

# **Analysis of ARR & Tariff Proposal of SOUTHCO for FY 2013-14**

February 20, 2013

By

World Institute of Sustainable Energy

(Consumer Counsel)

# **ARR Proposal of SOUTHCO**

# ARR of SOUTHCO FY 13-14 (cr)

ARR Components	2013-14 (Projected) Cr
Power purchase cost	745.74
Employee Cost	250.58
A&G Cost	46.16
R&M Cost	64.96
Depreciation	43.99
Bad Debts	24.92
Interest & Finance charges	72.05
Reasonable return	6.03
Special appropriation	521.56
(-) Expenditure & interest capitalized	8.62
<b>Total ARR</b>	<b>1767.35</b>
<b>Sale of Power at existing tariff</b>	<b>825.50</b>
Other non tariff Revenue	7.46
<b>Total Revenue Realisation</b>	<b>832.96</b>
<b>Revenue Gap with existing Tariff</b>	<b>-(934.25)</b>

# Prayer of SOUTHCO

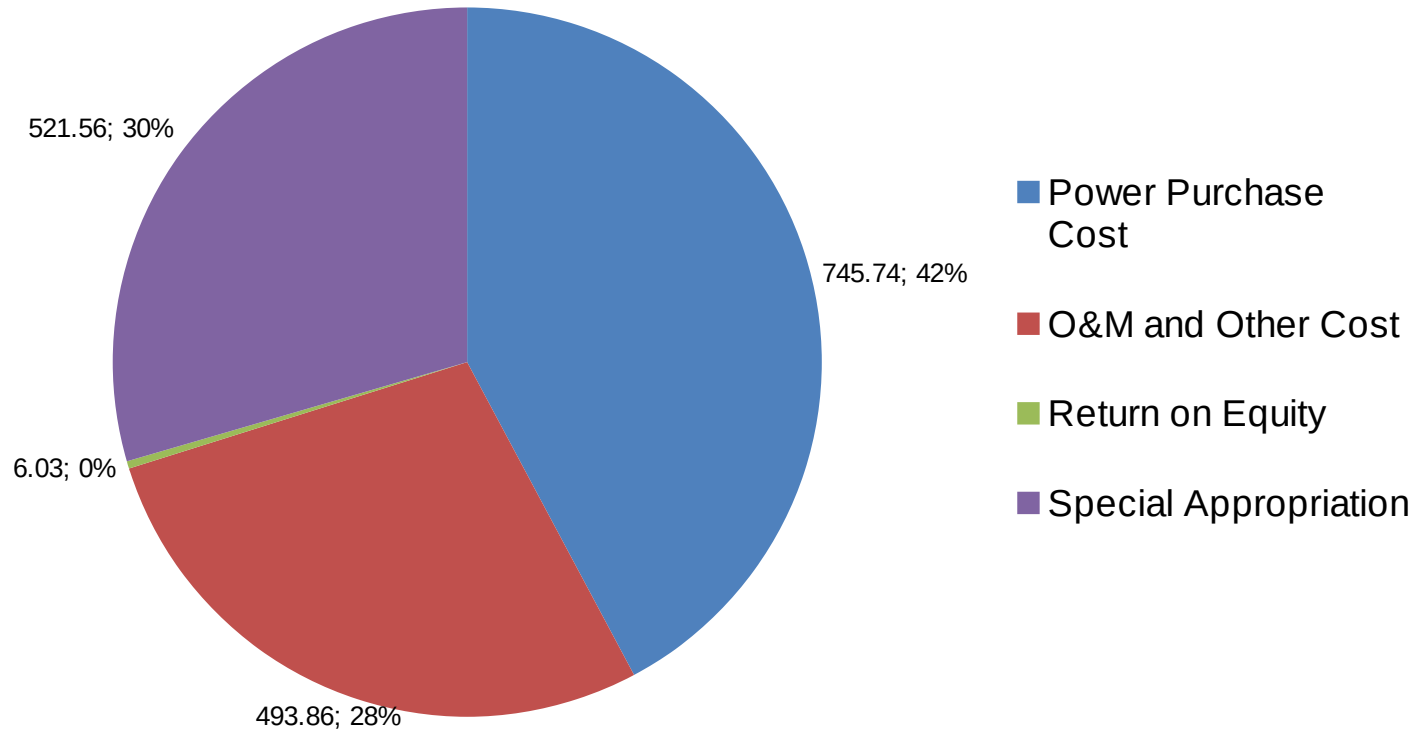
- Take the accompanying ARR and Tariff Petition on record.
- Approve the Annual Revenue Requirement for FY 2013-14 including **amortization of regulatory assets** on account of uncovered gap up to 2010-11 .
- Approve the **truing up impact for FY 2011-12 and FY 2012-13.**
- **Bridge the Revenue Gap for the FY 2013-14** through increase in Retail Supply Tariff, reduction in Bulk Supply Tariff (BST), grant/subsidy from the State Government of Orissa etc.
- To consider the servicing of the loan liability as 1st priority on the escrow utilization to enable SOUTHCO to raise funds for CAPEX
- To give effect to the ATE order dated 8.11.2010 on different issues such as fixation of Distribution loss target, truing up of previous years accordingly.
- GRIDCO and GoO may kindly be advised to implement the earlier order of Hon'ble Commission i.e **cede the licensees assets for raising loan.**
- Allow the **Tariff rationalization measures** as proposed by the utility

# Proposed Tariff Rationalisation Measures

- Fixation of Minimum Charges for LT (SI), LT(MI) Category of Consumers
- Applicability Delayed Payment Surcharge to all category consumer
- Introduction of KVAH Billing
- Two part tariff for Emergency power supply to Captive Power Plants (CPP)
- Introduction of Time of season (ToS) tariff
- Discontinuation of Load Factor Incentive and Take or Pay Tariff
- Exclusion of Meter Rent as Misc Revenue
- Revised tariff for the Lift irrigation Points.
- Revision in Demand charges and MMFC to recover fixed cost
- MMFC for Consumers with Contract Demand <110 KVA depending on CD or MD

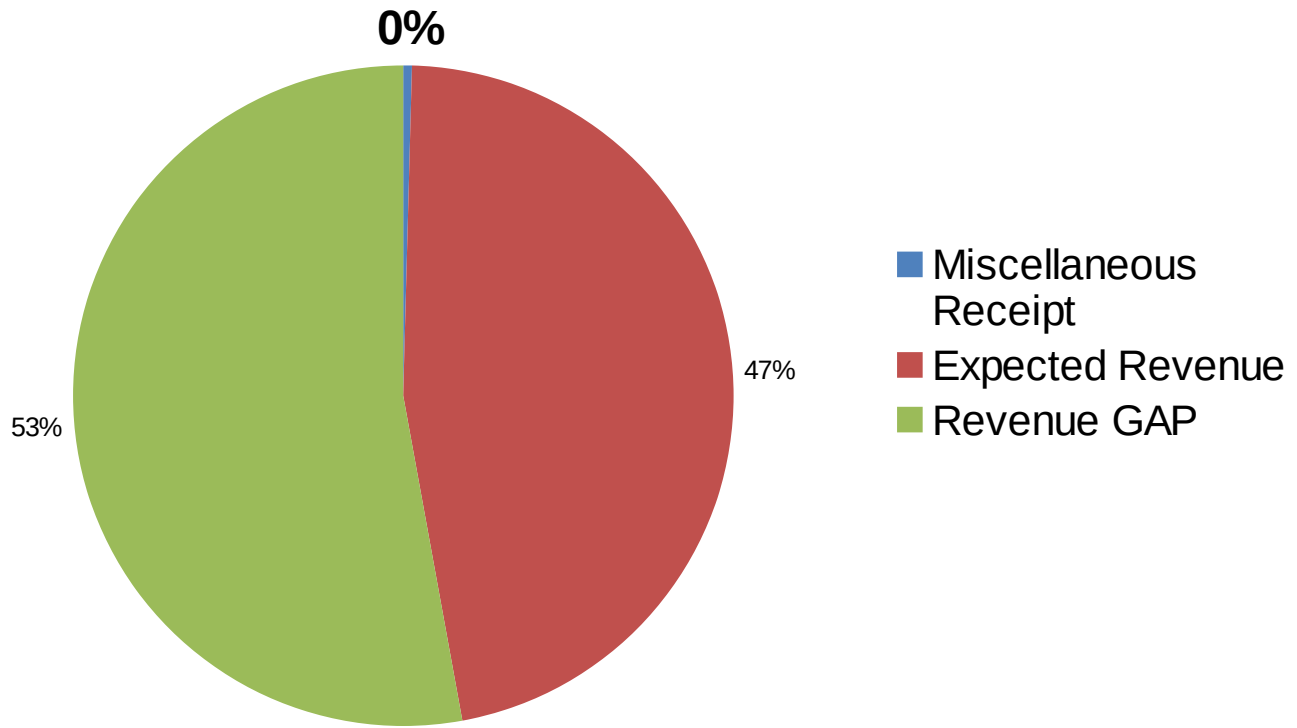
**Analysis of SOUTHCO  
ARR by Consumer  
Counsel**

# Cost Components of ARR



Total Power Purchase Cost including transmission and SLDC cost (A)	745.74	Rs Cr
Total Distribution cost ( O&M and Other Cost) (B)	496.98	Rs Cr
Return on Equity (C)	6.03	Rs Cr
Total Special Appropriation (D)	521.56	Rs Cr
<b>Total Cost (A+B+C+D)</b>	<b>1767.2</b>	<b>Rs Cr</b>

# Revenue GAP of SOUTHCO for FY 2013-14



Total Cost for FY 13-14	1767.2	Rs. Cr.
Less: Miscellaneous Receipt FY 13- 14	7.46	Rs. Cr
Expected Revenue (Full year )	825.5	Rs. Cr
GAP at existing tariff (+/-)	(-) 934.24	Rs. Cr



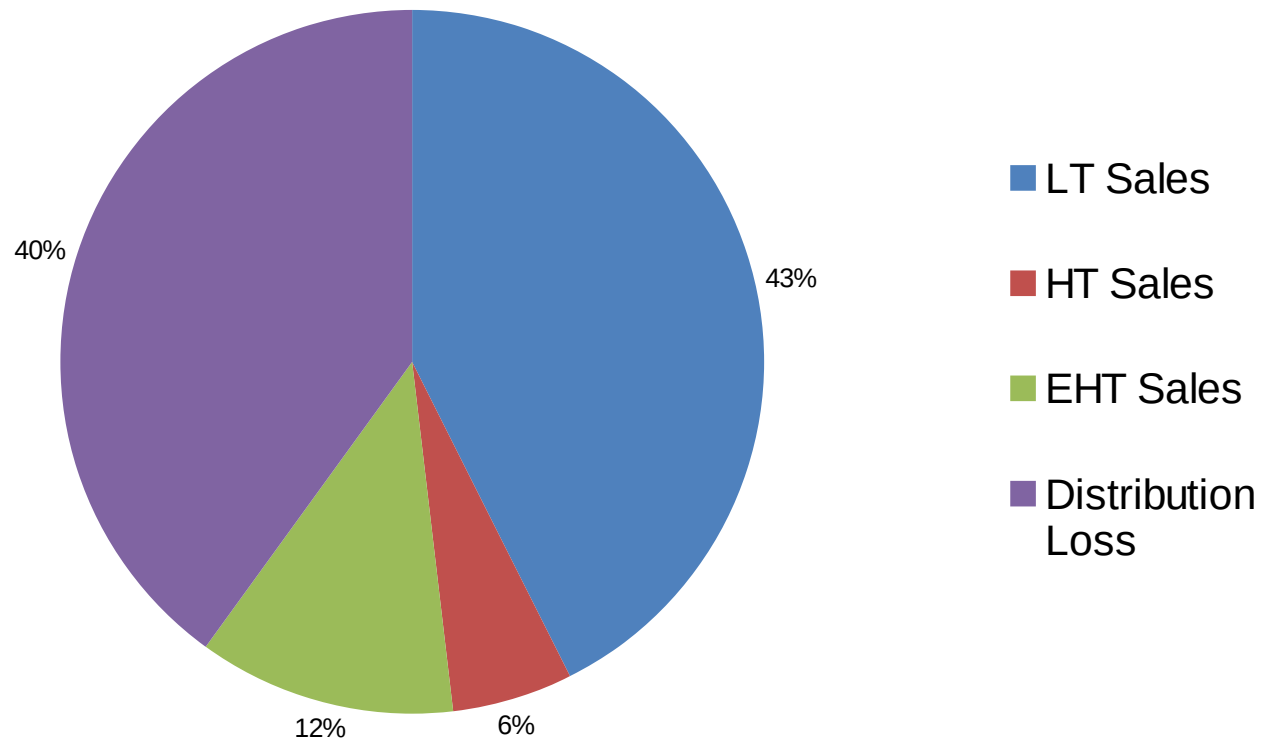
# **Submission on Cost Components of ARR**

# Power Purchase Cost

## Analysis of Important Factors:

1. Utilization of proposed power
2. Demand forecasts
3. Distribution Loss
4. Collection Efficiency
5. AT & C Loss

# Utilization of purchased power (FY 13-14)



**Observation:**

- Licensee has proposed to purchase **3,600 MU**.
- **40% of purchased power** will be the distribution loss and **actual sales projected is 60%**
- At current BSP the cost of power purchase is **Rs. 745.74 Cr** for FY 2013-14 and this will further go up with increase in BSP for the FY 13-14.

# Demand Forecasting

	LT	HT	EHT	Total
Est. Power Purchase in MU for FY 2013-14				3600
Power Purchase Approved in MU for FY 2012-13				3047
<b>% Increase in Purchase</b>				<b>18.15</b>
Estt .Sales in MU for FY <b>2013-14</b>	1533	200	426	2159
Est. Sales in MU for FY <b>2012-13</b>	1131	191	400	1722
<b>% Increase in sales</b>	<b>35.53</b>	<b>4.60</b>	<b>6.50</b>	25.36
No of Consumers on 1 April 2013	1298077	814	12	1298903
No of Consumers on 1 April 2012	880649	756	12	881417
% Increase In Consumers	47.40	7.67	0.00	47.37

**Observation:** Licensee has **proposed 18.15% increase** in overall power purchase.

In its sales forecast the LT sales has been projected a 35.531% increase over the last financial year due to 47.40% increase in consumer base. (4.17 Lakh LT consumers)

# Growth in LT / BPL consumers

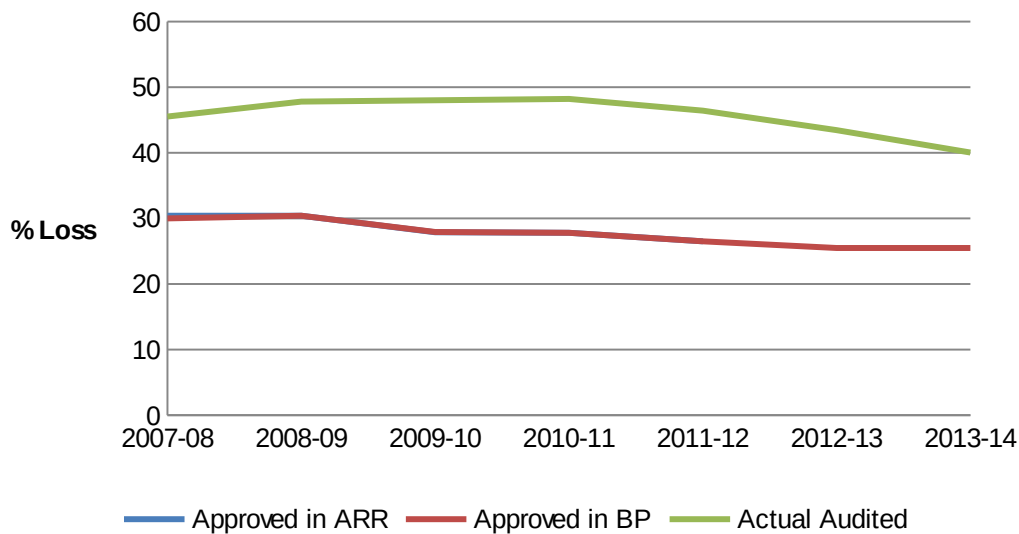
Consumer Category	No of Consumers				Consumption (in MU)			
	FY 12-13 (projected)	FY 13-14	Diff	% Increase	FY 12-13	FY 13-14	Diff	% Increase
LT Total	880649	1298077	417,428	47.40	1131	1533	402	35.54
BPL	150767	503813	353,046	234.17	92.045	244.32	152.275	165.44
% Share of BPL in LT Total	17.12	38.81			8.14	15.94		

Consumer Category	Consumption (in MU)					
	FY 09-10 (Actual)	FY 10-11 (Actual)	FY 11-12 (ARR Projections)	FY 11-12 (Actual)	FY 12-13 (Projected)	FY 13-14 (Projected)
LT Total	702.15	817.668	1028.89	932.78	1131	1533
BPL	3.323	12.256	76.64	40.38	92.045	244.32
% BPL of LT Total	0.47	1.50	7.45	4.33	8.14	15.94

**Observation:**

- In FY 12-13 BPL consumers were just 17.12% of total LT consumers which will rise to 38.81% of LT consumers in FY 2013-14.
- Energy sale to BPL consumer will be about 15.94% of total LT sales for FY 2013-14.

# Distribution Loss (%)



**Observation:**

- Licensee has projected distribution loss of **(40.03%)** over **BP** approval of **(25.5%)** **FY 13-14.**
- Further, trend of actual distribution loss is increasing. In last five years loss has been increased . Audited Dist Loss in FY07-08 was 45.5 % where as audited loss for FY 11-12 is 46.43% .

**Submission:**

- Licensees request to review the base line distribution loss may not be considered.
- Loss of revenue realization / higher energy purchase ( 14.53%, 523MU,108 Cr ) due to higher distribution loss should not be allowed to passed on to consumer.

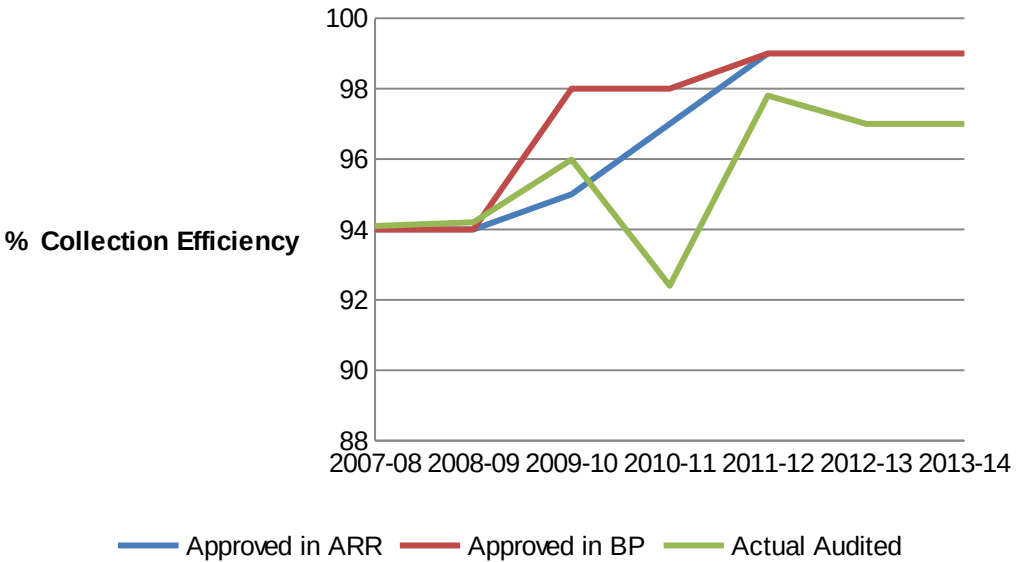
	Approved in ARR	Approved in BP	Actual Audited /EST	Performance
2007-08	30.4	30	45.5	15.1
2008-09	30.4	30.42	47.8	17.4
2009-10	27.9	27.92	48.02	20.12
2010-11	27.82	27.82	48.21	20.39
2011-12	26.5	26.5	46.43	19.93
2012-13	-	25.5	43.47*	<div style="border: 2px solid red; padding: 5px; display: inline-block;"> <span style="color: red; font-weight: bold; font-size: 1.2em;">+0.93%</span> </div>
2013-14	-	25.5	40.03*	

\* Provisional

# LT Distribution Loss Across the Utilities FY 13-14

	CESU	SOUTHCO	NESCO	WESCO
Overall Distribution Loss proposed	32.00	<b>40.03</b>	32.53	35.01
Distribution Loss Excluding EHT consumption	39.15	<b>45.40</b>	43.76	44.46
LT Distribution Loss (Excluding EHT and HT loss of 8% )	41.88	<b>43.64</b>	43.70	53.31
Distribution Loss Approved in BP FY 2012-13	23	<b>25.5</b>	18.35	19.6

# Collection Efficiency (%)



	Approved in ARR	Approved in BP	Actual Audited	Performance
2007-08	94	94	94.1	0.1
2008-09	94	94	94.2	0.2
2009-10	95	98	95.98	-2.02
2010-11	97	98	92.4	-5.6
2011-12	99	99	97.8	-1.2

## Observation:

- Licensee has proposed Collection efficiency of 97% which is lower than that of approved in BP for FY 13-14
- In last five years the collection efficiency has been increased from 94.1% in FY 07-08 to 97.8 % in FY 11-12.
- The revenue collection also includes the past years arrear collection ( OTS) and hence the proposed collection efficiency doesn't reflect the actual collection efficiency of the utility.

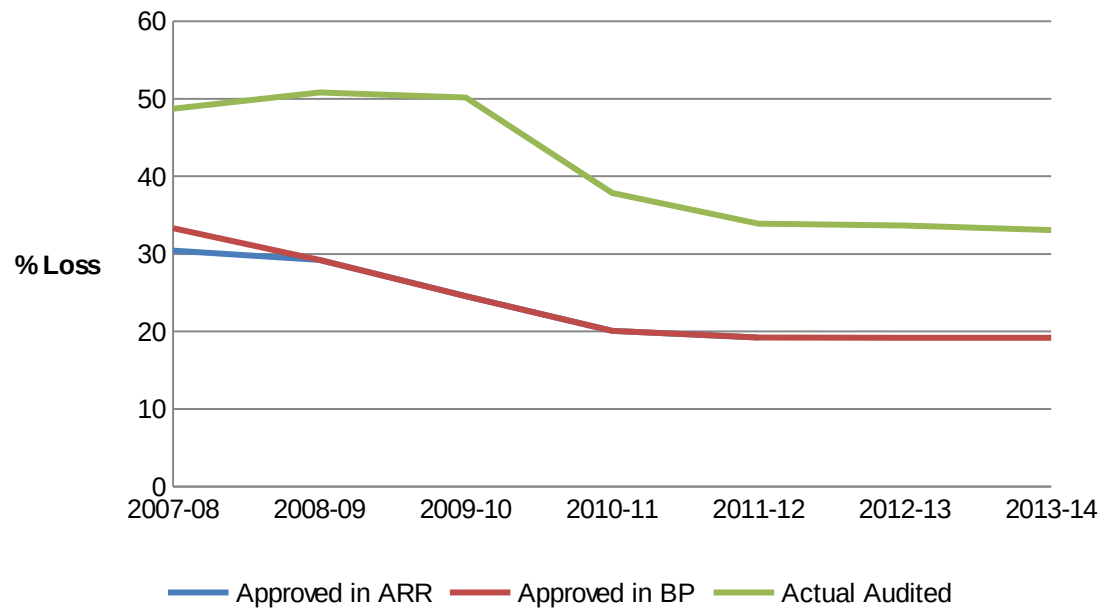
## Submission:

- Revenue collection for current bills and that of past arrears needs to separately analyzed.

\* Provisional



# AT & C Loss (%)



## Observations:

-Licensee has proposed 41.83% AT&C Loss.

In last five years the AT&C losses have reduced by 1.09% (from FY 07-08 to FY 11-12 Audited)

## Possible reason for high AT & C Loss

- 1) Lower HT to LT ratio.
- 2) Poor Power factor
- 3) Aged transmission lines and poor jointing
- 4) Less energy Audits
- 5) Faulty meters and metering
- 6) Higher thefts

	Approved in ARR	Approved in BP	Actual Audited	Performance
2007-08	34.6	34.2	48.7	14.1
2008-09	34.6	34.59	50.8	16.2
2009-10	29.4	29.36	50.16	20.76
2010-11	29.27	29.26	52.15	22.88
2011-12	27.24	27.24	47.61	20.37
2012-13		26.25	45.17*	
2013-14		26.25	41.83*	-1.09%

\* Provisional

# Distribution Cost of SOUTHCO for FY 2013-14

Distribution Costs	In Rs Cr		%
	FY 12-13	FY 13-14	Change
a) Employees cost	186.17	250.58	34.60
b) Repair and Maintenance cost	28.28	64.96	129.71
c) Admin. & General Expenses	19.17	46.16	140.78
d) Provision for bad and doubtful debts	6.92	24.76	257.87
e) Depreciation	14.95	43.99	194.25
f) Other expenses	0.00	0.00	0.00
g) Less expenses capitalized (Emp Costs, A&G, R&M)	2.66	2.94	10.71
h) Interest and financial charges	15.98	72.05	315.28
i) Less interest capitalized		5.69	
<b>Total Expenses (a + b + c + d + e + f - g + h - i)</b>	<b>268.81</b>	<b>493.87</b>	<b>83.72</b>

## Observation:

-Licensee has proposed **83.72% hike in Distribution Cost for FY 2013-14** over the approved cost for FY 2012-13

# ARR Cost Component – Employee Cost

## Observation:

- The licensee has proposed the employee cost of Rs **250.58 Cr** in ARR ; which is **34.60 % more than** FY 2012-13 approved employee cost .

## Submission :

- Out of this projected expenses majority is on account of the terminal benefit expenses (Rs.103 Cr.) . May be verified by the Hon Commission.

	Employee Cost (Paise/Unit of power purchase)						% Rise in FY 13-14 over 12-13
	FY08-09 (App)	FY 09-10 (App)	FY10-11 (App)	FY 11-12 (App)	FY 12- 13 (App)	FY 13- 14	
CESU	30.79	32.23	34.83	37.75	41.27	35.27	-14.53
SOUTHCO	47.04	45.62	56.57	56.20	61.10	<b>69.61</b>	13.92
NESCO	21.96	26.67	28.81	29.55	33.93	57.65	69.93
WESCO	19.36	21.60	26.70	25.77	31.84	48.13	51.18

# ARR Cost Component – A&G Cost

## Observation:

- Licensee has proposed A&G expenses of **Rs. 46.16 Cr** for FY 2013-14 which is 140.78% higher over the approved expenses for FY 2012-13.
- which include an additional A&G expenses of **Rs 30.39Cr** over the normal A&G expenses

## Submission :

- As per the MYT order since it is controllable cost **7% escalation may** be allowed on the approved value for FY12-13 for normal A&G.
- The additional A&G expenses claimed towards customer care, special police station, automation / IT expenses, inspection of network etc need to be verified before allowing in ARR.

	A&G Cost (Paise/Unit of power Purchase)						% Rise in FY 13-14 over FY 12-13
	FY 08-09 (App)	FY 09-10 (App)	FY 10-11 (App)	FY 11-12 (App)	FY 12-13 (APP)	FY 13-14 (EST)	
CESU	4.96	4.77	5.59	5.90	4.82	6.17	27.91
<b>SOUTH CO</b>	<b>6.51</b>	<b>6.84</b>	<b>7.58</b>	<b>9.10</b>	<b>6.29</b>	<b>12.82</b>	<b>103.80</b>
NESCO	3.12	3.68	3.34	4.42	4.03	8.72	116.52
WESCO	3.68	3.55	3.97	4.65	4.50	6.91	53.55

# ARR Cost Component – R&M

## Observation:

Licensee has proposed **Rs. 64.96 Cr** as R&M expenses. These expenses were projected as **5.4% of the opening GFA of Rs. 1202.99 Cr. at the beginning of FY-2013-14**

## Submission:

- Utilities GFA approved by commission as on **31.03.2012** were **394.15 Cr.** Utility has projected the GFA as Rs. 1202.99 Cr. Including the RGGVY and BGJY assets at the beginning of ensuring year.
- Assets creation under RGGVY and BGJY schemes should not be considered under GFA as it is not transferred to utility.

# ARR Cost Component – Provision for Bad Debt & RoE

## **Observation:**

Licensee has proposed Rs 24.92 Cr as provision for Bad Debt by considering 97% collection efficiency as against 99% approved in BP for FY 12-13.

**Submission** : additional Bad Debt due to 2% less collection efficiency may not be approved.

Return on Equity

## **Observation:**

Equity capital is constant for the current and ensuing year. There is no new equity capital infusion from DISCOM.

## **Submission**

RoE approved for FY 2012-13 may be allowed for ensuing year. .

# Per Unit Distribution Cost

Per Unit Distribution Cost (Paise /Unit)						% Rise in FY 13-14 over FY12-13
FY 09-10 (App)	FY 10-11 (App)	FY 11-12 (App)	FY 12-13 (App)	FY 13-14 (Estt)		
CESU	61.99	66.07	65.63	67.67	89.44	32.16
SOUTHCO	80.11	93.11	90.76	90.20	<b>138.86</b>	53.94
NESCO	53.25	53.31	57.23	63.08	104.12	65.07
WESCO	41.77	48.99	47.63	55.24	99.22	79.62

## Total Distribution Cost

Per Unit Distribution Cost = Total power purchase

# Computation of Average Cost of Supply

	A	B	C	D	E
	Total ARR (In Rs Cr) FY 13-14	Proposed Power Purchase (In MU)	Total Sales with proposed Dist. Loss (in MU)	Total Sales with Dist Loss as per BP (in MU)	ARR excluding Special Appropriation (in Rs Cr)
CESU	3030.31	8210.47	5583.12	6322.06	3030.31
SOUTHCO	1759.74	3600	2159.06	2682	1238.18
NESCO	2957.16	6140.23	4142.81	5013.49	2615.11
WESCO	3161.93	6821	4433	5484.08	2843.52
<b>Total</b>	<b>10909.14</b>	<b>24771.7</b>	<b>16317.99</b>	<b>19501.64</b>	<b>9727.12</b>

Avg. Cost of Supply for State =  $\frac{\text{(A, proposed total ARR)}}{\text{(C, total sales with proposed loss)}}$  = 668.53 per kWh

Avg. Cost of Supply for State =  $\frac{\text{(E, ARR excluding special appropriation)}}{\text{(D sales with distribution loss as per BP)}}$  = 498.78 per kWh.

Avg. Cost of Supply Approved for FY 12-13 was 460.51 paise per kWh.

**For FY 2013-14 it could be close to 498.78 paise PU (+20% is- 598. 54 and -20% is 399.02)**

BPL consumers tariff should be minimum – 249.39 paise per unit (50% of Avg. cost of Supp)



# Submission of the Consumer Counsel

# CAPEX programme of Govt of Odisha

- The GoO has sanctioned investment proposal of Rs 2400 Cr on 5th Nov 2010 with following arrangement

Share of GoO in the form of soft loan over 4 yr period ( FY 10-11 to FY 13-14)	Rs 700 Cr
GoI , Finance Commission grant	Rs 500 Cr
DISCOM Contribution	Rs 1200 Cr

## Year wise Plan Outlay for CAPEX programme for SOUTHCO

	FY 10-11	FY 11-12	FY 12-13	FY 13-14
F.C. grant + GoO share	61.50	82.00	51.25	51.25
DISCOM share	0	41.00	82.00	123.00

•DPR's for two years ( FY 10-11, FY 11-12) are approved by OERC

- The status of work is not furnished in the ARR but GFA has been increased for FY 13-14 . May not be approved

# Tariff rationalization/ DSM measures

Tariff rationalization / DSM measures adopted by the Commission in previous tariff order are supported with reasoned analysis and seems to be beneficial for all type of consumer . Therefore , Commission may adopt the same with further improvement.

- Emergency power supply to CGPs
- Peak and off-peak tariff
- Incentive for improvement in power factor
- Power factor penalty
- Over drawl during off-peak hour
- Incentive for prompt payment
- special rebate
- Delayed payment surcharge

**The tariff Rationalization measures suggested by utility are not supported with the reasoned analysis and also are not in line with EA 2003 , OERC Distribution Code 2004 , OERC MYT Tariff Regulation.**