

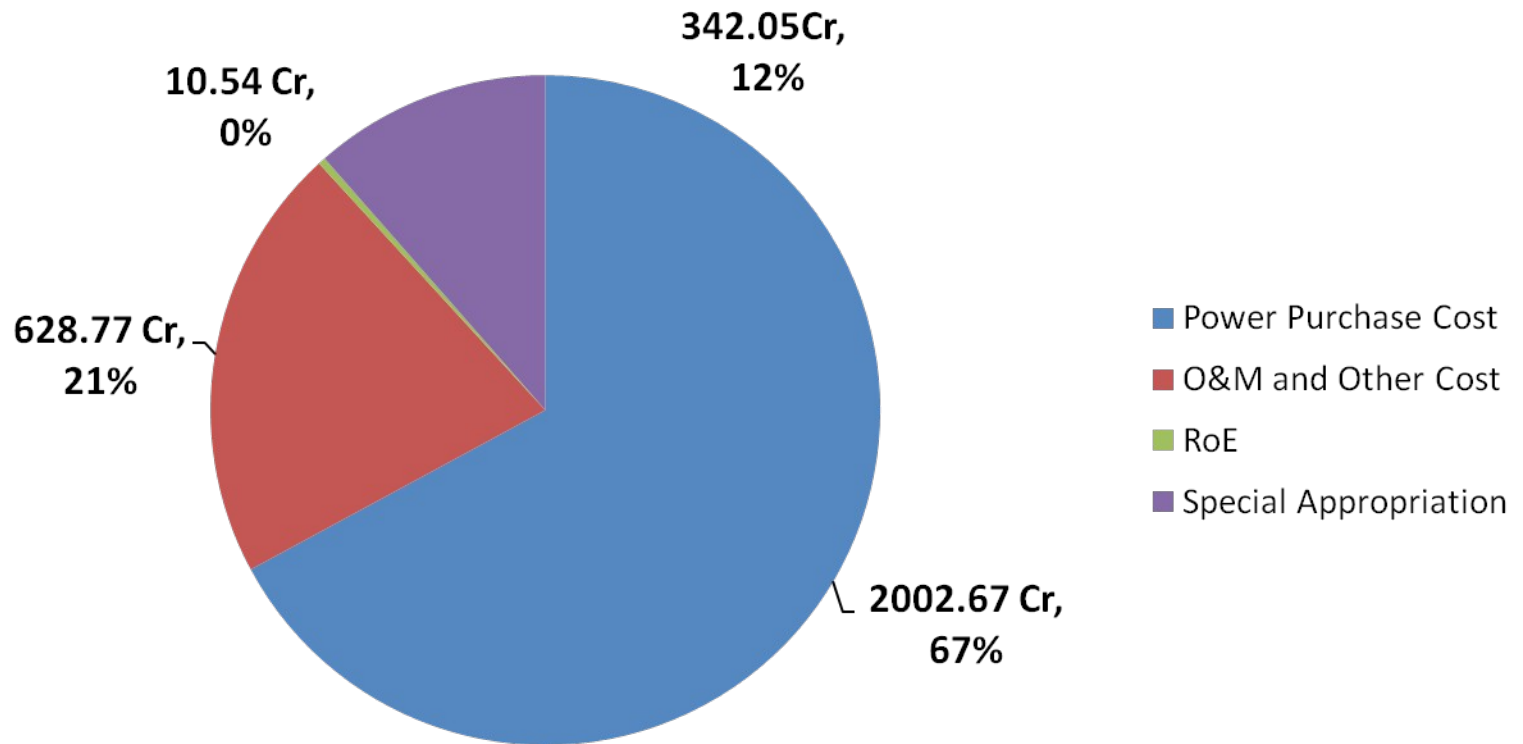
Analysis of ARR & Tariff Proposal of NESCO for FY 2013-14

February 12, 2013

By

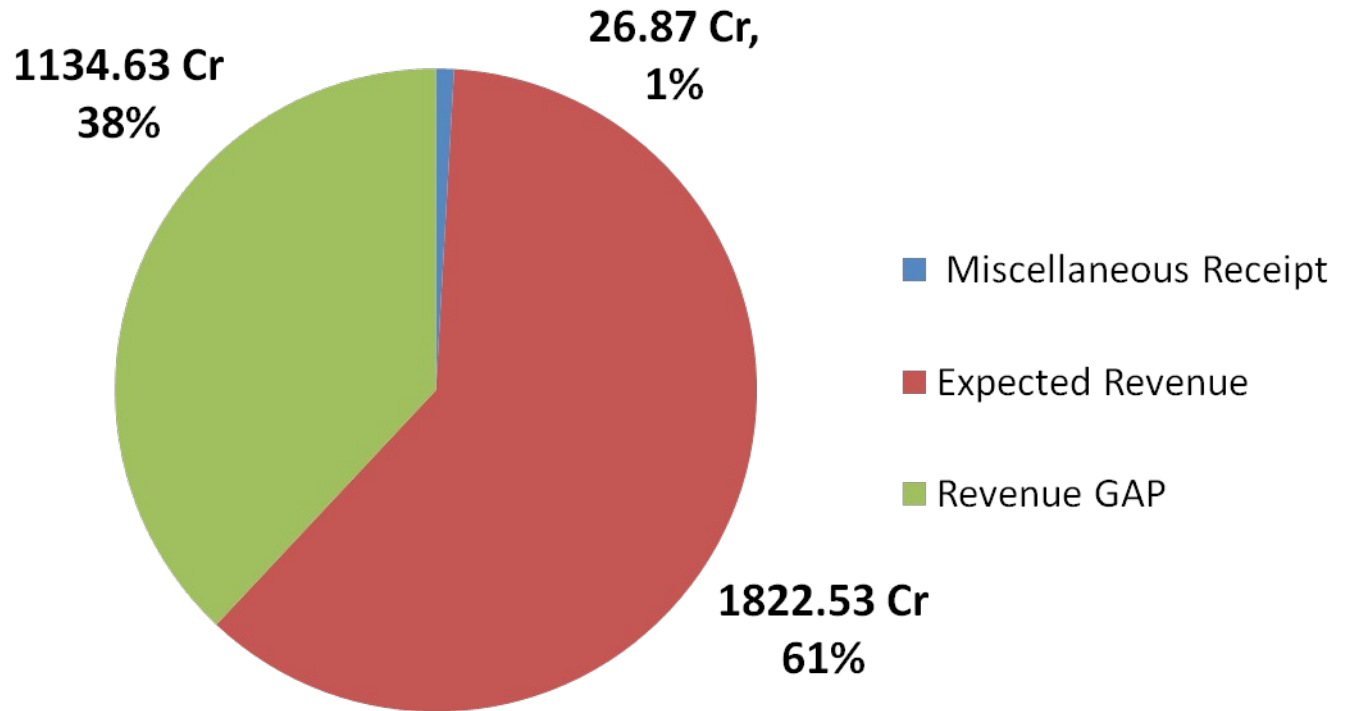
**World Institute of Sustainable Energy
(Consumer Counsel)**

Cost Components of ARR



Total Power Purchase Cost (A)	2002.67	Rs Cr
Total O&M and Other Cost (B)	628.77	Rs Cr
Return on Equity (C)	10.54	Rs Cr
Total Distribution Cost (A+B+C)	2641.98	Rs Cr
Total Special Appropriation (D)	342.05	Rs Cr
Total Cost (A+B+C+D)	2,984.03	Rs Cr

Revenue GAP of NESCO for FY 2013-14



Total Cost for FY 14	2,984.03	Rs. Cr.
Less: Miscellaneous Receipt FY 14	26.87	Rs. Cr.
Expected Revenue (Full year)	1822.53	Rs. Cr.
GAP at existing(+/-)	(-) 1,134.63	Rs. Cr.

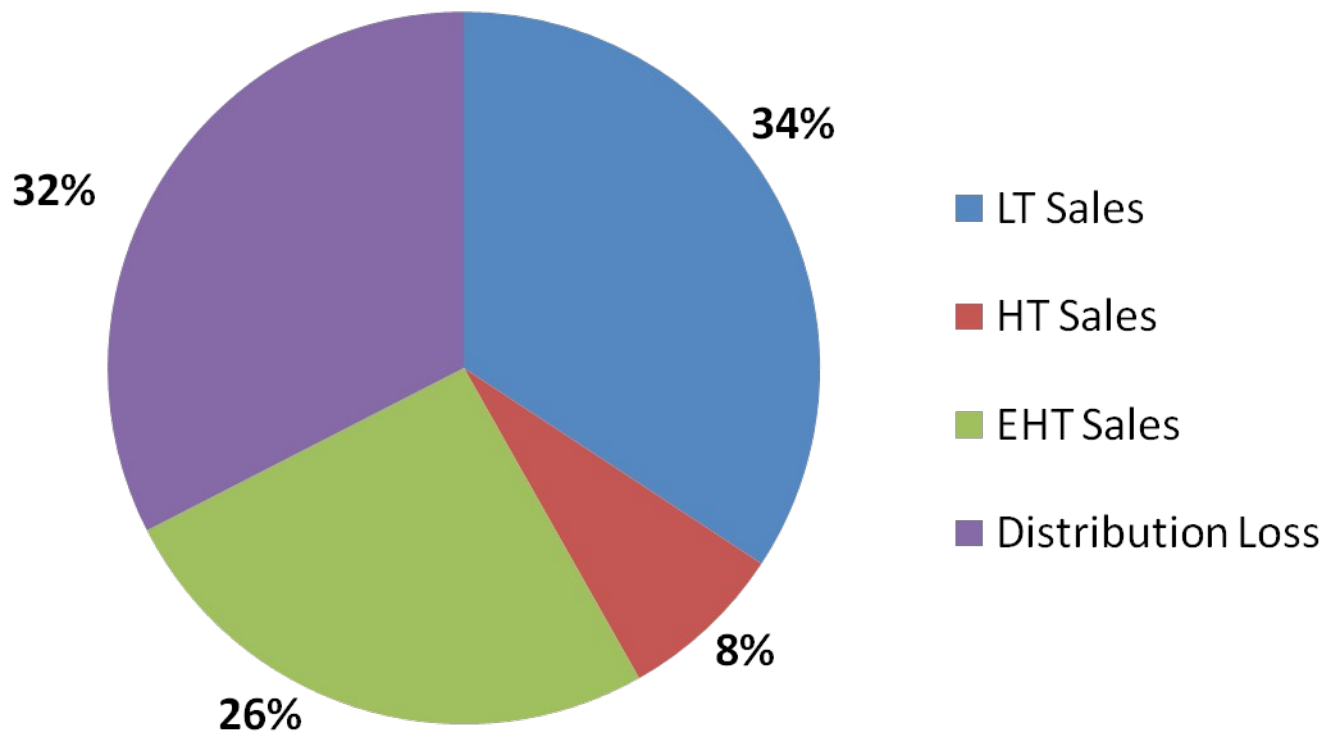
Tariff Proposal of NESCO

- 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 and truing up 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 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 cede the licensees assets for raising loan.
- Allow the Tariff rationalization measures proposed;
- Allow the licensee to submit additional documents, modify the present petition, if so required, during the proceeding of this application.
- Any other relief order or direction which the Hon'ble Commission deems

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)
- 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 full fix distribution cost
- MMFC for Consumers with Contract Demand <110 KVA
- Other Issues
 - Issue of Guidelines for replacement of burnt transformers with precondition of 50% arrear payment be made
 - Creation of dedicated feeders for AG and irrigation purpose
 - Determination of Minimum Fixed Tariff for rice processing units/ rice haulers
 - Exclusive Energy Police Station
 - 2% Rebate on payment of BST bills within 3 days time instead of 2 working days

Proposed Power Purchase - Cost and its Utilization



Observation:

- Licensee has proposed to purchase **6,140.23 MU**.
- 32% of purchased power** will be the **distribution loss** and **actual sales projected is 68%**
- At current BSP the cost of power purchase is **Rs. 2,002.67 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				6140
Power Purchase Approved in MU for FY 2012-13				5306
% Increase in Purchase				15.72
Est. Sales in MU for FY 2013-14	2103	465	1575	4143
Est. Sales in MU for FY 2012-13	1619	464	1704	3787
% Increase in sales	29.91	0.21	-7.59	9.40
No of Consumers on 1 April 2013	1627491	399	31	1627921
No of Consumers on 1 April 2012	901291	387	31	901709
% Increase In Consumers	80.57	3.10	0.00	80.54

Observation: Licensee has **proposed 15.72% increase** in overall power purchase.

In its sales forecast the LT sales has been projected a 29.91% increase over the last financial year due to 80.57% increase in consumer base. (7.26 Lakh LT consumers)

Growth in LT / BPL consumers

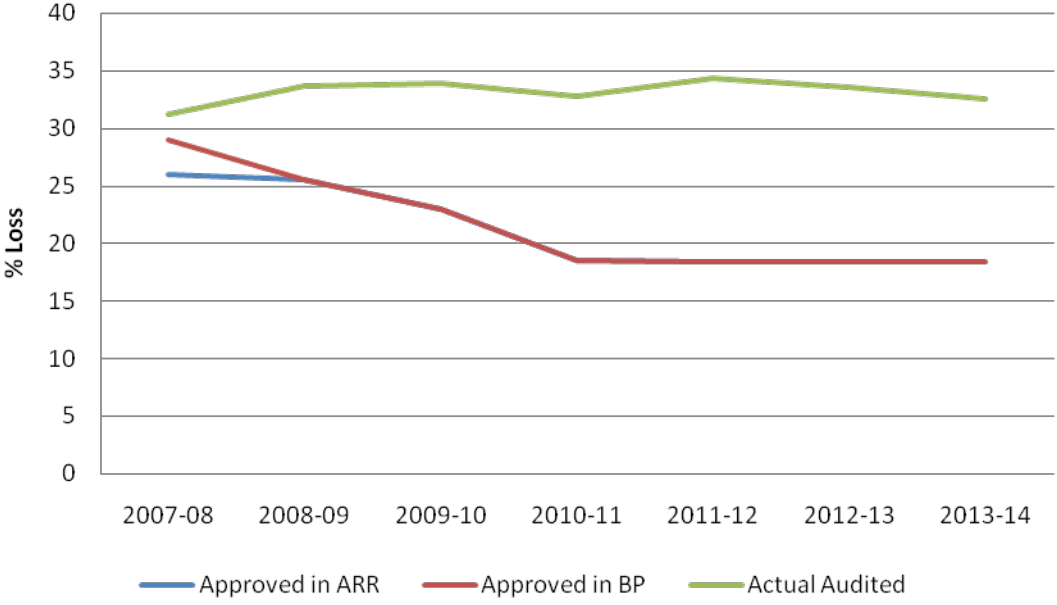
Consumer Category	No of Consumers				Consumption (in MU)			
	FY 12-13	FY 13-14	Diff	% Increase	FY 12-13	FY 13-14	Diff	% Increase
LT Total	901291	1,627,491	726,200	80.57	1619.07	2103.27	484.2	29.91
BPL	150683	637677	486,994	323.19	135.18	184.89	49.707	36.77
% BPL of LT Total	16.72	39.18			8.35	8.79		

Observation:

-In FY 12-13 BPL consumers were just 16.7% of total LT consumers which are now 39.18% of LT consumers in FY 2013-14.

-Energy sale to BPL consumer is about 8.78% of total LT sales for FY 2013-14.

Distribution Loss (%)



Observation:

- Licensee has projected distribution loss of **(32.53%)** over BP approval of **(18.35%)** FY 12-13.
- Further, trend of actual distribution loss is increasing. In last five years loss has been increased 2.28 %. Audited Dist Loss in FY07-08 was 31.17 % where as the revised estimate for FY 12-13 is 33.45% .

Submission:

- Licensees request to review the base line distribution loss may not be considered.
- Loss of revenue realization 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	26	29	31.17	5.17
2008-09	25.5	25.5	34.57	8.1
2009-10	23	23	32.52	10.8
2010-11	18.46	18.46	32.75	14.29
2011-12	18.4	18.4	34.28	15.88
2012-13	18.35	18.35	33.45*	15.1
2013-14		18.35	32.53*	

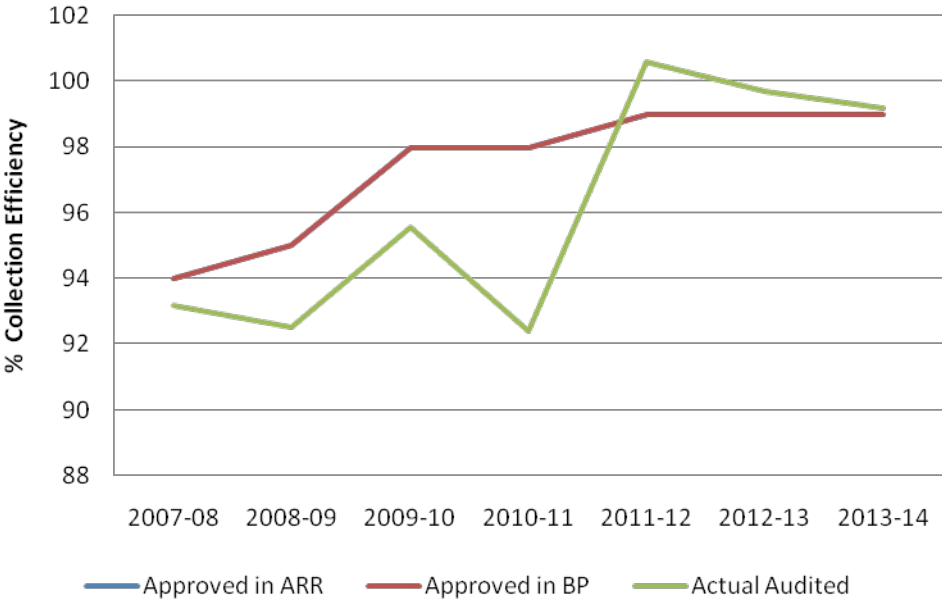
2.28%

* Provisional

LT Distribution Loss Across the Utilities FY 13-14

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

Collection Efficiency (%)



Observation:

-Licensee has proposed Collection efficiency of 99.17% which is more than that of approved in BP for FY 12-13.

-In last five years the collection efficiency has been almost stagnant which was 93.16% in FY 07-08 and 93.99% in FY 11-12.

-The revenue collection also includes the past years arrear collection and hence the proposed collection efficiency doesn't reflect the actual collection efficiency of the utility.

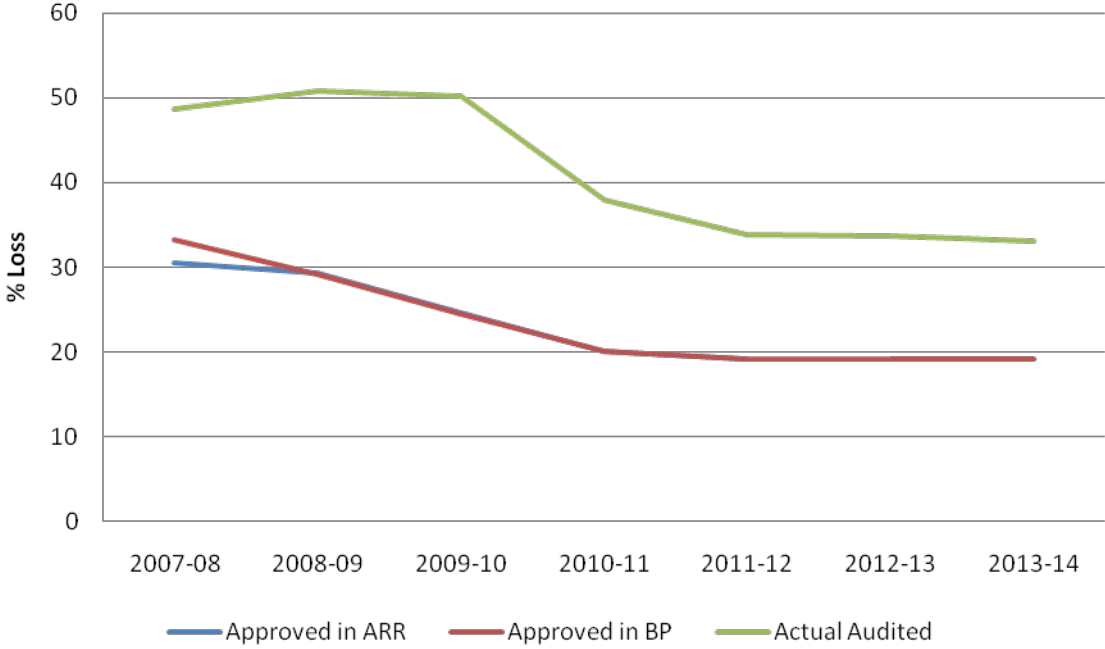
Submission:

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

	Approved in ARR	Approved in BP	Actual Audited	Performance
2007-08	94	94	93.16	-0.84
2008-09	95	95	92.5	-2.5
2009-10	98	98	95.53	-2.47
2010-11	98	98	92.38	-3.66

* Provisional

AT & C Loss (%)



Observations:

-Licensee has proposed 33.08% AT&C Loss.

In last five years the AT&C losses have reduced by 2.23% (from FY 07-08 to FY 12-13 Est)

	Approved in ARR	Approved in BP	Actual Audited	Performance
2007-08	30.44	33.3	35.9	5.46
2008-09	29.23	29.23	39.5	10.27
2009-10	24.54	24.54	38.6	14.06
2010-11	20.09	20.09	37.87	17.78
2011-12	19.22	19.22	38.23	19.01
2012-13		19.17	33.67*	
2013-14		19.17	33.08*	

-2.30%

* Provisional

Distribution Cost of NESCO for FY 2013-14

In Rs Cr			
Distribution Costs	FY 12-13	FY 13-14	% Change
a) Employees cost	180.02	354.30	96.81
b) Repair and Maintenance cost	51.17	84.08	64.31
c) Admn. & General Expenses	21.38	53.57	150.56
d) Provision for bad and doubtful debts	10.34	15.13	46.30
e) Depreciation	31.07	56.20	80.88
f) Other expenses	0	0.00	0.00
g) Less expenses capitalized (Emp Costs, A&G, R&M)	0.62	0.55	-10.57
h) Interest and financial charges	30.78	72.78	114.58
i) Less interest capitalized		6.74	
Total Expenses (a + b + c + d + e + f - g + h - i)	324.14	628.77	93.98

Observation:

-Licensee has proposed **93.98% 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 **354.30 Cr** in ARR with 96.81% hike over FY 2012-13 employee cost .
- Out of this projected expenses majority is the Terminal Benefit expenses which accounts to Rs.205.05 Cr. which needs to be verified. And the other employee cost is towards Actual Salary Expenses of Rs. 122.87 Cr.

	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	69.61	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.53.57 Cr** for FY 2013-14 which is 150.56% higher over the approved expenses for FY 2012-13.
- 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.
- Commission also approves additional A&G expenses for meeting expenses towards customer care, special police station, automation / IT expenses, inspection of network and compensation for electrical accidents – These expenses may be verified and allowed for FY 13-14.

	A&G Cost (Paise/Unit of Electricity 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
SOUTH CO	6.51	6.84	7.58	9.10	6.29	12.82	103.80
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. 84.08 Cr** as R&M expenses. These expenses were projected as 5.4% of the opening GFA of Rs. 1557.08 Cr. at the beginning of FY-2013-14

Submission:

Utilities GFA approved by commission as on **31.03.2012 were 818.01 Cr.** Utility has projected the GFA as Rs. 1557.08 Cr. at the beginning of ensuing year. Which seems to be on higher side. Therefore the proposed new additional GFA needs to be scrutinized.

ARR Cost Component – Provision for Bad Debt

Observation:

Licensee has proposed Rs 15.13 Cr as provision for Bad Debt by considering 99.17% collection efficiency as against 99% approved in BP for FY 12-13.

Submission:

These may be approved as per MYT Principle.

ARR Cost Component-RoE

Observation:

As proposed equity capital is constant for the current and ensuring year. There is no new equity capital infusion from DISCOM. Hence the Return on Equity should remain same as that of approved for FY 2012-13.

Submission:

Proposed RoE of Rs 10.55 Cr is same as approved in the last 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	138.86	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

$$\text{Per Unit Distribution Cost} = \frac{\text{Total Distribution Cost}}{\text{Total power purchase}}$$

Analysis of Debtors Outstanding as on 31 March 2012

Categories of Consumer/Region	1-12 M	12-24 M	Over 24M	Total Outstandin g	% of Outstanding	DPS Applicabili ty
Agro & Agro Allied	0.09	0.00	0.00	0.09	0.01	NO
Domestic	170.75	92.95	374.19	637.89	68.92	NO
LT General(Commercial)	32.81	14.90	59.01	106.73	11.53	NO
Industrial High tension	46.72	4.67	22.79	74.17	8.01	YES
Industrial Medium/low tension	6.96	0.18	4.36	11.50	1.24	YES
Public Lighting(Street Lighting)	0.42	0.00	7.16	7.58	0.82	NO
Irrigation/ Agricultural	3.63	1.85	20.69	26.17	2.83	NO
Water Supply & public works	4.93	0.00	20.71	25.64	2.77	NO
Traction/ Railways	8.88	0.00	2.20	11.07	1.20	YES
Bulk supplies to distributing licensee	0.52	0.00	0.60	1.13	0.12	NO
Bulk supply to others	0.61	0.85	3.45	4.90	0.53	YES
Others	2.15	1.10	15.43	18.68	2.02	YES
TOTAL	278.45	116.50	530.59	925.54	100.00	
	30.09	12.59	57.33	100.00		

The Categories who don't have applicability of DPS has outstanding dues of 87%
And categories with DPS applicability had outstanding dues of 13%

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	6322.0619	3030.31
SOUTHCO	1759.74	3600	2159.06	2682	1238.18
NESCO	2957.16	6140.23	4142.81	5013.497795	2615.11
WESCO	3161.93	6821	4433	5484.084	2843.52
Total	10909.14	24771.7	16317.99	19501.6437	9727.12

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)

Trend of Growth in HT& EHT over LT (all Orissa)

	ALL Orissa for 2008-09 (Est) from RST for FY 08-09 (in MU)	All Orissa (Est) for FY 2013-14 (in MU)	Difference
EHT	4,125	4,952	827(+20%)
HT	3,115	3,114	-1 (-0.02)
LT	4,844	8,252	3,408 (+70%)
Dist Loss in MU	6,085	8,454	2,369
Total Purchase	18,168	24,771	6,603 (36%)
Dist Loss in %	33%	34%	+1%

Observation :

- Over last five years HT and EHT sales is almost constant where as LT Sales has doubled, Over all dist loss increased by 1%.
- Reasons for lower growth in HT and EHT sector could be 1) CPP 2) load reduction due to market recession 3) theft ?
- Higher growth in LT sector 1) increase in domestic consumption due to rural electrification projects and standard of living
- Effect - PU cross subsidy burden on HT and EHT consumers is increasing.
 - With increase in LT consumer base the Collection efficiency may further go down as LT consumers collection efficiency is low.

Submission of Consumer Counsel

- Request to work out the tariff with cross subsidy within +/- 20% of average cost of supply.
- The difference between BPL tariff and 50% of cost of supply should come from State Govt as this may not further be compensated through cross subsidy due to constant HT and EHT consumption and increasing LT /BPL consumption.
- Hon. Commission may kindly consider all above facts and decide the retail tariff in the best interest of all category of consumers.