

CHAPTER - 5

ANNUAL REVENUE REQUIREMENT FOR FY12

5.1 ERC Application for FY12

BESCOM has filed its application for approval of revised ERC for FY12 and Tariff for FY12 on 15th June 2011. BESCOM in its replies dated 6th July 2011, to the preliminary observations made by the Commission has revised its revenue requirement for FY12. The summary of the proposed revision of ARR is as under:

TABLE – 5.1
Proposed ARR for FY12

Sl. No	Particulars	As per Filing*
	Revenue- Rs Crs	
1	Revenue from tariffs & Miscell. Charges	9646.46
2	RE subsidy from Govt.	661.25
3	Revenue to wires business	
	Total	10307.71
	Expenditure- Rs Crs	
4	Power Purchase	
5	Transmission Charges	
6	SLDC Charges	10551.89
7	R&M Expenses	
8	Employee Expenses	
9	A&G Expenses	650.88
10	Depreciation	202.25
	Interest & Finance Charges	
11	Interest on Loan Capital	185.44
12	Interest on Working Capital	167.77
13	Interest on Consumer Deposits	124.77
14	Interest on belated payment of power purchase cost	0.00
15	Other Interest & Finance Charges	4.23
16	Less: Interest & other expenses capitalised	0.00
17	Other Debits (incl. Prov for Bad debts)	0.00
18	Extraordinary Items	0.00
19	Other (Misc.)-net prior period credit	0.00
20	Power purchase cost as per decision in OP No.8/2009 dated 11.12.2009	
	Total	11887.23

21	ROE	13.37
22	Other Income	150.46
23	Provision for taxes	0.88
24	Fund towards Consumer Relations / Consumer Education	1.00
25	Regulatory Assets	221.00
	NET ARR	11973.02
26	Surplus (+) / Shortfall (-)	-1665.31

*** As revised in BESCOM's Replies to the preliminary Observations of the Commission**

BESCOM has requested the Commission to approve an ARR Rs.11973.02 Crores. BESCOM has projected a deficit of Rs. 1665.31 Crores. In order to meet this deficit, BESCOM has proposed to hike the electricity tariff by 88 paise per unit across all the categories of consumers excluding BJ/KJ and IP Set consumers.

5.2 Annual Revenue Requirement for FY12

5.2.1 Capital Investments for FY12

BESCOM in its filing has stated that it has retained the original proposal of CAPEX for FY12 as approved by the Commission in MYT Order dated 07.12.2010. However, BESCOM vide its letter dated 09.09.2011 has furnished revised CAPEX proposal, the details of which are as follows:

TABLE – 5.2

Capital Works as proposed by BESCOM and approved by the Commission For FY12

Sl. No.	Schemes	Rs. in lakhs
1	11 KV Lines for New Stations	690
2	11 KV Other Works + DTCs including dedicated DTCs for DWS Schemes.	6255
3	Re-conducturing of ACSR / Rabbit to Coyote in Bangalore Urban	325
4	Re-conducturing of LT line using Rabbit conductor	580
5	Re-conducturing (Improvement works on 11 KV Rural Feeders)	1800
6	Strengthening of 11 KV UG cable Network with RMUs	4950

7	NJY	15400
8	Providing infrastructure to Un authorized IP Sets	2800
9	Metering Programme	
10	Metering of BJ/KJ, IP Sets and Street Lights (Un-metered category)	159
11	RAPDRP & DAS	26890
12	Service connections	1800
13	Replacement of failed DTCs by new ones	1500
14	Civil Engineering works, DSM & Others	730
15	RE Works (General)	
16	Electrification Hamlets/Villages	2.5
17	Energisation of IP Sets	240
18	Kuteer Jyothi	
19	SCP	
20	Electrification of Hamlets/HBs/JCs/Thandas	
21	Energisation of IP Sets	250
22	Kuteer Jyothi	
23	TSP	
24	Electrification of Tribal Colony	
25	Energisation of IP sets	500
26	Kuteer Jyothi	
27	T&P and Computers	365
28	Other works including Safety measures fund, Local Planning, Formation of ALDC, Spill over works etc.	600
29	Providing AB Cable	284
30	Spill over works for FY 2009-10	
Total		66120.72

Commission's Analysis and Decision

The Commission notes that, BESCOM has achieved a CAPEX of Rs. 327.94 Crores in FY11 as against a target of Rs.750 Crores. BESCOM has proposed to invest Rs.661.21 Crores during FY12. The major works proposed are re-conducturing of HT and LT lines, Niranthara Jyothi Yojana, RAPDRP and Distribution Automation works etc.

The Commission has taken note of the fact that substantial capex provisions have been made to carry out the above stated works. The proposed CAPEX includes investment of Rs.146 Crores towards E&I works, Rs.154 Crores towards Niranthara Jyothi Yojana and Rs.269 Crores towards R-APDRP works. These works would enable reduction in distribution losses besides improving reliability and quality of power supply to consumers. In order to meet these objectives and to comply with the directives of the Commission, besides achieving reduction of distribution losses, the Commission is of the view that, capex as proposed would be necessary. The Commission accordingly decides to allow capex as proposed by BESCOM for FY12.

The Capex so allowed is subject to prudence check by the Commission. BESCOM shall furnish data as per the prescribed format during the APR for FY12.

5.2.2 Sales Forecast

Category-wise Energy Sales

1. BESCOM has estimated sales of 23,238 MU for FY12 indicating a growth rate of 24.03% over FY11 actuals of 18,736 MU. The Commission in its observation had noted that the growth rate estimated was on the higher side and had requested to furnish the reasons for such high growth rates.
2. BESCOM in their replies to preliminary observations has stated that the increase in sales is due to the following reasons:
 - a. Proposed 24 hours of power supply under NJY scheme to non-IP set loads and 8-hours supply to IP sets instead of the prevailing 12 hours single-phase supply & 6 hours three-phase supply in rural areas.
 - b. Proposed unrestricted power supply in towns & cities by resolving system constraints.
 - c. With boom in all economic sectors, BESCOM envisages high demand in Bangalore city, especially in areas like electronic city, IT parks which are currently subjected to load shedding.

- d. High growth achieved in April-11 [32%] & May [15%] when compared to the Corresponding months of previous year.
3. In response to the above replies, the Commission in its validation meeting requested BESCOM to furnish the following information:
 - a. Approval of GoK for increasing hours of supply to IP sets from existing 6 hours to 8 hours.
 - b. Specific Consumption of BJ/KJ and street light installations for FY-11 on the basis of metered data.
 - c. Report on analysis of consumption earlier and after the NJY scheme was implemented in 89 feeders.
 - d. Details of feeders on which constraints were envisaged and the sales data pertaining to such feeders prior to system improvement and after improvement.
 - e. Details of pending application for HT-2a & HT-2b Categories.
 - f. Justify 24% growth in FY12 over previous year.
4. In response to the validation meeting BESCOM has furnished replies regarding number of hours of supply to IP sets as 6-hours, Specific consumption details for BJ/KJ & Street Lights and details of pending application in HT-2a and HT-2b categories. Further, BESCOM has not substantiated the additional power requirement due to system constraints. BESCOM vide dated 09.09.2011, has furnished list of NJY feeders already completed indicating status of voltage, interruptions and transformer failure rate etc., The impact on energy sales cannot be arrived based on these details. As such, it is difficult to estimate the additional sales required due to NJY scheme and improvement works proposed in the distribution system.
5. The Commission has obtained from BESCOM category-wise sales for the five months period from April10 to August10 and April11 to August11. Based on the information furnished by BESCOM, the Commission has considered the actual sales for the period April11 to August11 for all categories of consumers excluding BJ/KJ and IP

sets and has estimated the sales for the remaining period of FY12 [ie September11 to March11] for these categories considering the category-wise annual growth rate as proposed by BESCOM. The Category wise sales based on the above approach for categories of consumers excluding BJ/KJ and IP sets is indicated below:

TABLE – 5.3
Sales Estimate for FY12

Category	Apr10- Aug10 Actuals	Apr11 to Aug11 Actuals	Annual Growth as estimated by BESCOM	Sep10- Mar11 Actuals	Sep11-Mar12 considering annual growth rate	Sales MU		
						FY-11 Total Actuals	FY-12 Total As approved	FY12 as filed by BESCOM
LT2a	1743.07	1905.57	29.34%	2438.51	3153.94	4181.58	5059.51	5408.41
LT2b	11.63	12.74	67.81%	17.04	28.59	28.67	41.33	48.11
LT3	496.41	560.12	35.81%	694.41	943.11	1190.82	1503.23	1617.30
LT4b	2.89	3.5	7.54%	3.87	4.16	6.76	7.66	7.27
LT4c	1.31	1.74	39.12%	1.86	2.59	3.17	4.33	4.41
LT5	400.06	431.11	17.40%	587.07	689.20	987.13	1120.31	1158.85
LT6 WS	161.63	177.44	16.90%	245.31	286.77	406.94	464.21	475.72
LT6 SL	139.99	148.47	1.38%	216.83	219.82	356.82	368.29	361.74
LT7	35.35	45.67	69.36%	57.99	98.21	93.34	143.88	158.08
HT-1	200.16	203.96	24.55%	282.11	351.36	482.27	555.32	600.65
HT2a	1595.07	1798.88	29.31%	2313.24	2991.29	3908.31	4790.17	5053.91
HT2b	1015.11	1131.07	39.34%	1372.00	1911.73	2387.11	3042.80	3326.18
HT3a& b	0.83	1.39	22.65%	0.98	1.20	1.81	2.59	2.22
HT4	43.05	48.7	14.96%	62.92	72.33	105.97	121.03	121.82
Metered- Sales	5846.56	6470.36		8294.14	10754.31	14140.70	17224.67	18344.67

6. Regarding BJ/KJ Consumers, the Commission in its preliminary observations had noted that even though there was a negative growth in the estimated number of installations in FY12, a positive growth was considered for sales. BESCOM in its reply to the observations made during validation meeting, furnished estimates of the specific consumption. Hence, for BJ/KJ consumers, the Commission has considered the specific consumption of 13.23 units/installation/ month based on metered data furnished by BESCOM and the number of installations as estimated by BESCOM. Based on the above, the sales to BJ/KJ consumers is as indicated below:

TABLE – 5.4
BJ/KJ Sales for FY12

As per filing for FY12-MU	Sp.Consp/ J Month/ installation	Year end Installations for FY12	Sales as approved MU
136.22	13.23	687512	109.12

7. As far as sales to IP sets, the Commission in its preliminary observation had noted that BESCOM had considered higher specific consumption for FY12. BESCOM has stated that IP set consumption has been projected considering 6 hours of three-phase supply per day. Since the IP set consumers are not 100% metered, for these consumers, the Commission has considered the specific consumption of 7534 units/installation/year based on monthly reports furnished by BESCOM and the mid – year number of installations as estimated by BESCOM. Based on the above, the sales to IP set consumers is as indicated below:

	As per filing for FY12-MU	FY11 Specific Consumption as per Monthly Reports -Units/IP/Yr.	Mid-Year Installations for FY12	Sales as approved MU
BESCOM	4756.63	7534	607596	4577.62

As discussed in the above paras, though BESCOM has projected sales of 23237.52 MU, the Commission approves 21911.42 MU as sales for FY12. Further, any variation in sales would be trued up during the Annual Performance Review for FY12.

5.2.3 Distribution Losses

BESCOM in its filing has proposed a distribution loss of 14.50% for FY12. BESCOM had reported actual distribution loss of 14.55% as against a target of 14.75% for FY11. Further as per the provisional accounts furnished on 05.09.2011, the distribution losses for FY11 is reported as

14.48%. The Commission in its MYT order dated 07.12.2010 had approved distribution loss at 14.50% for FY12.

As regards segregation of losses BESCOM has stated that, study reports of CPRI in respect of 2 nos. 11 KV feeders namely Jagalur and Honnali are submitted and the final report would be submitted as soon as the same is received. BESCOM is directed to expedite its on going studies and furnish detailed report to the Commission.

The Commission notes that, the loss levels for the control period FY11-13 has been fixed in the MYT order dated 07.12.2010. The actual distribution losses reported in the past four years are as follows:

TABLE - 5.5

Reduction in Distribution Losses – FY08-11

Particulars	FY08	FY09	FY10	FY11
Target Distribution losses	20.00%	19.00%	16.00%	14.75
Actual Distribution losses	19.99%	16.70%	15.09%	14.48
Reduction over the previous year		3.29%	1.61%	0.27%

As seen above, BESCOM **has achieved reduction in losses better than the target set by the Commission.** Considering the loss reduction performance of BESCOM in the past and proposed investments during FY12, the Commission decides to retain distribution losses of 14.50% as approved in the MYT Order dated 07.12.2010.

TABLE – 5.6

Approved Distribution Losses for FY12

Particulars	FY12
Energy at Interface Points in MU	25627.39
Total sales in MU	21911.42
Distribution losses as a percentage of input energy at IF points in %	14.50%

The range of distribution losses as approved by the Commission, for FY12 are as follows:

TABLE – 5.7**Approved Range of Distribution Losses as % of Input energy at interface points**

Range	FY12
Upper limit	15.00
Average	14.50
Lower Limit	14.00

Incentive and Penalty mechanism for Distribution Loss

As decided in the MYT Order dated 07.12.2010, in case the actual distribution loss is less than the approved loss level, such savings shall be shared between the distribution licensee and the consumers in the ratio of 70:30 during the first Control Period and in the ratio as may be decided by the Commission in the subsequent Control periods. Accordingly, the Commission would consider the incentive/penalty on actual basis during the annual performance review for FY12.

5.2.4 Power Purchase**a) BESCOM's Power purchase proposal for FY12**

BESCOM has proposed to purchase 28364.03 MU of power at a cost of Rs.9787.34 Crores for FY12. The source-wise power purchase vis-à-vis the approved quantum and cost thereof are as under:

TABLE – 5.8**BESCOM's Proposal for the Source wise Power Purchase for FY12**

Source	As approved in the tariff order 07.12.2010		As per FY 12 Tariff filling application	
	Energy In MU	Amount In Rs. Cr	Energy In MU	Amount In Rs. Cr
KPCL Hydel	5621.80	379.77	890.85	17.72
KPCL Thermal	5974.54	1815.71	12439.66	4003.50
CGS	6166.93	1793.70	5129.34	1558.03
IPP	2835.12	1005.17	3044.29	1506.78
NCE	3730.93	1137.31	2768.16	978.00

Short Term	0.00	0.00	3956.76	1693.63
Others	135.46	30.02	134.97	29.65
Total	24464.78	6161.68	28364.03	9787.34

The above proposals are based on the estimated sales grossed up by transmission and distribution losses.

BESCOM, while projecting the power purchase quantum and cost for the control period has made the following assumptions:

- a. Power purchase for FY12 is based on the details furnished by PCKL..
- b. The energy being purchased from different sources viz KPCL Hydel, Thermal, CGS, IPPs, NCE projects and others through short term purchase.
- c. Energy availability of hydel stations is estimated based on the anticipated inflow of ten years moving average less by 1 % auxiliary consumption as per PPA. The 5 % carry over in Linganamakki, Supa & Mani dams considered.
- d. KPCL Thermal : The tariff rates worked out based on KERC order dated 03.08.2009 for thermal stations 1 to 7 at 72% PLF. The Capacity and energy charges have been furnished by KPCL.
- e. Central Generating Station: ESCOMs have a share in NTPC Southern Region station of Ramagundam and other stations like Neyveli Lignite Corporation, Kaiga Atomic Power Station and Madras Atomic Power Station. Talcher Phase II.
- f. Independent Power Producers : The projected energy details of Tata Power Company Limited & M/S Sree Rayalseema Alkalies and allied chemical limited & UPCL for the year 2011-12 are detailed below:

Stations	Energy in Mu	Fixed cost Rs. Cr	Variable cost Paise per Kwh
Rayalseema	166.31	13.71	1021.28
Tata Co	505.17	72.80	818.86
UPCL	4436.29	485.33	261.00

- g. Non conventional Energy Source.: The actual generation of NCE projects for the year 2010-11 has been considered except the Co-generation and Bio-mass projects who have completed 10 years period, have been excluded, presuming that the Mini Hydel and wind projects shall be continue to supply power to respective ESCOMs.
- h. Jurala : The 50% of the energy from Jurala Hydro electric Projects (117 MW) is expected during 2011-12. The expected energy from the project is detailed below:

Particulars	Energy in MUs	Paisa per unit
Jurala Project	240	246

For FY12, the power purchase from T. B. Dam has been estimated to be 32 MU and revenue expenditure is Rs.72 Lakhs.

- i. Short Term Purchases :

The actual short term energy purchased from different sources for the month of April-2011 & May-2011 is based on actual power purchase cost.

Particulars	Energy in Mus	Amount in Rs.
Short Term purchases	1311	744

BESCOM is required to procure additional power to the extent of 3500 MUs, to meet the deficit. Tender has been floated for procurement of 500 MW RTC power on medium term basis under Case-1 bidding guidelines. The tariff for such procurement was estimated at Rs. 4 per Unit.

b) Commission's Analysis & Decision

Due to increase in the gap between supply and demand of power for the months during summer; the State has been resorting to short-term power purchases. In order to ensure proper planning of power

procurement, the Commission has conducted review meetings with Chairman, PCKL and MDs, ESCOMs, wherein various aspects of generation and supply planning, peak load management through DSM, reduction of losses through HVDS, energy efficiency measures, consumer safety, prevention of accidents, reliable services to the consumers, Energy accounting & auditing and short-term power procurement were discussed.

The Commission has observed that, the ESCOMs, in view of the severe shortage situation in the State, had procured short-term power from various sources at the weighted average rate of Rs.4.99 per unit during FY11. This had significantly impacted the power purchase cost. Further, the shortage situation has also continued in FY12.

In order to provide reliable power supply to the consumers across the state and also to optimize power purchase costs, the Commission identified certain important issues, which need to be addressed on priority basis to promote efficiency and economy in the operations of ESCOMs. The Commission, therefore, in exercise of the power conferred under section 86(2) of Electricity Act 2003, rendered advice to the State Government to take appropriate policy and administrative measures.

One of the important issues on which the Commission rendered advice to Government of Karnataka, was regarding measures to augment power supply in the State by contracting medium term / Long term power purchase with a view to optimize the cost of power and to restrict short-term purchases as far as possible.

In view of the above experience, the Commission hereby directs BESCOM, to plan its requirement in advance and make arrangements to tie up for medium and long-term power, to meet the anticipated shortfall in supply at a rate not exceeding Rs.4 /- per unit. In case the

short-term procurement is necessitated at a rate above Rs.4/ per unit, prior written approval shall be obtained from the Commission.

Further, the Commission, while computing the Power purchase requirement of BESCOM for FY12, has considered the following :

1. The actual sales up to August 2011 and for the period from September 2011 to March 2012, the annual sales growth rate as proposed by BESCOM has been applied as discussed in the preceding section under sales forecast.
2. During the process of validation of data filed by the ESCOMs, as actual generation availability for the period from April 11 to August 11 was already available, KPCL/PCKL/ESCOMs were requested to furnish availability figures for FY12 based on the actual for the period April 11 to August 11 and estimates for the remaining period. Accordingly, KPCL has furnished the revised data on the availability of the KPCL stations (Hydro & Thermal), in its letter No; A1W4FO/KERC/467 dated 14.09.2011. The cost of energy available from KPCL sources is computed as per the agreements for each source.
3. In case of C G S & U I, preceding 12 months historical data collected from SLDC is considered. As the Major IPPs, NCE projects & others are committed for availability through agreements executed with the respective ESCOMs, the availability figures of these sources have been considered as per the tariff filing applications of each ESCOM. The cost of energy is computed as per the data furnished by PCKL vide letter No: PCKL/A12/119/2006-07/2400 dated 05.08.2011 and keeping in view the ESCOM-wise allocation of power from different sources made by Government.
4. The quantum of energy and cost thereon in respect of the following new generating stations coming up is subject to approval of PPA by the Commission.

- i. RTPS Unit-8
 - ii. BTPS Unit-2
 - iii. UPCL Unit 1&2 (subject to approval of tariff by CERC)
 - iv. All Stations under the erstwhile VVNL except Yelahanka Diesel Generating Station.
5. Further, any source wise variation in quantum and the actual cost of power purchase will be reviewed at the time of Annual Performance Review for FY12.
6. As discussed in the preceding para on distribution losses, the distribution losses of 14.50 % is considered for determining Power Purchase Cost. The transmission losses of 3.98 % is considered as per the Tariff Order dated 7.12.2010.

c) Transmission Charges

As per the approved ARR of KPTCL as per Commission's Order dated 07.12.2010, the Transmission charges payable by BESCOM for the Control period FY12 is Rs.746.75 Crores.

d) SLDC Charges

The Commission in its Order dated 07.12.2010 had approved SLDC charges payable by ESCOMs for the control period FY11-13. Accordingly, the SLDC charges payable by BESCOM for FY12 is Rs.5.24 Crores.

Accordingly, the approved Power purchase quantum and cost for FY12, Source wise is as under:

TABLE – 5.9

Approved Power Purchase Quantum & Cost

Source	Energy in Mu	Cost in Rs.Cr
KPCL Hydel	5552.51	258.64
KPCL Thermal	6755.03	2504.75
CGS	5282.05	1527.36
Major IPP	2749.01	1361.89
NCE	2768.15	978.00

Others	134.97	29.65
Short-term *	3343.99	1518.40
Purchases under UI and others	73.71	9.88
Purchases to meet the deficit *	30.23	12.09
Transmission, SLDC & Other charges	0.00	751.99
TOTAL	26689.64	8952.66

* Shortfall in the energy requirement is to be met by short term / medium term power purchase and other sources.

The details of approved power purchase quantum and cost for FY12 is enclosed in **Annexure - III**.

5.2.5 O & M Expenses

BESCOM's Proposal

BESCOM has requested for approval of Rs.650.88 Crores towards O&M expenses for FY12. The break up of the O & M expenses proposed by BESCOM is as follows:

TABLE – 5.10

O&M Expenses for FY12 – BESCOM's Proposal

Rs. in Crores		
Sl. No.	Particulars	FY-11
1	R&M Expenses	32.54
2	Employee cost	540.23
3	Administrative & General Expenses	78.11
O&M Cost in Rs. Crs.		650.88

Commission's Observations

In accordance with the MYT Regulations, considering the actual O&M expenses for the base year FY10, the Commission has computed the normative O&M expenses for FY12 as under:

TABLE – 5.11

Computation of Normative O&M expenses for FY12

Particulars	FY10	FY11	FY12
No of installations as per actuals as per D2 of the filing	7256308	7578464	8131393
Consumer growth as per actuals / projections	4.53%	4.44%	7.30%
CGI based on 3 Year CAGR (Using actuals of FY10 for FY12)		5.38%	5.38%
Base Year O&M Cost(FY10 as per actuals)	528.17		
O&M Index= O&M (t-1)*(1+WII+CGI-X)		578.18	632.92

Efficiency factor, X = 1% for BESCOM

The Commission in its preliminary observations requested BESCOM to furnish actuarial valuation report for FY11 for providing future liability in respect of pension and gratuity. Further, BESCOM was requested to separately indicate the employee cost component due to proposed pay revision for FY11 and FY12. BESCOM was also requested to furnish data of employees working as per Format D6 (a). The Commission also observed that expenditure under remuneration to contract agencies was indicated at 30% higher than the previous year. Also conveyance and travel expenses were estimated at 28% higher than the previous year.

BESCOM, in its replies to the preliminary observation has stated that the actuarial valuation has been done as on 1st April 2009 and latest valuation is taken up by KPTCL, which would be completed in a couple of months. As regard increase expenditure under remuneration to contract agencies and conveyance and travel expenses, BESCOM has requested approval of O&M expenses on normative basis and any variation to be taken up during APR for FY12.

Further, the Commission in its validation meeting had directed BESCOM to furnish the details of additional employee cost due to proposed pay revision. BESCOM in its reply has stated that the

additional employee cost of Rs.42.98 Crores is included in the proposed employee cost.

Subsequently the pay revision to employees of KPTCL / ESCOMs was approved vide GoK letter No.EN 119 EEB 2010 dated 29.08.2011, according to which an increase in pay by 25% has been approved with effect from 1st April 2010.

Accordingly, the Commission has considered the increase in pay by 25% and impact of revision of HRA component on basic pay being incurred by BESCOM for the present. The computation of this additional employee cost is as follows:

TABLE – 5.12

Computation of Additional Employee Cost for FY12

Particulars	Rs. in Crores
	FY12
Basic Pay*	205.38
Increase in Pay due to Revision as per GoK Order	51.34
DA on increase in pay	32.09
HRA on increase in pay	5.13
Increase in HRA due to Revision	4.11
Allowable uncontrollable additional O&M cost	92.68

* Basic pay is projected at an increase of 3% over the previous year to reflect annual increment.

Thus, the total approved O&M expenses for FY12 is as follows:

TABLE – 5.13

Total approved O&M Expenses for FY12

Particulars	Rs. in Crores
	FY12
Normative O&M expenses	632.92
Additional O&M expenses (uncontrollable)	92.68
Total approved O&M expenses	725.60

The above figures are computed using data as per the audited accounts for FY10 and applying the norms as per the MYT Regulations. However, this is subject to review during APR for FY12. BESCOM shall

furnish the break-up of actual additional employee costs like revision of pay, increase in HRA and increase in P&G contribution if any, separately.

5.2.6 Depreciation

BESCOM 's Proposal

BESCOM has estimated depreciation for FY12 based on CERC rates and has requested the Commission to approve an amount of Rs.202.25 Crores.

Commission's Analysis & Decision

The Commission has considered the CERC prescribed rate of depreciation for arriving at amount of depreciation for FY12. The details of which is as under:

TABLE – 5.14
Approved Depreciation for FY12

Particulars	Closing Balance of Asset as on 31.03.2011*	Depreciation	Rate of Depreciation as per CERC order
Buildings	42.13	1.41	3.34%
Civil	2.75	0.09	3.34%
Other Civil	0.51	0.02	3.34%
Plant & M/c	875.72	46.24	5.28%
Line, Cable Network	3113.59	164.40	5.28%
Metering Equipment	39.13	2.07	5.28%
Vehicles	15.20	1.44	9.50%
Furniture	7.28	0.46	6.33%
Office Equipments	4.33	0.27	6.33%
Sub Total	4100.64	216.40	5.28%
Depreciation Withdrawn		20.00	
Total	4100.64	196.40	4.79%

*Data as per Accounts for FY11

Thus the Commission approves depreciation amount of Rs.196.40 Crores duly considering withdrawal amount of Rs.20.00 Crores for FY12.

5.2.7 Interest & Finance Charges

BESCOM has indicated interest and finance charges as Rs.482.21 Crores for FY12, the breakup of which are as follows:-

TABLE – 5.15

Proposed Interest & Finance Charges

Rs. in Crores

Particulars	FY12
Interest on Loan Capital	185.44*
Interest on Working Capital	167.77
Interest on Consumer Deposit	124.77
Other Interest & Finance Charges	4.23
Total	482.21

*Includes Rs 70.50 Crs towards Short Term Loans.

Commission's Analysis & Decision

a) Interest on Loan Capital

BESCOM in its replies to the preliminary observations has proposed to meet its capex for FY12 by borrowings and internal resources as indicated below:

TABLE – 5.16

Sources for Funding CAPEX

Rs. in Crores

Particulars	FY-12
Proposed Capex	661.00
Internal Resources	363.00
Borrowings	298.00
Debt Ratio	45%
Internal Resource Ratio	55%

BESCOM has indicated Interest on Loan capital as Rs.185.44 Crores which includes short term loans of Rs.70.50 Crores.

Commission's Analysis & Decision

As per the data furnished by BESCOM, an amount of Rs.114.94 Crores is claimed towards interest on Long Term Loans after excluding short-term loans of Rs.70.50 Crores. Considering the average loan for the year, the rate of interest works out to 8.79% per annum.

The Commission would consider the level of borrowing excluding interest on short-term loan of Rs.70.50 Crores as suggested by BESCOM for the purpose of allowing interest and finance charges for financing CAPEX for FY12. The Commission also notes that, the weighted average rate of interest for FY12 is 8.79%, which is less than the prevailing interest rates. Therefore the Commission has considered an interest rate of 8.79% per annum as proposed for projecting interest on long-term loans for FY12. The Commission accordingly allows interest on loan capital as detailed below:

TABLE – 5.17

Approved Interest on Long Term Loans for FY12

Rs. in Crores	
Particulars	FY12
Secured Loans	747.60
Unsecured Loans	1017.03
Total	1764.63
Less Short term loans/ Over draft	566.76
Less Interest accrued & dues	0.00
Long term secured & unsecured loans	1197.87
Add new Loans	298.00
Less Repayments	79.45
Total loan at the end of the year	1416.42
Average Loan	1307.15
Interest proposed on long term loans	114.94
Weighted average rate of interest as filed	8.79%
Interest Rate allowed in %	8.79%
Interest Allowed	114.94

b) Interest on working Capital

BESCOM, in its application, has claimed an amount of Rs.167.77 Crores towards interest on working capital for FY12.

Commission's Analysis & Decision

The Commission has worked out the interest on Working Capital as per norms stipulated in the MYT Regulations duly considering the data as per the provisional accounts for FY11 as under:

TABLE – 5.18
Approved Interest on Working Capital for FY12

Rs. in Crores	
Particulars	FY 12
One-twelfth of the amount of O&M Exp.	60.47
Opening GFA	4109.84
Stores, materials and supplies 1% of Opening balance of GFA	41.10
One-sixth of the Revenue	1717.95
Total Working Capital	1819.52
Rate of Interest (% p.a.)	11.75%
Interest on Working Capital	213.79

c) Interest on Consumer Deposit

BESCOM, in its application, has claimed an amount of Rs.124.77 Crores towards interest on consumer's deposits.

Commission's Analysis and Decision

Considering the opening balance of consumer deposit of Rs.1820.37 Crores as per provisional accounts for FY11, the interest rates works out to 6.85%. As per the KERC (Interest on Security Deposit) Regulations 2005, the interest rate to be allowed is the Bank rate prevailing on the first of April of the relevant year. Duly considering the opening balance

of deposits for the relevant year, the Commission has worked out the same as under:

TABLE – 5.19

Approved Interest on Consumer Deposits for FY12

Rs. in Crores

Particulars	FY12
Outstanding balance of consumer deposits	1820.37
Interest on consumer deposits as filed	124.77
Rate of Interest	6.85%
Rate of Interest at bank rate to be allowed as per regulations	6.00%
Interest allowed.	109.22

d) Other Interest and Finance Charges

BESCOM, in its application, has claimed an amount of Rs.4.23 Crores towards Other Interest and Finance Charges for each year of the control period. The Commission approves the same.

An abstract of the approved Interest and Finance charges is indicated below:

TABLE – 5.20

Approved Interest & Finance Charges for FY12

Rs. in Crores

Particulars	FY12
Interest on Loan Capital	114.94
Interest on Working Capital	213.79
Interest on Consumer Deposit	109.22
Other Interest & Finance Charges	4.23
Total	442.19

5.2.8 Return On Equity

BESCOM has claimed an amount of Rs.13.37 Crores as Return on Equity. Further BESCOM in its replies to preliminary observations has stated that, it is an entity adopting going concern concept and therefore the loss incurred will be set off against the future gains.

Hence BESCOM has requested to allow RoE on equity component only.

Commission's Analysis & Decision

The Commission has considered an RoE of 15.5% and applicable Minimum Alternate Tax (MAT) for assessment year 2012-13 of 20.00775% on RoE. This works out to 19.377%. Accordingly, as per the Provisional Accounts for FY11, the projections of post tax RoE for FY12 is worked out below:

TABLE – 5.21
Approved RoE for FY12

Rs. in Crores

Particulars	FY12
Paid Up Share Capital	205.95
Share Deposit	298.46
Reserves and Surplus	-359.60
Total Equity	144.81
Approved RoE @ 19.377%	28.06

5.2.9 Income Tax

BESCOM, in its application, has claimed an amount of Rs.0.88 Crore as provision for Income Tax for FY12. **Since RoE has been provided at 19.377% considering MAT at 20.0008%, the question of allowing any income tax separately does not arise.**

5.2.10 Fund towards Consumer Relations / Consumer Education

The Commission in its Order dated 07.12.2010 had allowed an amount of Rs.1.00 Crore per year in the ARR towards funds for consumer relations and consumer education programs in BESCOM. The Commission is of the view that there is a need for the utilities to continue its efforts in providing adequate information and improve their consumer relations especially at the Section level and Sub-

Division level. Further, ESCOMs have to conduct grievance redressal meetings periodically and institutionalize a mechanism for addressing common problems of the consumers. In this regard, the Commission has allowed Rs.1.00 Crore for the same.

A detailed plan of action on implementation of these measures shall be submitted to the Commission within two months from the date of this Order.

5.2.11 Other Income

BESCOM, in its application, has indicated an amount of Rs.150.46 Crores, for FY12. The Commission, in its preliminary observations sought to know the reasons for under estimation of other income from Rs.274.20 Crores in FY11 to Rs. 150.46 Crores in FY12. However BESCOM in its replies has stated that for FY11 other income of Rs.274.20 Crores included an amount of Rs.154.95 Crores which corresponded to withdrawal of excess of provision made in FY10. Thus BESCOM has requested the Commission to consider non tariff income as Rs.119.25 Crores for FY11. However as per the provisional accounts the same has been indicated as Rs.173.68 Crores for FY11. Considering the other income in FY11, the Commission has retained the same at Rs.173.68 Crs for FY12.

5.3 Abstract of ARR for FY12

An Abstract of the approved consolidated Annual Revenue Requirement of BESCOM for FY12 is given below:

TABLE – 5.22
Approved consolidated ARR for FY12

Rs. in Crores

APPROVED ARR FOR FY12 - BESCOM			
Sl. No.	Particulars	FY12	
		As per filing*	As approved
1	Power purchase cost inclusive of transmission charges and SLDC Charges	10551.89	8952.66
2	R&M Expenses		
3	Employee Expenses		
4	A&G Expenses	650.88	725.60
5	Depreciation	202.25	196.40
6	Interest & Finance Charges		
7	Interest on Loan Capital	185.44	114.94
8	Interest on Working Capital	167.77	213.79
9	Interest on Consumer Deposits	124.77	109.22
10	Interest on belated payment of power purchase cost	0.00	0.00
11	Other Interest & Finance Charges	4.23	4.23
12	Less: Interest & other expenses capitalised	0.00	0.00
13	Other Debits (incl. Prov for Bad debts)	0.00	0.00
14	Extraordinary Items	0.00	0.00
15	Other (Misc.)-net prior period credit	0.00	0.00
16	Power purchase cost as per decision in OP No.8/2009 dated 11.12.2009		12.58
17	Total	11887.23	10329.42
18	ROE	13.37	28.06
19	Other Income	150.46	173.68
20	Provision for taxes	0.88	0.00
21	Fund towards Consumer Relations / Consumer Education	1.00	1.00
22	Regulatory Assets	221.00	0.00
23	NET ARR	11973.02	10184.80

5.4 Segregation of ARR into Distribution and Retail Supply Business

The Consolidated ARR has been segregated into ARR for Distribution Business and ARR for Retail Supply Business based on the following allocation.

TABLE – 5.23
Segregation of Costs

Particulars	Distribution Business	Retail Supply Business
O&M	56%	44%
Depreciation	88%	12%
Interest on Loans	100%	0%
Interest on Consumer Deposits	0%	100%
RoE	50%	50%
GFA	88%	12%
Non Tariff Income	19%	81%

Accordingly, the following are the ARR for Distribution Business and Retail Supply Business:

TABLE – 5.24
ARR for Distribution Business – FY12

Sl. No	Particulars	Rs. in Crores
		FY12
1	R&M Expenses	
2	Employee Expenses	
3	A&G Expenses	406.33
4	Depreciation	172.83
	Interest & Finance Charges	
5	Interest on Loan Capital	114.94
6	Interest on Working Capital	22.36
7	Interest on Consumer Deposits	0.00
8	Interest on belated payment of power purchase cost	0.00
9	Other Interest & Finance Charges	4.23
10	Less: Interest & other expenses capitalised	
11	Other Debits (incl. Prov for Bad debts)	0
12	Extraordinary Items	0
13	Other (Misc.)-net prior period credit	0.00
	Total	720.69
15	ROE	14.03
16	Other Income	33.00
17	Provision for taxes	0.00
	NET ARR	701.72

TABLE – 5.25
ARR for Retail Supply Business – FY12

Rs. in Crores		
Sl. No	Particulars	FY12
1	Power Purchase	8952.66
2	Transmission Charges	
3	R&M Expenses	
4	Employee Expenses	
5	A&G Expenses	319.26
6	Depreciation	23.57
	Interest & Finance Charges	
7	Interest on Loan Capital	0
8	Interest on Working Capital	191.43
9	Interest on Consumer Deposits	109.22
10	Interest on belated payment of power purchase cost	0.00
11	Other Interest & Finance Charges	0.00
12	Less: Interest & other expenses capitalised	
13	Other Debits (incl. Prov for Bad debts)	0
14	Extraordinary Items	0
15	Other (Misc.)-net prior period credit	0.00
16	Power purchase cost as per decision in OP No.8/2009 dated 11.12.2009	12.58
	Total	9608.73
17	ROE	14.03
18	Other Income	140.68
19	Provision for taxes	0.00
20	Fund towards Consumer Relations / Consumer Education	1.00
	NET ARR	9483.08

5.5 Average Cost of Supply

Based on the approved ARR, the average cost of supply of BESCOM for each year of the control period is worked out as under:

TABLE – 5.26

Average Cost of Supply for FY12

Rs. in Crores		
Sl. No	Particulars	BESCOM
1	ARR for FY12	10184.80
2	Revenue at existing tariff	9809.31
3	Deficit for FY12	375.49
4	Deficit of FY11	313.03
5	Regulatory Asset for FY13	91.00
6	Net Deficit	597.52
7	Net ARR including deficit of FY11 less Regulatory Asset	10406.83
8	Energy Sales in MU	21911.42
9	Average Cost (Rs. per unit)	4.75

From the above it is seen that, the average cost of supply for FY12 is Rs.4.75 per unit. The Commission decides to carry forward a Regulatory Asset of Rs. 91.00 Crs to be recovered in FY13.

The determination of the retail supply tariff of BESCOM for FY12 based on the revenue deficit as per approved ARR is discussed in Chapter - 6 of this order.