit effective from January 2004.

ii) Repairs & Maintenance

The approved R & M cost was Rs. 41.49 Crs. The actuals as per the audited accounts is Rs.31.27 Crs. resulting in savings of Rs.10.22 Crs. Major savings are in R&M of Plant & Machinery – Rs.5.25 Crs, Lines, cables and network cost – Rs. 3.0 Crs. and buildings- Rs.1.28 Crs.

iii) Employee cost

In the Tariff Order 2003, the Commission had approved Rs.234.53 Crs. as against Rs.242.69 Crs. proposed by the BESCOM. The Commission had disallowed bonus of Rs.2.97 Crs. and Free electricity supply to employees of Rs.5.19 Crs. The actual employee cost as per the audited accounts is Rs.248.75 Crs. After excluding bonus of Rs.3.16 Crs. as per the accounts and Rs.5.19 Crs. towards free electricity supply as per the Tariff Order 2003, the employee cost would be Rs.240.40 Crs. indicating an additional expense of Rs.5.87 Crs. above the approved expenditure. There is savings of Rs.2.93 Crs. in salaries

and allowances. There is an increase of Rs.8.99 Crs. in other benefits to the employees.

iv) Administration & General expenses

The Commission had approved Rs.22.10 Crs as A & G expenses [considering 10% increase over FY02 actual expenditure] as against the BESCOM's proposal of Rs.26.52 Crs. As per the audited accounts, the A & G expenses for FY04 is Rs.26.96 Crs. an increase of Rs.4.86 Crs. above the approved amount.

v) Depreciation

The Commission had approved an amount of Rs.93.79 Crs. as depreciation cost on the opening gross fixed assets of Rs.1334.49 Crs. as proposed by the BESCOM for FY04, which was based on the rates of depreciation as in the GoI notification. The depreciation as per audited accounts is Rs.94.35 Crs. which is marginally higher than the approved amount.

vi) Interest & Finance charges

The BESCOM had proposed Rs.56.65 Crs. as Interest & Finance charges for FY04, which the Commission had approved. The actual Interest & Finance charge as per the audited accounts is Rs. 34.10Crs. indicating savings of Rs.22.55 Crs.

vii) Expenses Capitalised

The Commission had approved Rs.1.65 Crs. as expenses capitalised as proposed by the BESCOM. In the annual accounts, expenses capitalised are not separately indicated.

viii) Other debits and Net prior period charges and credits

The BESCOM had not made any provision for the above expenses in FY04. However, the Commission notes that as per the audited

accounts other charges/ (debits) is Rs.15.43 Crs. and Net prior period charges/(credits) is Rs.0.86 Crs.

ix) Provision for taxation

The Commission had not made any provision for taxation, as the same was not proposed by the BESCO. However, as per the annual accounts, an amount of Rs.8.71 Crs. has been provided for taxation.

x) Reasonable return

The Commission had approved 3% on net fixed assets as reasonable return as proposed by the BESCO, which amounts to Rs.18.50 Crs. The Commission notes that the actual return as per the annual accounts works out to Rs.21.47 Crs. indicating an increase of Rs.2.97 Crs.

e) Gap for FY04

- i) The revenue surplus/(Gap) before subsidy as per the Tariff Order 2003 and as per actuals is as follows:

Table-4.8
Gap for FY04

(Rs.Crs.)

Particulars	Approved by KERC	Actuals as per the audited accounts
Net ARR	3173.75	3418.21
Revenue from Sale of power	3027.08*	3242.47
Gap before subsidy	146.67	175.74

* Includes revenue from additional sales

- ii) After deducting the amounts not allowed by the Commission for pass through in the tariff i.e. a) Bonus to the employees as per annual accounts: Rs.3.16 Crs. and b) Free /subsidised electricity to the employees Rs.5.19 Crs. the actual ARR works out to Rs.3409.86 Crs. and the gap before subsidy would be Rs.167.39 Crs.
- iii) However, the Commission notes that as per the audited accounts an amount of Rs. 188.51 Crs. is shown as R.E. Subsidy from the GoK, which includes 3% return on NFA. Hence, the total surplus for FY04 after considering the subsidy from the GoK works out to Rs. 21.12 Crs.

4.3.2 ERC for FY05

As discussed in Chapter-2 of this order, the Commission has not approved the ERC of the BESCOM for FY05. According to the provisional accounts of the BESCOM for FY05, the revenue surplus for that year is Rs.19.92 Crs. after considering the Government subsidy of Rs. 132.94 Crs.

4.3.3 ERC for FY06

1. The BESCOM filed its ERC for FY06 on 31.05.2005. The Commission analysed the same and preliminary observations were communicated vide Commission's letter dated 24.06.2005 and letter dated 11.07.2005 on the following:
 - a. To furnish the Provisional Accounts for FY05.
 - b. Capital investment plan.
 - c. Sales Forecast.
 - d. Details of Slab-wise consumption
 - e. Prevention of Electrical Accidents.
 - f. Distribution losses
 - g. Cost of service

- h. Various expenses covered under ARR for FY06 and
- i. Tariff Schedule.

- 2. The BESCOM has furnished its replies to the observations on the above issues vide its letter dated 25.07.2005. Based on the ERC and replies furnished, the Commission has analysed the ERC and the same is discussed in the following paras:

4.3.3.1 Sales Forecast

The BESCOM has generally adopted 3 year or 5 year CAGR for projecting the number of installations and energy sales for the metered categories in FY06. Wherever there is inconsistent growth rate year on year, the BESCOM has made projections based on the field data. Regarding unmetered sales, the BESCOM has projected the number of installations of BJ/KJ and IP sets based on likely additions as per the GoK policy and energy on specific consumption basis. For streetlights, the energy is projected based on specific consumption as directed by the Commission. The validation of number of installations and energy sales as analysed by the Commission are discussed below:

I. Metered Categories

- i) LT2-a Domestic Lighting

The BESCOM has projected 40,57,648 installations for FY06 based on 5 year CAGR of 8.73%. The growth rate during the last three years has not been consistent due to conversion of BJ installations to lighting installations. In view of this, the Commission accepts the projected figure of 40,57,648 for FY06.

For energy sales, the BESCOM has considered growth rate of 5.5% over FY05, whereas the 3-year CAGR is 8.39 and five year CAGR is 7.10%.

The actual growth in FY05 over FY04 is 12%. Considering the conversion of BJ/KJ installations to LT2 category and the year on year growth during the period from FY01 to FY04, the growth rate of 5.5 proposed by BESCOM appears to be reasonable. Hence based on this growth rate, the energy sale of 2521.29 MU is reasonable.

ii) LT-3 Commercial Lighting

The five years CAGR of 4.89% for the number of installations proposed by the BESCOM is reasonable. Applying this percentage on the actual numbers for FY05, the projections for FY06 would be 4,91,456 numbers as against the BESCOM's estimate of 4,88,265.

The 5-year CAGR for energy sales is around 15%. The BESCOM has considered 14.32%, which is nearer to the CAGR. Hence the projection of 637.73 MU is accepted.

iii) LT-5: LT Industries

There is a negative growth from FY01 to FY04 and for FY05 there is a marginal increase. The BESCOM has proposed an addition of 3918 installations based on the field data, which appears to be reasonable. Hence the number of installations for FY06 would be 1,14,527 installations considering the actual figures for FY05 as against the BESCOM projection of 1,18,201 installations.

The energy sales of 907.86 MU as proposed by the BESCOM are reasonable.

iv) LT6 a (i) Water Supply Rural

There is inconsistent growth over the last 5 years in the number of installations. The growth rate for FY05 over FY04 is 6%. The BESCOM has

proposed a growth rate of 4.72% for this category, which appears to be reasonable. Based on this growth rate, the number of installations for FY06 would be 19799, considering actuals of FY05, as against BESCOM's projection of 19206 installations.

v) LT6 b (i) Water Supply Urban

There is inconsistent growth over the last 5 years in the number of installations. The BESCOM has proposed addition of 137 installations during FY06 based on the growth rate in FY05. Therefore, the total number of installations for FY06 would be 7994 considering the actuals for FY05, as against BESCOM's projection of 6630 installations.

The total number of installations under water supply (both Urban & Rural) would be 27,793 as against the proposed number of 25,836.

Regarding energy sales, the BESCOM has projected sales of 301.35 MU (both Urban & Rural) based on 2 year CAGR and accounting for increased power supply duration in rural areas. The projections are reasonable.

vi) HT-2a-HT Industrial

The 3-year CAGR for the number of installations is 10% and the previous years growth rate is 13%. The BESCOM has proposed a growth rate of 11.66%, which appears to be reasonable, and the number of installations would be 2335 considering the actuals for FY05 as against 2356 projected by the BESCOM. The projections should have been made based on the pending applications and the number of installations likely to be serviced during the year.

The sales of 2051.65 MU projected by the BESCOM is reasonable.

vii) HT-2b-HT Commercial

The growth rate for installations in the last five years is inconsistent. The BESCOM has considered an addition of 230 installations based on the previous years growth rate. Hence, the number of installations would be 1802 for FY06 considering the actuals for FY05 as against 1768 projected by the BESCOM. The projections should have been made based on pending applications and the number of installations likely to be serviced during the year.

The growth rate for sales is assumed as 29.27% whereas 5 year CAGR is 31.2%. Applying 5 year CAGR, the sales should be 1009.77 MU as against 957.61 MU proposed by the BESCOM.

viii) HT-4 Residential

As the growth rate is inconsistent over the years, the BESCOM has considered addition of 10 installations in FY06 based on the pending applications & field data, which appears to be reasonable. Hence, the total number of installations for FY06 would be 142 considering the actuals for FY05 as against 150 projected by the BESCOM.

The BESCOM has assumed a sales growth rate of 25.19%, whereas the 5 year CAGR is 22%. Applying the 5-year CAGR, sales would be 85.16 MU as against 96.73 MU proposed by the BESCOM.

The Commission notes that the variation in number of metered installations and the metered energy sales as proposed by the BESCOM and as worked out by the Commission is less than one

percent, which is negligible. Hence, the Commission adopts the figures proposed by the BESCOM for metered category.

II. Unmetered Categories

i) LT-1 BJ/KJ

The BESCOM had projected 4,25,056 installations for FY05 and 4,50,056 installations for FY06 in the initial filing. Subsequent to validation by the Commission, the BESCOM has revised these figures to 3,67,841 based on the DCB for the FY05 and 5,07,271 for FY06. While projecting the numbers for the FY06, the BESCOM in its original filing had considered 50,000 additions per annum in BJ/KJ category based on the GoK policy. Subsequently, the same has been revised to 1,50,000 by the BESCOM, stating that the above revised target has been as per directions of the GoK, considering the Rajiv Gandhi Gramina Vidyudhikarana Yojana. A letter written by the MD, KPTCL to all the ESCOMs was produced as a proof for enhancing the target.

The Commission notes that in FY05 there is a reduction of 50,417 installations in comparison to the number of installations in FY04. Based on the projected figures for FY06, there would be an increase of 1,39,430 installations, which may not be achieved keeping in view the past trends. However, the Commission accepts this number as it is a GoK policy.

Based on the mid-year number of installations for FY06, & consumption of 18 units per installation per month, the energy sales for FY06 would be 94.51 MU as estimated by the BESCOM.

ii) LT4-a&b Irrigation pump sets

The BESCOM has estimated the mid year figures for installations as 5,39,843 and specific consumption as 7836 units per IP/Yr. Hence, the sales to this category in FY06 has been estimated by the BESCOM as 4230 MU.

However, based on the monthly reports furnished by the BESCOM for FY05, the Commission has estimated the specific consumption as 7250 units per IP/Yr. Hence, the sales to this category in FY06 has been estimated by the Commission as 3695 MU.

iii) LT6a(ii) Street Lights Rural

There is inconsistent growth over the last 5 years in the number of installations. The BESCOM has proposed an addition of 1553 installations during FY06 based on FY05 growth rate. Therefore, the total number of installations for FY06 would be 16,031 considering the actuals for FY05, as against BESCOM's projection of 18,729 installations.

iv) LT6 b(ii) Street Lights Urban

There is inconsistent growth over the last 5 years in the number of installations. The BESCOM has proposed an addition of 616 installations during FY06 based on FY05 growth rate. Therefore, the total number of installations for FY06 would be 4072 considering the actuals for FY05, as against BESCOM's projection of 3881 installations.

The total number of installations under streetlights (both Urban & Rural) would be 20,103 as against the proposed number of 22,610.

The BESCOM has projected sales of 257.38 MU (both Urban & Rural), based on 360 units/kW/month as directed by the Commission.

However, due to variation in the number of installations as estimated by the Commission, the sales to this category would be 230.31 MU.

The Commission notes that there is wide variation in the number of un-metered installations and un-metered energy sales as proposed by the BESCOM and as worked out by the Commission. Hence, the Commission would adopt the figures for the number of installations as considered by it are reasonable as mentioned under each category and the corresponding energy sales to the un-metered Categories.

Based on the above discussion, the Commission approves the number of installations and energy sales for the BESCOM for FY06 as indicated in the Table below. However, the Commission directs the BESCOM to note the observations made by the Commission on sales forecast for future guidance.

Table-4.9
Sales Estimates for FY06

Category	Type of Installation	As Proposed by the BESCOM (revised)		As approved by the KERC	
		No. of Consumers	Energy Sales	No. of Consumers	Energy Sales
LT-1 (a)	Bhagya Jyothi	507271	94.51	507271	94.51
LT- 2(a)	Domestic Lighting /AEH	4057648	2521.29	4057648	2521.29
LT-2(b)	Private Prof. & Edl Institutions	5831	13.02	5831	13.02
LT-3	LT Commercial	488265	637.73	488265	637.73
LT-4 (a) & (b)	Irrigation pump sets – less than 10 HP	569843	4230.05	529630	3694.82
LT-4 (c)	IP sets more than 10 HP	340	1.15	340	1.15
LT-4(d)	Private Horticulture nurseries, Coffee & Tea plantations	466	0.91	466	0.91
LT-5	LT Industries	118201	907.86	118201	907.86
LT-6 (a) & (b)	Water Supply	25836	301.35	25836	301.35

Category	Type of Installation	As Proposed by the BESCOM (revised)		As approved by the KERC	
LT-6 (a) & (b)	Street Lights	22610	257.38	20103	230.31
LT-7	Temporary Power Supply	36122	51.11	36122	51.11
	LT Total	5832433	9016.36	5789713	8454.06
HT-1	HT Water Supply	81	459.83	81	459.83
HT-2(a)	HT Industries	2356	2051.65	2356	2051.65
HT-2(b)	HT Commercial	1768	957.61	1768	957.61
HT-3 (a) & (b)	HT Irrigation & LI Societies	20	2.63	20	2.63
HT-4	HT Residential	150	96.73	150	96.73
	HT Total	4375	3568.45	4375	3568.45
	Metered Category	4737084	8002.87	4737084	8002.87
	Unmetered Category	1099724	4581.94	1057004	4019.64
	Total	5836808	12584.81	5794088	12022.51

4.3.3.2 Distribution Loss & Energy Input for FY06

1. Assessment of IP Set Consumption

Estimation of IP set consumption is a key factor, in assessing the distribution loss levels. Hence, it is worthwhile to discuss the approach taken by the Commission in determining the IP set consumption in the previous order before arriving at the consumption for FY06. IP set consumption for FY 04 has already been discussed earlier. Assessment of IP set consumption for FY05 & FY 06 is discussed below:

a) IP set consumption for FY 05

1. The year-end figures of LT4-a & b installations for FY 05 is 489630 and the energy sales is 3875.79 MU based on actuals for FY05. However, BESCOM has estimated LT4-a & b installations for FY 05 as 509843 and the energy sales as 3661.64 MU.

2. As per the monthly reports furnished by BESCO, mid-year figure of installations would be 487018 and the energy consumption is 3531 MU. Hence, the specific consumption in FY05 would be 7250 units per IP/Year.
3. The Commission vide its letter no. T/01/2003/1839 dated 04.11.2003 has informed the ESCOMs that the figures furnished in the monthly reports in respect of IP sets would form the basis for estimating the IP set consumption. Hence, Commission adopts 7250 units/IP/Yr. as the specific consumption for estimating IP set Consumption in FY06.

b) IP set consumption for FY 06

1. The BESCO has projected a year-end figure of 5,69,843 installations in the ERC for FY06. While arriving at the said number it is stated that 60,000 installations would be serviced during the year (30,000 due to regularisation of un-authorized IP sets as per the Government directive and 30000 new connections). Further it is stated that 5000 IP sets would be defunct during the year. Hence the net addition for FY06 would be 55,000.
2. Considering FY04 as the base year and the BESCO's proposed number of additions during FY05 & FY06, the year-end figures for FY06 should be 5,69,405 and the mid-year figure should be 5,41,905 as against the BESCO's figures of 5,69,843 and 5,39,843 respectively. This shows that proper care is not taken while computing the IP-Set numbers.
3. The Commission notes that as per the gist of the discussions in the meeting with the Hon'ble Minister for Power on 20.04.2005, issued by

the MD, KPTCL vide note dated 23.04.2005, the target for new IP installations for BESCOM is 15,000. Considering this number and the proposed regularisation of 30,000 unauthorised IP sets, the total additions during FY06 would be 45,000. Further, reducing 5000 defunct IP sets during FY06, the net additions would be 40,000. Hence, the Year-end figure of IP sets for FY06 works out to 5,29,630 as against the BESCOM's estimate of 5,69,843 and the mid-year figure for FY06 would be 5,09,630.

4. For the reasons stated earlier, the Commission would adopt the specific consumption of 7250 units/IP/year of FY05 to arrive at the IP-consumption for FY06. Hence, the energy sales to IP-sets for FY 06 would be 3695 MU.

2. Distribution Loss

The loss level for FY 04 has already been discussed earlier. The loss for FY05 & FY 06 is discussed in the following paragraphs.

a) Loss for FY 05

As per the ERC filing the input energy to the BESCOM inclusive of EHT sales is 14670 MU. This has been revised to 14697.08 MU by the KPTCL vide their letter dated 27.08.2005. The total sales for FY05 as per the filing are 11309 MU. The distribution loss works out to 23.05% for FY 05 based on input energy figures furnished by KPTCL.

b) Distribution Loss for FY 06

1. In the ERC filing for FY06 the BESCOM has projected the energy input including EHT sales at 16013 MU and total sales of 12585 MU. The distribution loss works out to 21.41%.

2. The Commission in its Tariff Order 2003 had fixed 21.35% as the allowable distribution loss for FY04. The Commission notes that the actual loss in FY 04 was 26.44% as per the annual accounts and in FY05 it was 23.05% [revised] as per the ERC filing. The Commission notes that the loss level has increased by 5.09% in FY04 above the approved figure and the target is not reached even in FY05. The Commission notes that BESCOM has not made necessary efforts to bring down the losses to the targeted level in FY04.
3. In this context, BESCOM is better placed, in comparison to HESCOM or GESCOM. Further, the allowable loss level for BESCOM in FY06 cannot be more than 21.35% which is the loss level already approved for FY 04. It is worthwhile here to mention about the losses in 14 towns/cities being monitored by the Commission.
4. The losses in the BESCOM excluding 14 cities/towns in FY05 is as indicated below:

Table-4.10
Losses excluding 14 Cities and Towns

Particulars	14 Towns	BESCOM excluding 14 Towns	BESCOM- Total
Input energy-MU	6328.78	8368.30	14697.08
Loss- MU	795.16	2592.92	3388.08
% Loss to Input	12.56	30.98	23.05

5. It is noted that the loss level in the BESCOM excluding the 14 towns is very high indicating that there is lot of commercial loss, which can be reduced substantially by better management. Hence, the BESCOM through better management, apart from the Capex

proposed for FY 06, can easily bring down the loss level to 21.00% in FY 06.

6. In view of the above, the Commission hereby allows 21.00% as the loss for BESCOM.
7. In the Tariff Order 2003, the Commission has stated that the true indicator of distribution loss is to reckon the same as a percentage of the input energy without including the EHT sales. The allowable distribution loss levels, however, have been expressed as a percentage of input energy sales inclusive of EHT sales. The distribution loss expressed as percentage of Input inclusive and exclusive of EHT sales for FY04, FY05 & FY06 are indicated hereunder:

Table-4.11
Distribution loss levels

Year	Input energy inclusive of EHT sales in MU	EHT sales in MU	Input energy excluding the EHT sales in MU	Total sales including EHT sales in MU	Total sales excluding EHT sales in MU	Distribution loss as a percentage of input energy inclusive of EHT sales in %	Distribution loss as a percentage of input energy exclusive of EHT sales in %
FY04 as per annual accounts	13758	709*	13049	10121	9412	26.44	27.87
FY05 as per ERC filings	14697	760*	13937	11309	10549	23.05	24.31
FY06 as per KERC	16128	820	15308	12741**	11921	21.00	22.13

• EHT sales as per ERC filing.

** Includes additional sales

3. Energy Input for FY 06

The BESCOM has estimated an energy input of 16013 MU. However, the Commission has approved 16128 MU as the energy input for the BESCOM. Based on the approved input energy & allowable loss level of 21.00%, the sales to be achieved by the BESCOM would be 12741 MU as against the proposed sales by the BESCOM of 12585 MU. The Commission approves 16128 as input energy to the BESCOM and directs BESCOM to achieve additional sales of 719 MU due to efficiency improvement.

4.3.3.3 Capital Investment Programme for FY 06

1. The BESCOM has proposed a capital investment programme of Rs. 728.25 Crs. including Rs.100 Crs. towards APDRP works during FY06.

During the review of capital works programme, the Commission had observed that:

- a) Adequate investment should have been made on metering of installations in order to comply with the provisions of the EA 2003 to supply electricity only through installation of correct meters. BESCOM has stated that it will send a suitable proposal to extend the deadline for supplying power to installations without meters to certain categories of consumers. However, the Commission has not received any proposal from BESCOM in this regard.
- b) The Commission has noted the increasing trend in the number of accidents in the BESCOM. The Commission has directed BESCOM to prepare and forward a detailed action plan for taking preventive measures and also to make adequate provision in the Capital Investment Programme for the prevention of accidents. It is however noted by the Commission that no provision has been

made in the capital Investment Plan for FY06 towards preventive measures to reduce accidents. BESCOM has stated that such works are being undertaken out of the allocation made towards the Extension & Improvement works.

- c) The Commission has also noted that a huge amount, of the order of Rs.389.00 Crs. (more than 50% of the total investment programme for FY06) has been provided for distribution automation, with financial assistance from Japan Bank Investment Corporation (JBIC). The Commission desired that the salient features of the proposed scheme be provided so that the Commission could take a view. A team from Japan made a presentation before the Commission highlighting the salient features of the scheme. BESCOM has stated that the scheme is in the very preliminary stage as the DPR needs to be approved for recommendation both by the GoK and the GoI for sanction by JBIC and that there will be no financial implications during FY 06 for this work. BESCOM has therefore sent a revised Capital Investment Plan for FY 06 as noted below:

Table-4.12

Scheme-wise allocation of Capital Investment programme proposed by BESCOM for FY06

Sl. No.	Scheme	Rs. crores
1.	Extension & Improvement including 33 KV station works	100.50
2	APDRP(New & Spillover works)	94.90
3.	Service Connection	19.40
4.	RE (General)	
a)	Electrification of Hamlets/HBs/JCs/Tandas including RGRHCL and PMGY works	12.68
b)	Energisation of IP sets	7.24
c)	Kuteer Jyothi	20.00

Sl. No.	Scheme	Rs. crores
5.	TSP	
a)	Electrification of Tribal Colonies	1.00
b)	Energisation of IP sets	1.50
c)	Kuteer Jyothi	1.00
6.	SCP	
a)	Electrification of HB/JC/Tandas	3.50
b)	Energisation of IP sets	15.00
c)	Kuteer Jyothi	1.50
7.	Metering Programme	10.00
8.	Energisation of unauthorized IP sets	39.08
9.	Replacement of failed Distribution transformers	5.80
10.	Rural Load Management Scheme	25.00
11.	T&P and Computers	1.90
12.	Civil Engineering Works	3.00
	Grand Total	363.00

2. The Commission approves the revised capital investment of Rs.363.00 Crs. which includes APDRP works of Rs. 94.90 Crs. This is subject to approval of the Commission for schemes costing more than Rs. 1 crore as per practice direction issued by the Commission

4.3.3.4 Power Purchase Cost

1. The BESCOM has projected power purchase cost (including transmission charges) of Rs.3297 Crs. for an energy input at interface points of 16013MU. The per unit power purchase cost works out to 254.88 paise.

2. In terms of Section 39 (1) of the EA 2003, KPTCL is barred from trading in electricity with effect from 10.06.2005. Accordingly, the GoK vide its order No. EN 131 PSR 2003 dated 10.05.2005 has accorded approval to the ESCOMs to purchase power from various generating Companies. Allocation of power supplied by KPCL, VVNL, CGS and Conventional IPPs is on the basis of total energy consumption during the year FY05. NCE projects have been allocated to the ESCOMs based on geographical location of the project.
3. The Commission had directed KPTCL to work out the ESCOM wise requirement of power purchases for FY06 based on the above GO. Accordingly, KPTCL has worked out ESCOM wise energy input for FY06.
4. Based on KPTCL working the input energy to BESCOM would be 16013 MU.
5. The Commission approves power purchase quantity of 16128 MU at a cost of Rs.3104.97 Crs. as discussed in Chapter-3.
6. The transmission charges for BESCOM at 19.42 paise per unit works out to Rs. 313.20 Crs.

4.3.3.5 Repairs and Maintenance expenses

1. The BESCOM has proposed Rs. 48.31 Crs. as R & M expenses for FY06. The expenditure for FY05 as per the provisional accounts is Rs.32.51 Crs. indicating an increase of R & M expenses by 48.6%. The previous growth rate over FY04 was 4%. BESCOM has justified the increase stating that the infrastructure has been growing by leaps and bounds and as the system becomes older, maintenance cost also increases. Further, BESCOM has proposed massive preventive maintenance on all DTCs in rural areas to reduce transformer failure rate.

2. The Commission approves Rs.48.31 Crs. as R & M expenses considering the reasons furnished by BESCO. The Commission directs BESCO to improve the quality of supply by proper utilization of R & M expenses approved.

4.3.3.6 Employee Cost

1. Employee cost of Rs.264.72 Crs. is proposed for FY06 by the BESCO. This indicates an increase of 5.5% over FY05 employee cost of Rs. 250.99 Crs. as per the provisional accounts.
2. The number of employees working in FY06 is estimated by the BESCO as 10,270 as against 11,118 in FY05 indicating a decrease of 848 employees in BESCO. Consequent to this, BESCO has made 0.5% reduction in salaries over FY05 provisional accounts figures.
3. The BESCO has computed DA as 70% of basic salaries on the basis of Time weighted average. BESCO has assumed 2 instalments of DA at a rate of 3%. BESCO has estimated Rs.35.85 Crs. as terminal benefit based on actuarial valuation at 20.45% of Basic & DA. Further, the BESCO has stated that there will be a contingent liability in ARR for the current year in the event of long impending pay revision of employees.
4. Considering the inflation rate, the proposed increase of 5.46% in employee cost over FY05 is reasonable. As decided in the earlier Tariff Orders, the Commission will disallow for pass through in the tariff bonus of Rs.3.05 Crs. and cost of free/subsidised electricity to employees of Rs.5.19 Crs. [as per tariff order 2003] for FY06 also. However, the Commission has already made it clear that the order of the Commission on the disallowance of these expenses will not in any

way hinder the licensees from fulfilling their contractual obligations to their employees. After disallowing the above expenses, the allowable employee cost would be Rs.256.48 Crs.

4.3.3.7 A & G expenses

The BESCOM has proposed Rs.51.33 Crs. as A & G expenses, which is 30.61% higher than FY05 actuals as per the provisional accounts. The Commission during validation has observed that proposing abnormal increase in expenditure without indicating the benefits there from is totally unjustified and the Commission expects that the licensees would endeavour to cut down costs. The BESCOM has responded by stating that considering the number of innovative measures undertaken by the BESCOM and the quantum of work involved, the proposed amount is reasonable. The BESCOM has not justified the increase in A & G expenses in terms of benefits that would be derived from innovative schemes. Considering the fees payable to the KERC, the Commission considers it to be appropriate to provide a reasonable increase of 20% over FY05 actuals [as per the provisional accounts]. Thus the approved A & G expenses for FY06 is Rs.42.65 Crs.

4.3.3.8 Depreciation

Rs.122.72 Crs. has been provided as depreciation for FY06 by the BESCOM on the basis of rate prescribed by GoI notification of 1994. The Commission approves provision of Rs.122.72 Crs. towards depreciation.

4.3.3.9 Interest & Finance Charges

The BESCOM had proposed Rs.66.30 Crs. initially and subsequently revised the same to Rs.162.17 Crs. BESCOM has not furnished any reasons for increasing the amount from Rs.66.30 Crs. to Rs.162.17 Crs. In response to the Commission observations, BESCOM has stated that the increase is due

to additional drawal of loans to meet the capex program. In the absence of further information on this account, the Commission approves the earlier estimate of Rs.66.30 Crs.

4.3.3.10 Other Charges/Debits

1. A sum of Rs.13.75 Crs. has been proposed under this head comprising of provision for bad/doubtful debts to an extent of Rs.9.50 Crs. and towards miscellaneous and others Rs.4.25 Crs.
2. In the Tariff Order 2002, the Commission has clearly indicated that provisions for bad & doubtful debts on adhoc basis would not be considered and that if there are any bad debts required to be actually written off in the books, the licensees may come up with specific proposal before the Commission in future ERCs. Therefore, after deducting the provision of Rs.9.5 Crs. for bad & doubtful debts, Commission approves Rs.4.25 Crs. towards other debits.

4.3.3.11 Expenses Capitalised

The BESCO has proposed Rs.0.22 Crs. towards capitalisation of expenses for FY06, which is at the same level as in FY05. Considering the provisional nature of expenses, the Commission accepts the estimate of the BESCO.

4.3.3.12 Net Prior period charges & Credits

A provision of Rs.0.90 Crs. has been made for FY06. The Commission accepts the estimate of BESCO.

4.3.3.13 Provision for tax

The BESCO had not made any provision for tax in its ERC filing. However, a sum of Rs.2.46 Crs. as provision for tax for FY06 has been indicated in

P & L account while furnishing replies to the Commission's observations. The Commission accepts this provision.

4.3.3.14 Reasonable return

1. The Commission had allowed RoR at 3% on NFA to the ESCOMs in the earlier years, since section 27 of KER Act 1999 stipulated that the provisions of Electricity (Supply) Act 1948 applies in the case of Board or its successor entities for determination of revenue of the licensees and further that the GoK had stipulated 3% RoR in respect of erstwhile KEB.
2. With the enactment of Electricity Act 2003, the Electricity (Supply) Act 1948 has been repealed, save otherwise as provided in the EA 2003. As per section 61 of the Electricity Act 2003, the Commission shall specify the terms and conditions of tariff and in doing so the Commission shall be guided by, amongst others, the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees.
3. Further, as per the draft Tariff Policy dated 16.03.2005 issued by the Ministry of Power, Gol, the rate of return on equity for generation and transmission projects as notified by the Central Commission would be adopted by the SERCs for distribution. However, as discussed in **Chapter-3** of this order, these aspects will be further examined by the Commission while specifying the terms and conditions for determination of tariff under section 61 of the EA 2003, after the National tariff Policy is notified by the Gol. The Commission has allowed 12% Return on Equity (RoE) to KPTCL. On the same lines, the Commission decides to allow 12% Return on Equity (RoE) amounting to

Rs.50.25 Crs. to BESCOM as against BESCOM's proposal of 3% RoR amounting to Rs.25.28 Crs.

4.3.3.15 Other Income

The BESCOM has indicated Rs.25.85 Crs. as Other Income from trading and miscellaneous receipts, on the basis of actual income generated during the previous years. The Commission approves the estimate of the BESCOM.

4.3.3.16 Annual Revenue Requirement

Based on the above discussions, a summary of the ARR proposed by the BESCOM and approved by the Commission is as under:

Table-4.13

ARR proposed by the BESCOM & as approved by KERC for FY06

(Rs crores)

Particulars	Proposed by BESCOM	Approved by KERC
Expenditure		
Power Purchase	3927.00	3104.97
Transmission Charges		313.20
Repairs & Maintenance	48.31	48.31
Employee Costs	264.72	256.48
A & G expenses	51.33	42.65
Depreciation	122.72	122.72
Interest & Finance Charges	162.17	66.30
LESS: Expenses Capitalised	-0.22	-0.22
Other Charges/ (Debits)	13.75	4.25
Net prior period credits/(Debits)	0.9	0.90
Provision for taxation	2.46	2.46

Particulars	Proposed by BESCOM	Approved by KERC
Add: Return on equity @ 12%	25.28	50.25
Total Expenses	4618.42	4012.27
Less: other income	25.85	25.85
Net ARR	4592.57	3986.42

4.3.3.17 Average Cost of Supply

Considering the proposed ARR of Rs. 4592.57 Crs, the BESCOM has worked out the average cost of supply for FY06 as 364.93 paise per unit. However, after considering the ARR and sales as allowed by the Commission, the average cost of supply works out to 331.59 paise per unit.

Table-4.14
Average Cost of Supply

Particulars	Proposed by BESCOM	Approved by KERC
Net ARR (Rs crores)	4592.57	3986.44
Sales –MU	12585	12022
Average cost of Supply Paise per unit (Paise per unit)	364.93	331.59

4.3.3.18 Revenue from Existing Tariff

1. The Commission has pointed out the discrepancies in the revenue estimates made by the BESCOM's during validation. In the absence of any further credible information, the Commission accepts the revised revenue estimates of BESCOM at existing tariff of Rs.4188.03 Crs.

2. The Commission notes that revenue estimation is an important exercise in the whole ERC estimation. In the earlier Tariff Orders the Commission has mentioned about the necessity for developing a systematic approach towards revenue estimation by adopting a robust sampling procedure. The BESCO could have used the actual computer billing data for slab-wise consumption instead of adopting a sample since the computerisation is stated to be complete in the BESCO. The Commission once again reiterates that a systematic approach needs to be adopted by BESCO for realistically forecasting the revenue in next filings.

4.3.3.19 Revenue Gap for FY06

The revenue gap for BESCO with existing tariff is given below;

Table-4.15
Revenue Gap at existing tariff in BESCO for FY06

(Rs crores)

Particulars	As per ERC filing of BESCO Revised	As approved by KERC
Total expenditure including return	4618.42	4012.27
LESS : Other income	25.85	25.85
Net revenue requirement	4592.57	3986.42
Revenue from sale of power (net of rural rebate)	4188.03	4188.03
Surplus/(Deficit) before subsidy	-404.54	201.61

The revenue surplus of BESCO in FY06 at the existing tariff, before Government subsidy is estimated to be Rs.201.61 Crs. However considering an additional sales of 719 MU due to efficiency improvement, there will be an additional revenue of Rs.256.18 Crs.