ANALYSIS OF ANNUAL REVENUE REQUIREMENT AND TARIFF PROPOSAL OF LICENSEES/GENERATING COMPANIES

For the Year

2008-09

Submitted to

Orissa Electricity Regulatory Commission

Bhubaneswar

By

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Orisa Hydro Power Corporation Limited (OHPC)

A BRIEF SUMMARY OF THE PROPOSAL

- The installed capacity of OHPC power stations for the FY 2008-09 is projected as 2062 MW.
- The ARR of OHPC old power stations for the FY 2008-09 have been computed as Rs. 874.16 crore and for UIHEP, it is Rs. 1195.42 crore.
- The design energy for sale for which OHPC has awarded the work order to M/S Spark, Bhubaneswar for FY 2008-09 is 5619.24 MU.
- The total ARR/AFC for FY 2008-09 is projected as Rs. 67.69 crore for HPS, Rs. 66.77 crore for BHEP, Rs. 32.25 crore for RHEP, Rs. 33.27 crore for UKHEP, and Rs. 131.72 crore for UIHEP.
- The rate for both primary and secondary energy is same. The average energy rate or average tariff for 2008-09 is projected as 58.07 P/U for HPS, 57.01 P/U for BHEP, 62.06 P/U for RHEP, 40.39 P/U for UKHEP, and 67.81 P/U for UIHEP.
- The monthly capacity charge shall be computed as per the CERC Regulations.
- Machhkund H. E. (JT) project is a joint project of Govt. of Orissa and Andhra Pradesh with 30% and 70% share. The proposed tariff for Orissa drawl of Machhkund power for FY 2008-09 is 25.30 P/U.

ARR and Tariff Proposal of OHPC During FY 2008-09

(Rs. in Crore)

Particulars	**HPS**	**BHEP**	**RHEP**	**UKHEP**	**UIHEP**
Interest on loan	5.92	12.13	0.41	0.49	5.70
Depreciation	10.72	13.55	2.41	2.88	32.07
Return on equity	12.96	11.70	3.30	3.95	41.82
O & M expenses	35.97	27.37	25.10	24.87	42.12
Interest on working capital	1.80	1.69	0.98	0.99	3.18
ED on aux. Consumption @20 P/U	0.12	0.12	0.05	0.08	0.20
Income Tax (MAT) for previous year	0.00	0.21	0.00	0.00	6.63
Total ARR	**67.49**	**66.77**	**32.25**	**33.27**	**131.72**
Average Tariff (P/U)	**58.07**	**57.01**	**62.06**	**40.39**	**67.81**

GIST OF THE PROPOSAL

OHPC has submitted the Annual Revenue Requirement and Tariff proposal of individual power stations separately for the FY 2008-09 before the Hon'ble Commission for approval. The summary of the proposal is presented in the following.

1. **Introduction:** The Orissa Hydro Power Corporation Ltd. (OHPC) is a generating company incorporated under the companies Act. 1956, after unbundling of power sector in the state of Orissa in the year 1995, to carry out the business of hydropower generation. The entire power produced by OHPC through its various generating stations, viz. Hirakud Power System (HPS) (Burla and Chiplima), Balimela H.E. Project (BHEP), Rengali H.E. Project (RHEP), Upper Kolab H.E. Project (UKHEP), Upper Indrabati H.E. Project (UIHEP) and Machkund H.E. (JT) Project is fully dedicated to the state of Orissa at present. Due to the existing single buyer model presently prevailing in the state of Orissa, OHPC is supplying its entire power to GRIDCO (after supplying 5 MW power from Burla power house to CSEB as per the Inter-State agreement), which is a deemed licensee for bulk supply and supplying power to the distribution licensees of the state.

2. **Installed Capacity:** The installed capacity of OHPC power station as on 01.04.97 was 1972 MW. After completion of R, M and U works of unit 1, 2, 3 & 4, the installed capacity of the different generating stations of OHPC for the year 2008-09 is 2062 MW.

3. **Project Cost:** The transferred project cost of OHPC old power stations (i.e. HPS, BHEP, RHEP & UKHEP) was Rs. 1196.80 crore as on 10.04.1996. However, while determining the tariff for the FY 2007-08, Hon'ble commission have considered Rs. 868.62 crores as the project cost of OHPC old power stations considering the historical cost of Rs. 479.80 crores as on 10.04.96. Hon'ble commission have indicated that the state government have been advised to keep in abeyance the up valuation of the old assets of OHPC for a period of another five years beyond FY 2005-06, till 2010-11. Accordingly, the ARR of OHPC old power stations for the FY 2008-09 have been computed as 874.16 crore. Further, Hon'ble commission in their order dtd. 22.03.07 have approved Rs. 1195.42 crores as the final capital cost of UIHEP which is also the same for the year FY 2008-09.

4. **Design Energy:** The commission in its order 10.06.2005 at para 6.5 (a), had directed that reassessment of design energy of OHPC power stations should be done by the appointing an independent group of consultants regarding the progress from time to time. Accordingly, OHPC has awarded the work order to M/S spark, Bhubaneswar, a consultancy agency to carry out the job of reassessment of design energy of its power stations on a turn-key basis with an expected completion period of 10 months. Till vetting of the reassessed energy by

the Hon'ble Commission, the design energy for sale of OPHC power stations considered for tariff calculation for the FY 2008-09 is 5619.24 MU.

5. Annual Fixed Charges:

(a) **Interest on Loan:** The interest on the outstanding loans for inclusion in AFC of the year 2008-09 projected for different power stations are Rs. 5.92 crore for HPS, Rs. 12.13 crore for BHEP, Rs 0.41 crore for RHEP, Rs. 0.49 crore for UKHEP and Rs. 5.70 crore for UIHEP.

(b) **Depreciation Including AAD:** The depreciation is computed @ 2.57% on the project cost for the FY 2008-09. However, in case of HPS and BHEP where loan repayment is more than the computed depreciation, the advance against depreciation of a differential amount is kept. So the depreciation considered for FY 2008-09 as to the extent of loan repayment of HPS and BHEP are Rs. 10.72 crores and Rs. 13.55 crores respectively. For RHEP and UKHEP it is usual and with 2.41 crores and 2.88 crores respectively. In case of UIHEP the advance against depreciation is 32.07 crores, which is limited to the principal loan repayment.

(c) **Return on Equity (ROE):** ROE has been considered @ 14% per annum for the FY 2008-09 for each of the power stations with an equity base of 25% of the original project cost and additional capital expenditure of HPS, Burla. In case of BHEP extension project and additional capital expenditure of all the power stations except HPS, Burla ROE has been considered @ 14% on an equity base of 30%. Accordingly, ROE is Rs. 12.96 crores, Rs. 11.70 crores, Rs. 3.30 crores, Rs. 3.95 crores, and Rs. 41.82 crorers for HPS, BHEP, RHEP UKHEP and UIHEP respectively.

(d) **Operation and Maintenance (O&M) Expenses:** Operation and maintenance expenses of different power stations for 2008-09 is projected at Rs. 35.97 crore for HPS, Rs. 27.37 crore for BHEP, Rs. 25.10 crore for RHEP, Rs. 24.87 crore for UKHEP and Rs. 42.12 crore for UIHEP.

(e) **Interest on working capital:** The rate of interest on working capital of different power stations is calculated @12% per annum, the short-term prime lending rate of SBI at the time of filling of the application. The projected interest on working capital for the FY 2008-09 in the case of HPS is Rs. 1.80 crore, BHEP is Rs. 1.69 crore, RHEP is Rs. 0.98 crore, UKHEP is Rs. 0.99 crore and UIHEP is 3.18 crore.

(f) **Electricity Duty on Auxiliary Consumption:** Electricity Duty (ED) for 2008-09 is projected @ 20 paise/KWH on the Auxiliary consumption, limited to 0.5 % of the design energy of each power stations. The projected figure is Rs. 0.12 crore for HPS, Rs. 0.12 crore for BHEP, Rs.

0.05 crore for RHEP, Rs. 0.08 crore for UKHEP and Rs. 0.20 crore for UIHEP.

(g) **Income tax:** As per the CERC tariff regulation, 2004, income tax (MAT) shall be computed as on expense and recovered from the beneficiaries. It is Rs. 0.21 crore and Rs. 6.63 crore for BHEP and UIHEP respectively with nil income tax for others.

The total ARR/AFC projected for different power stations during 2008-09 is Rs. 67.69 crore for HPS, Rs. 66.77 crore for BHEP, Rs. 32.25 crore for RHEP, Rs. 33.27 crore for UKHEP and Rs. 131.72 crore for UIHEP.

6 **Rate of Primary Energy:** As per the CERC tariff regulations, rate of primary energy for the hydro generating stations shall be equal to average of the lowest variables charges of the Central Sector thermal power generating stations of the concerned region for all the months of the previous year. It is computed based on the primary energy rate and saleable primary energy. The average energy rates/tariff (paise/KWh) computed for the FY 2008-09 are 58.07, 57.01, 62.06, 40.39, and 67.81 for HPS, BHEP, RHEP, UKHEP, and UIHEP respectively.

7 **Rate of Secondary Energy:** It is same as the rate of primary energy.

8 **Capacity Charges:** Two-part tariff has already been implemented at all the power stations of OHPC. As per CERC Regulations,

Capacity Charges= (Annual Fixed Charge-Primary Energy)
The monthly capacity charges shall be computes as per the CREC Regulations

9 **Machhakund H. E. (JT) Project:** It is a joint project of Govt. of Andhra Pradesh and Govt. of Orissa with 70% and 30% share at present. The Proposed tariff of 25.30 paise/KWh for Orissa drawl of Machhakund Power for FY 2008-09 has been computed on cost reimbursement basis. Actual O&M expenses of Rs. 5.36 crore for FY 2006-07 has been escalated @ 4% each year to arrive at Rs. 5.80 crore for FY 2008-09 and the power purpose cost of Rs. 0.84 crore has been computed @ 8 paise/KWh for 105 MU, the total annual expenditure being Rs. 6.64 crores for the year 2008-09. The cost per unit is 25.30 paise considering the 50% of the design energy of 525 MU for Machhkund.

ANALYSIS OF THE PROPOSAL

After unbundling of power sector in the state of Orissa in the year 1995, OHPC, a Power Generating Company under the Companies Act, 1956, is entrusted the work to carry out the business of hydropower generation. It produces power through various generating stations, viz. Hirakud Power System (HPS), Balimela H. E. Project (BHEP), Rengali H. E. Project (RHEP), Upper Kolab H. E. Project (UKHEP), Upper Indravati H. E. Project (UIHEP) and Machkund H. E. Project (MHEP). Due to the existing single buyer model presently prevailing in the state of Orissa, OHPC is supplying its entire power to GRIDCO, who is a trading licensee and supplying power to the Distribution Licensees of the state.

ARR Proposal

ARR proposal for the power stations like RHEP and UKHEP has increased significantly during FY 2008-09 compared to the FY 2007-08 (see Table below). While there was decline in the ARR of RHEP in the previous year by 1.08 per cent, the proposal for the same has increased by 76.42 per cent in FY 2008-09. At the same time, there was an increase in the ARR of UKHEP in the previous year by 29.84 per cent, and again the proposal for 2008-09 is an increase in 90.22 per cent. On the other hand, the proposal of UIHEP for 2008-09 is about an increase of 0.97 percent, while it is an increase of around 6 per cent in case of HPS and BHEP. But in the previous year there was a decline in the ARR of HPS and an increase in ARR of UIHEP and BHEP by 2.54 per cent and 145.32 per cent respectively

ARR of Different Power Stations from 2005-06 to 2008-09

(Rs in Crore)

Power Stations	2005-06	2006-07	2007-08	2008-09	% Change in 2007-08 over 2006-07	% Change in 2008-09 over 2007-08
HPS	61.55	66.36	63.69	67.49	- 4.02	5.97
BHEP	22.84	25.55	62.68	66.77	145.32	6.53
RHEP	16.33	18.48	18.28	32.25	-1.08	76.42
UKHEP	11.30	13.47	17.49	33.27	29.84	90.22
UIHEP	125.33	127.23	130.46	131.72	2.54	0.97

The main reasons for significant increase in ARR of RHEP and UKHEP are increase in O&M expenses and interest on working capital. While in case of RHEP, the increase in O&M expenses is about 70% and increase in interest on working capital by about 78%, in case of UKHEP, the increase in O&M expenses is about 88% and increase in interest on working capital is about 94%.

O & M expenses of Different Power Stations

(Rs. Crore)

Power Stations	2006-07	2007-08 (Approved)	% Change	2008-09 (Proposed)	% Change over 2007-08 approval
HPS	33.53	33.29	-0.72	35.97	8.05
BHEP	20.34	26.10	28.32	27.37	4.87
RHEP	14.94	14.74	-1.34	25.10	70.28
UKHEP	9.52	13.23	38.97	24.87	87.98
UIHEP	38.54	39.88	3.48	42.12	5.62
Total	116.87	127.24	8.88	155.43	22.15

Interest on working capital of Different Power Stations

(Rs. Crore)

Power Stations	2006-07	2007-08 (Approved)	% Change	2008-09 (Proposed)	% Change over 2007-08 approval
HPS	1.28	1.55	21.09	1.80	16.13
BHEP	0.73	1.45	98.63	1.69	16.55
RHEP	0.55	0.55	0.00	0.98	78.18
UKHEP	0.43	0.51	18.60	0.99	94.12
UIHEP	2.48	2.64	6.45	3.18	20.45
Total	5.47	6.70	22.49	8.64	28.96

Besides, there is proposal for increase in reasonable return on equity by the power stations like HPS, BHEP, RHEP and UKHEP. While HPS and BHEP proposed increase in reasonable return by 91 per cent and 55 per cent respectively, RHEP and UKHEP proposed increase of Rs 3.30 Cr and Rs 3.95 Cr respectively although the Commission had not approved any reasonable return for these two stations for 2007-08. During 2008-09 all the five power stations show reasonable return on equity. However, no reasonable return may be allowed to OHPC along the lines of thinking adopted for 2006-07. Allowing return on equity would have negative effect on the sector in general and consumers in particular.

Return on Equity of Different Power Stations

(Rs. Crore)

Power Stations	2006-07	2007-08 (Approved)	Increase over 2006-07	2008-09 (Proposed)	Increase over 2007-08 approval
HPS	2.46	6.78	4.32 (175.61%)	12.96	6.18 (91.15%)
BHEP	0	7.56	7.56	11.70	4.14 (54.76%)
RHEP	0	0	0	3.30	3.30
UKHEP	0	0	0	3.95	3.95
UIHEP	41.82	41.82	0	41.82	0
Total	44.28	56.16	11.88 (26.83%)	73.73	17.56 (31.29%)

Tariff Proposal

Tariff proposal for the power stations like RHEP and UKHEP has increased significantly during FY 2008-09 compared to the FY 2007-08 (see Table below) as a result of increase in ARR during the same period.

Comparison of Tariff of Different Power Stations (P/U)

Power Stations	2006-07	2007-08	2008-09 (Proposed)	% Change in 2007-08 over 2006-07	% Change in 2008-09 over 2007-08
HPS	57.10	54.79	58.07	-4.05	5.99
BHEP	35.36	53.52	57.01	51.36	6.52
RHEP	21.82	35.17	62.06	61.18	76.46
UKHEP	16.35	21.24	40.39	29.91	90.16
UIHEP	65.50	67.16	67.81	2.53	0.97
MHEP	19.47	18.21	25.30	-6.47	38.93

OHPC has projected this increase in tariff in order to meet the revenue requirements of the power stations. This increase in tariff proposal if allowed would impose heavy burden on the consumers. Instead of increasing the tariff of different power stations, there should be curtailment of expenditure for which there is a need to assess the revenue requirement of OHPC.

Summing Up

OHPC has proposed an increase in tariff during 2008-09 in order to meet the revenue requirement of the hydro power stations. As Power Stations like BHEP, RHEP and UKHEP have shown significantly higher increase in ARR there is a need to assess the revenue requirement of OHPC. The increase in tariff should not be allowed for the best interest of the consumers. On the other hand, there should be curtailment in revenue requirement as there is scope for reducing ARR of OHPC.

Grid Corporation of Orissa Limited (GRIDCO)

A BRIEF SUMMARY OF THE PROPOSAL

- GRIDCO has projected availability of energy from the State Hydro Stations like OHPC old stations during FY 2008-09 as 3728.57 MU after deducting 0.5% loss towards auxiliary consumption and 0.5% loss towards transformer and from UIHEP it is projected as 1962.18 MU. The design energy of Machhkund taken by OHPC is 525 MU. Considering Orissa share of 50%, GRIDCO's procurement is projected at 265.00 MU.
- GRIDCO has projected purchase of energy from state thermal stations like OPGC during FY 2008-09 as 2946.76 MU with projected PLF of 88.50% duly adjusted with auxiliary consumption of 9.5% as per PPA. The net energy from TTPS of NTPC is projected as 3162.17 MU based on PLF of 87.68% and auxiliary consumption of 10.50%.
- GRIDCO has projected procurement of energy from central generating stations like TSTPS-stage-I as 1986.78 MU, and TSTPS-Stage-II as 1249.55 MU, FSTPS as 1361.12 MU, KhTPS-I as 564.83 MU and KhTPS-II as 534.74 MU.
- GRIDCO proposes drawl of 543 MU from captive generation plants (CGPs)
- GRIDCO proposes drawl of 375 MU from renewable energy sources like M/S NINL, M/S AARTI Steel Ltd & M/S Tata Sponge Ltd.
- The Procurement cost @ Rs. 1.35/kwh for total 19,110.05 MU (before transmission loss @5% for DISTCOs and CGPs) comes to Rs. 2577.68 crore.
- Including other expenses GRIDCO has projected a net revenue requirement of Rs. 3345.84 core.
- GRIDCO has projected Rs. 2439.18 core from the sale of 18144 MU (after transmission loss @5%) to DISTCOs and CGPs @ 135.66 P/U.
- Thus, there will be a revenue gap of Rs. 906.56 crore during FY 2008-09.
- With the ARR of Rs. 3345.54 crore the energy charge would work out to 184.39 P/U representing an increase of 36% from the average existing energy of 135.66 P/U.
- Gridco proposes to collect a surcharge of 1.25% per month for payment after the period of 30 days from the date of submission of bills, and to provide 2% rebate if full payment is made within 2 working days of submission of bill and 1% rebate on monthly bill if full payment is made within 30 days from the date of submission.

GIST OF THE PROPOSAL

1 Energy Availability:

Gridco holds the Bulk Supply License for the state of Orissa and is a constituent of Eastern Regional Power Committee. The licensee supplies power to DISTCOs to cater to the requirement of consumers of the state. It also provides emergency power to captive generating plants (CGPs) and sells power surplus to the requirements of DISTCOs as and when available within the state to intending agencies for use elsewhere. It purchases power from OHPC, OPGC, TTPS and Central Sector Generators located in the Eastern Region and Chukha and Tala HEPEP in Bhutan and surplus power from some CGPs within the state. Gridco projects to get available energy from different generating stations as per the following.

State Hydro Stations:
Energy sent out (ESO) on the basis of generation plan submitted by OHPC (ED-I) from OHPC old stations (Hirakud, Balimela, Upper Kolab and Rengali) has been projected 3728.57 MU for FY 2008-09 after deducting 0.5% loss towards auxiliary consumption and 0.5% towards transformer loss.

The availability (ESO) from UIHEP is projected at 1962.18 MU. Therefore, the projection from OHPC is 5690.75 MU and the design energy of Machhkund taken by OHPC is 525 MU. Considering Orissa share of 50%, GRIDCO procurement is projected at 265.00 MU.

State Thermal Station:
The availability of energy from OPGC is 2946.76 MU for FY 2008.09 as per the Generation and Maintenance Schedule (ED-II) with projected PLF of 88.50% duly adjusted with Auxiliary Consumption of 9.5% as per PPA. The net energy available from TTPS of NTPC is 3162.17 MU based on PLF of 87.68% (last year projection) and Auxiliary Consumption of 10.50% (revised CERC norm)

Central Generating Stations (CGSs):
For the purpose of actual availability, the system loss for ER system is considered as 3.62% based on the actual data tabulated from Regional Energy Account of Eastern Regional Power Committee (ERPC) (ED).

Gridco is projecting 1986.78 MU from TSTPS-Stage-I and 1249.55 MU from TSTPS-Stage-II. The availability (ESO) from FSTPS is 1361.12 MU and KhTPS-I is 564.83 MU, from KhSTPS-II is 534.74 MU. Gridco proposes to draw 234.90 MU of energy from Chukha (Bhutan) and expects 195.44 MU from Tala HEP (Bhutan).

Captive Generation Plants (CGPs):
Gridco proposes drawl of 543 MU from CGPs for FY 2008-09.

Renewable Energy:
Gridco is drawing power from M/S NINL, M/S AARTI Steel Ltd. And M/S Tata Sponge Ltd., Samal Small Hydro, Minakshi Small Hydro which is estimated to be 375 MU for FY 2008-09.

2. Projection of Energy Demand and Procurement Cost of Gridco:

Gridco has considered the energy demand on its own in the absence of any communication from DISTCOs, and has projected the total sale of 18154.00 MU including 10 MU to CGP after transmission loss @ 5%. Total procurement projected for sale of energy to DISTCOs and CGPs is 19,110.00 MU. The procurement cost at the existing rate is Rs. 1.35/kwh. Gridco's projection for primary energy rate for 2008-09 remains unchanged as 2007-08 for OHPC and Upper Indrabati HEP. The total projection as per the generation plan subordinated by OHPC, Upper Indravati and Machhakund is 5,955.75 MU. Total cost is Rs. 305.45 crore and the rate per unit is 51.29 P.

The total projected power procurement cost from NTPC-TTPS during FY 2008-09 for procurement of 3162.17 MU is estimated at Rs. 471.36 crore. Rate per unit is 149.06 P. Similarly, the cost of 2946.76 MU power from OPGC @ 154.15 P/U comes to Rs. 454.24 crore. The power purchase cost for different CGPs for 543 MU @ 149.03 P/U comes to Rs. 80.93 crore. The power purchase cost for different renewable energy sources for 375 MU @ 218.43 P/U comes to Rs. 81.91 crore.

The power purchase cost for different CGSs for 6127.36 MU is Rs. 1183.79 crore. Per unit cost for TSTPS stage-I is 168.35 P, TSTPS stage-II is 181.77 P, FSTPS is 209.73 P, KhSTPS-I is 229.20 P and, KhSTPS-II is 229.20 P, Chukha 183.17 P and Tala 213.25 P.

Therefore, the total procurement cost @ Rs. 1.35/kwh for total 19,110.05 MU is projected at Rs. 2577.68 crore.

3 Pass Through and Other Expenses:

Gridco has proposed for pass through of past losses towards repayment of principal of Rs. 481.87 crore during the FY 2008-09. Gridco has also proposed for pass through of uncovered expenses of 2007-08 as per order of OERC in review petition in the ARR and BSP application of Rs. 50.93 crore for 2008-09.

The interest and financing charges is projected to be Rs. 169.79 crore for FY 2008-09. Gridco has projected Rs. 7.95 crore towards employee cost, A&G expenses, R&M expenses, and ERLDC & NLDC charges, and Rs. 60.62 crore towards return on equity.

4 Revenue Requirement:

The Gross Revenue Requirement is projected at Rs. 3348.84 crore. After deducting miscellaneous receipts of Rs. 3.30 crore, Net Revenue Requirement comes out to Rs. 3345.54 crore.

5 Revenue to be earned after Selling

Gridco has projected Rs. 2439.18 crore from sale of 18144 MU @ 135.66 P/U to DISTCOs like CESU, NESCO, WESCO and SOUTHCO for FY 2008-09.

6 Revenue Requirement (Excess/Deficit) with the Existing Tariff

The total revenue requirement of Gridco is estimated at Rs. 3348.84 crore with the revenue receipt from sale of energy to DISTCOs at existing rates and from miscellaneous receipts. Thus, there will be a gap of Rs. 906.35 crore during FY 08-09.

7 Proposal for Revision of Bulk Supply Price

Gridco claims that with the present Bulk Supply price structure it cannot meet current cost. In order to meet the deficit of Rs 906.36 crore, Gridco submits the present ARR and BSP application before Hon'ble Commission praying for revision of Bulk Supply price from 1st April, 2008. It proposes to formulate the BSP to recover the full costs of supply by increasing the energy charge from 135.66 P/U to 184.39 P/U. Besides, it proposes surcharge for late payment and rebate for early payment.

The proposed surcharge is 1.25% per month for payment after the period of 30 days from the date of submission of bills, 2% rebate on monthly bill if full payment is made within 2 working days of submission of bill & 1% rebate on monthly bill if full payments is made within 30 days from submission.

ANALYSIS OF THE PROPOSAL

Revenue Gap

GRIDCO has projected a revenue gap of Rs 906.36 Crore during FY 2008-09, with a net revenue requirement of Rs 3345.54 Crore and revenue receipts at existing BSP of Rs 2439.18 Crore. However, in the revenue requirement it has included a proposal of Rs 532.80 Crore as pass through losses. In order to meet this deficit, GRIDCO has given the proposal for revision of Bulk Supply Price during the FY 2007-08. It has proposed to increase the energy charge by 36 per cent from the existing charge of 135.66 P/U to 184.39 P/U. GRIDCO has also proposed other measures like surcharge for late payments and rebate for early payments. The calculation of Revenue Gap by GRIDCO for the FY 2008-09 is presented in the following.

Revenue Gap Projected by GRIDCO during FY 2008-09

(Rs in Crore)

Power purchase cost	2577.68
Interest and financial charges	169.79
Employees cost, A&G expenses, and ERLDC & NLDC charges	7.95
Return on equity	60.62
Proposal for pass through of losses towards payment of principal	481.87
Proposal for pass through of unforeseen expenses of 2007-08	50.93
Gross Revenue Requirement during 2008-09	**3348.84**
Misc. Receipts	3.30
Net Revenue Requirement	**3345.54**
Revenue Receipt from sale of power to DISTCOs during 2008-09	**2439.18**
Revenue gap during FY 2008-09	**906.36**

The gap arises as a result of the proposal for increase in ARR during FY 2008-09 and accumulated past losses and unforeseen expenses of 2007-08 by GRIDCO. The Commission should not allow GRIDCO to increase the energy charge, which if allowed would ultimately be passed on to consumers. Reducing the revenue requirement, which is shown very high, can reduce this higher revenue gap.

Pass Through Past Losses

The proposal for passing through of past losses and unforeseen expenses to the extent of Rs 532.80 Crore, if approved, would pose burden on the general consumers of the state. This passing through of past losses to consumers by GRIDCO should not be considered.

Employee and A&G Expenses

Cost of employees and A&G expenses during 2007-08 was approved at Rs 3.77 Crore. GRIDCO projects Rs 6.28 Crore for the FY 2008-09, which is an increase of 66.58 per cent from the FY 2007-08. This seems to be very high. The increase in this cost should not be allowed by more than 10%.

Power Procurement Costs

The GRIDCO is proposing to purchase less than one-third of total power requirement from the hydro-based stations on the basis of availability. However, this costs less compared to the other sources. Hence, there is a need for proper assessment of the availability of power from hydro stations. GRIDCO has not explained the method of projection. Therefore, the Commission should assess the availability of power from this source. Similarly, there is a need to assess the availability of power from state thermal stations, as this costs less than the power from central sector. If the availability of power from these two sources would be more than projected by GRIDCO, then the total cost of power purchase would be lower than what is projected.

Proposed power procurement costs during FY 2008-09

Generators	Energy (MU)	Rate (P/U)	Total Cost (Rs. Cr.)
State Hydro	5955.75	51.29	305.45
State Thermal	7026.94	154.90	1088.44
Total State	12982.69	107.37	1393.89
Central sector	6127.36	193.20	1183.79
Total	19110.05	134.89	2577.68

Transmission Loss

GRIDCO has proposed a transmission loss of 5%, the rate that was approved by OERC for FY 2007-08. However, in conformity with the power sector reform the transmission loss should be reduced gradually and significantly. The transmission loss, therefore, may be fixed at 4% for the FY 2008-09. This would increase the revenue from power sale to the DISTCOs and CPP during 2008-09.

Projection of Demand

GRIDCO has projected lower increase in sale of energy to DISTCOs during the FY 20008-09 over FY 2007-08 as compared to the increase in 2007-08 (prorated projection) over 2006-07. GRIDCO has therefore underestimated sale of power to all the DISTCOs during FY 2008-09. The Corporation has estimated the projection during FY 2008-09 considering the projection during 2007-08 prorating first sixth months of actual demand by the DISTCOs. However, there is a need to examine how far the projection based on first six month will be justified.

Energy Sale to DISTCOs (MU)

Agency	2006-07 Actual	Projection for 2007-08 prorating 1st six months' actual	% Change over 2006-07	GRIDCO projection for FY 08-09	% Change over 2007-08 prorated projection
CESU	4623.26	5185.08	12.15	5760.00	11.09
NESCO	3981.12	4360.42	9.53	4730.00	8.48
WESCO	4671.19	5151.74	10.29	5627.00	9.23
SOUTHCO	1826.88	1933.50	5.84	2027.00	4.84
Total DISTCOs	**15102.45**	**16630.74**	**10.12**	**18144.00**	**9.10**

Profit from sale of power

GRIDCO was selling power to other states when it was having surplus. It should give the picture of what it was doing with this profit. This is important as GRIDCO is now trying to pass through past losses to the consumers.

Summing Up

The Commission should not allow GRIDCO to increase energy charge, which if allowed would be ultimately passed on to the consumers. The higher revenue gap as shown by GRIDCO can be reduced by reducing the revenue requirement, which is projected to be very high. The high transmission loss is not in conformity with the power sector reform and needs to be reduced gradually and significantly.

Orissa Power Transmission Corporation Limited (OPTCL)

A BRIEF SUMMARY OF THE PROPOSAL

- OPTCL has been following the postage stamp method for determination of its transmission charges.
- The net ARR is of OPTCL for the FY 2008-09 is projected as Rs. 655.78 crores (including ARR of SLDC) and Rs. 635.265 crores (excluding ARR of SLDC).
- OPTCL has projected transmission loss @ 5% during FY 2008-09.
- OPTCL proposes to deliver a total of 18912 MU for FY 2008-09 to the DISTCOs through substations of OPTCL and 325.79 MU (including transmission loss of 5%) to CGPs. So the revenue receipts at the existing tariffs @ 22 P/U will be Rs. 423.23 crores.
- OPTCL projects a revenue deficit at the existing wheeling rate of 22 P/U during FY 2008-09 as Rs. 232.55 crore.
- As per the direction of Hon'ble Commission, OPTCL has filed one separate ARR application for SLDC function.
- OPTCL proposes to recover
  (a) AFC of Rs. 655.78 crore (both for OPTCL and SLDC) in full from LTOA customers like DISTCOs and CGPs either through recovery of the same on monthly basis @ Rs. 54.65 crore/month, or @ 34.11 P/U from dt 01.04.2008.
  (b) AFC of Rs. 635.265 crores (excluding SLDC function) in full from LTOA customers like DISTCOMs and CGPs either through recovery of the same on monthly basis @ Rs. 52.94 crore/month, or @ 33.05 P/U from dt. 01.04.08.
- The transmission licensee shall retain 25% of the charge collected from the STOAs and the LTOAs shall adjust the balance 75% towards reduction in the transmission charge payable.
- The LT open Access charge has been fixed at Rs. 8187.88/MW/Day including SLDC function and Rs 7931.73 excluding SLDC function.
- The ST open Access charge has been fixed at Rs. 2046.97/MW/Day including SLDC function and Rs 1982.93 excluding SLDC function.

GIST OF THE PROPOSAL

Introduction

Orissa Power Transmission Corporation Ltd., Bhubaneswar (OPTCL), a Govt. Company registered on 29th March' 04 under the companies Act, 1956, is carrying on business transmission of electricity within the State of Orissa. The Company commenced business on 31st March, 2004. By virtue of a transfer scheme entitled 'Orissa Electricity Reform Scheme, 2005' purporting to be under section 131 (4) of the Act, the erstwhile transmission business of Gridco with all the assets and liabilities was transferred and vested with OPTCL with effect 1.4.2005. OERC has issued license conditions of OPTCL vide its order dtd. 27.10.2006 in case No. 22. of 2006 to undertake in activities relating to transmission of electricity in the state of Orissa.

OPTCL has both Long Term Open Access (LTOA) customers and Short Term Open Access (STOA) customers. Gridco is a long-term customer of OPTCL for bulk power supply to the DISTCOs and for transmission of the surplus power to CGPs from their generating stations to their plants located elsewhere.

Revenue requirement:

Transmission Charge

Till date, OPTCL has been following the postage stamp method for determination of its transmission charges. The fixed costs of the state transmission utility (OPTCL) projected for the FY 2008-09 for the purpose of deriving ARR and transmission Tariff/charges are:

- The Employees expenses amounting Rs. 144.27 crore (after capitalization) including terminal benefits of Rs. 49.36 crore. The proposed cost also includes Rs. 5.11 crore of employees cost proposed in ARR of SLDC.
- The administrative and general expenses amounting Rs. 25.93 crores, including Rs. 3.58 crore proposed in ARR of SLDC.
- R & M cost amounting Rs. 82.12 crore, including Rs. 6.85 crore proposed in ARR of SLDC. Therefore, the total cost is at Rs. 252.32 crores needed towards O&M expenses although the O&M expenses as per CERC norms works out to Rs. 317.52 crore.
- Interest on Loan capital amounting Rs. 115.16 crore.
- Depreciation projected at Rs. 64.53 crore.
- Advance Against Depreciation projected at Rs. 65.13 crore.
- Return on Equity for Rs. 8.40 crores, @ 14% on the equity share capital of Rs. 60 crore.
- Interest on short-term loan for equity component projected to be Rs. 3.04 crore.
- Interest on working capital is projected to be Rs 13.53 crore.

Pass Through and other Expenses

- OPTCL proposes Rs. 108.32 crore as Pass Through Expenses.
- Additional Expenses of OPTCL includes Contingency Reserve (Rs. 13.10 crore), and Gridco Co-ordination Committee Expenses (Rs. 0.13 crore).

The ARR of OPTCL including the expenditure for SLDC is estimated as Rs. 643.56 crores from which miscellaneous receipts of Rs. 1.00 crore @ 10 paise per unit (from inter-state wheeling and from short term open access) is to be deducted. Due to 2% rebate on first charge basis ARR is Rs 13.12 crores. Thus, the net ARR is Rs. 655.78 crores including ARR of SLDC and Rs. 635.265 crores excluding ARR of SLDC.

Transmission Loss:

OPTCL projected a figure of 5 % as transmission loss during FY 2008-09. OPTCL claims that since it is purely technical loss, the company has no control over it due to several factors.

Revenue Earned:

Gridco is a long term customer of OPTCL for bulk power supply to the DISTCOs (CESU, NESCO, WESCO, SOUTHCO) and CGPs. Being the transmission licensee, it earns revenue by charging the rate applicable for wheeling of power from generating points to the supply point of distribution & retail supply licensee & wheeling of power from CGP to its units.

OPTCL expects to deliver a total of 18912 MU for FY 2008-09 to the DISTCOs through sub-station of OPTCL and 325.79 MU (including transmission loss of 5 %) to CGP units at separate locations. The revenue receipts at the existing tariff of 22 p/u is projected at Rs. 423.23 crores. Thus, revenue gap at the existing wheeling rate @ 22 p/u is projected at Rs. 232.55 crores.

OPTCL submits its application before Hon'ble Commission with humble request to approve its proposed ARR and the transmission tariff and wheeling loss for FY 2008-09.

Proposed Transmission Tariff Design:

As per direction of Hon'ble Commission, OPTCL has filled one separate ARR application for SLDC function to levy annual fees, operating charges, scheduling and system operation charges per day or part thereof for each transaction from STOA customers.

OPTCL proposes to recover the annual fixed cost of Rs. 655.78 crores (both for OPTCL and SLDC) in full from LTOA customers like DISTCOs and CGPs either through recovery on monthly basis @ Rs. 54.65 crores per month, or 34.11 P/U w.e.f 1.04 2008, and the annual fixed costs of Rs. 635.265 crores (excluding SLDC function) in full from

LTOA customers either through recovery of the same on monthly basis @ 52.94 crores per month, or @ 33.05 P/U w.e.f. 1.04.2008.

The transmission licensee shall retain 25 % of the charges collected from the STOAs and the LTOAs and adjust the balance 75 % towards reduction in the transmission on charges payable. The LTOAs access charge has been fixed at Rs. 8187.88/MW/Day including SLDC function and Rs 7931.73 excluding SLDC function. The STOA charges have been fixed at Rs. 2046.97/MW/Day including SLDC function and Rs 1982.93 excluding SLDC function including SLDC function and Rs 1982.93 excluding SLDC function.

ANALYSIS OF THE PROPOSAL

Revenue Gap

OPTCL has given the proposal for revenue requirement of Rs. 635.26 Crore and revenue from long-term open access customer of Rs 423.23 Crore, leaving a shortfall of Rs 212.03 Crore during the FY 2008-09. This shortfall has been calculated at the existing transmission tariff @ 22 P/U. OPTCL proposes to recover the annual fixed cost of Rs 635.26 Crore in full from the long term open access customers like GRIDCO & CGPs on energy drawl during FY 2008-09 in two ways, i.e. either through recovery of the same on monthly basis @ Rs 52.94 Crore per month, or @ 33.05 P/U from 1.4.2008 considering the transmission loss for wheeling as 5% on energy drawl.

Revenue Gap of OPTCL During FY 2008-09

(Rs in Crore)

Total Revenue Requirement	635.26
Revenue from long-term open access customer	423.23
Revenue Gap	212.03

Annual Revenue Requirement

OPTCL has projected its revenue requirement during FY 2008-09 about 69 per cent more than that of FY 2007-08. The revenue requirement constitutes not only fixed cost and additional expenses but also pass through cost of Rs 108.32 Crore. Earlier these costs were not allowed by the Hon'ble Commission. If the pass through cost were deducted, then the revenue gap would be Rs 103.71 Crore. The pass through of previous loss and liabilities would certainly impose burden on the consumers and therefore should not be allowed.

The areas of concern, besides the pass through loss, are increase in A & G cost (65.05%), repair and maintenance cost (74.72%), interest on loan capital (116.45%) and advance against depreciation (108.62%). The increase in A & G cost seems to be too high. Even if it were increased by 6 per cent it would be around Rs 16.65 Crore. Repair and maintenance is required in order to operate the system effectively. However, for a single year, the proportion of spending seems to be too high and hence a part of this may be allowed to pass on. Otherwise, the whole burden would fall on the consumers. Further, it is of concern that machines are imported without any service facilities.

OPTCL had proposed an amount of Rs 131.51 Crore as interest on loan capital during the FY 2007-08, but the Hon'ble Commission had approved only Rs 60.86 Crore. Again during FY 2008-09, OPTCL has proposed Rs 131.73 crore as interest payment. OPTCL should explain such significant increase in interest. Is there any delay in the completion of any ongoing projects, which has added to the interest? However, the entire amount should not be passed on to tariff at a time, as it would impose burden on the consumers.

Annual Revenue Requirement of OPTCL

	Proposal for 2007-08	Approval of 2007-08	Proposal for 2008-09		% Change (Including SLDC)
			Including SLDC	Excluding SLDC	
O & M expenses	**255.83**	**205.23**	**251.51**	**236.78**	**22.55**
Employees Cost	187.04	142.52	144.27	139.16	1.23
Repair & Maintenance Cost	54.00	47.00	82.12	75.27	74.72
A & G Cost	14.79	15.71	25.93	22.35	65.05
Interest on Loan Capital	131.51	60.86	131.73	131.73	116.45
Depreciation	52.95	48.10	64.53	64.47	34.16
Advance against Depreciation	84.18	31.22	65.13	65.13	108.62
Return on Equity	8.4	0.00	8.4	8.4	
Pass through Cost	138.33	23.01	108.32	108.32	370.75
Additional Expenses	12.05	12.05	13.23	8.73	9.79
Total Revenue Requirement	**673.43**	**380.47**	**643.66**	**623.56**	69.17
Less misc. receipts	4.91	3.74	1.00	1.00	-73.26
Rebate 2% ARR			13.12	12.71	
Net ARR	**678.34**	**376.73**	**655.78**	**635.26**	74.07

Regarding the advance against depreciation, it is to be seen that whether it satisfies the CERC norm, which stipulates that advance against depreciation should be permitted only if cumulative loan repayment up to a particular year exceeds the cumulative depreciation up to that year.

The significant increase in expenses as mentioned above would impose burden on the general consumers of the state, as this would be passed on to the ultimate users through GRIDCO and DISTCOs. Therefore, there is a need to reduce these expenses for the benefit of the consumers.

Revenue from Tariff

OPTCL has calculated the revenue receipts to be Rs 423.23 crore at the existing rate of tariff, i.e. @22 P/U, based on the projection of GRIDCO. OPTCL has expected to deliver 18912 MU of energy to GRIDCO, while the actual projection submitted by DISTCOs for the FY 2008-09 is not available. If the demand of the DISTCOMs would be more than the projection of GRIDCO then the revenue receipts of OPTCL would be changed and hence revenue gap will be changed accordingly.

Transmission Loss

OPTCL has proposed a transmission loss of 5% for the FY 2008-09. The Hon'ble Commission had approved 5% transmission loss during FY 2007-08 though it had approved 4% for 2006-07. Kanungo Committee had recommended for a stepwise reduction of transmission loss so that the same is brought to a level at par with that of Central Power Grid by 2007. However, the trend seems to be in the reverse direction. OPTCL has failed to arrest the high transmission loss due to its inefficiency. In conformity with the power sector reform, therefore, OPTCL needs to reduce the transmission loss gradually and significantly. The transmission loss, therefore, may be fixed at 4% for the FY 2008-09.

Tariff proposal

OPTCL claims that with the existing Tariff structure consisting of Transmission charge @22 P/U and Transmission Losses @5% it is not able to meet current costs, which results in a deficit of Rs. 212.03 Crore. OPTCL, therefore, proposes to recover the annual fixed cost in full from DISTCOs and CGPs either through recovery on monthly basis @ Rs 54.65 Crore or @ 34.11 P/U from 1.4.2008 with transmission loss for wheeling as 5% on energy drawl. Considering the ARR of OPTCL only, it proposes to recover AFC on monthly basis @ Rs 54.65 Crore or @ 34.11 P/U from 1.4.2008.

Summing Up

OPTCL has projected its revenue requirement during FY 2008-09, which is 69 per cent more than that the estimated figure of FY 2007-08. The areas of concern are the passes through of past loss and high increase in A&G cost, repair and maintenance cost, interest on loan capital and advance against depreciation. This higher proportion of increase in cost for FY 2008-09 may not be allowed for the best interest of the consumers. Further, OPTCL has failed to arrest the high transmission loss in conformity with the power sector reform and needs to reduce the transmission loss gradually and significantly. Therefore, transmission loss may be fixed at 4% for the FY 2008-09.

State Load Despatch Centre

(SLDC)

A BRIEF SUMMARY OF THE PROPOSAL

SLDC function is vested with OPTCL and provisions are made for smooth functioning of SLDC. OPTCL has given separate proposal of revenue requirement and Tariff for SLDC.

- The ARR of SLDC function is projected at Rs 20.10 crore, which would be recovered through annual fee and operating charges. The revenue requirement includes employee cost of Rs 5.11 crore, R&M cost of Rs 6.85 crore, A&G cost of Rs 3.58 crore depreciation of Rs 0.06 crore and provision of reinvestment for infrastructure development for EBC and ULDC project amounting Rs 4.50 crore.
- OPTCL proposes the basis of determination/calculation of annual fee as the ratio of Capital Cost to Total Generation Capacity.
- The parameters taken by OPTCL for fixing Annual Fee are: Rate of Interest at 9% for 2008-09, 10 years of recovery investment, and Generation Capacity of 2250 MW considering the availability to GRIDCO from different stations.
- By using the required formula, for investment of Rs 4.50 crore for SLDC function, capital cost is calculated as Rs 0.7012 crore and annual fee as Rs 3117/MW/PA.
- The monthly operating charge is calculated as the ratio of Annual Operating Charges to Total Generating Capacity, and on this basis it becomes Rs 5778/MW/PM for the FY 2008-09.
- Considering the provisions in the Electricity (Removal of difficulty), where the central government in exercise of its power made the order in respect of levy and collection of fees and charges for using the transmission system, OPTCL proposes to levy and collection of annual fee and operating charges for SLDC from the licensees using the intra-state transmission system (i.e. from DISTCOs and CPP).
- The estimated energy of DISTCOs and CPPs to be wheeled in OPTCL's system is 19222 MU for FY 2008-09 or an average of 2195 MW. Using the required formula OPTCL proposes to levy Rs 3195/MW/PA as the annual fees to be levied for the FY 2008-09.
- The monthly operating charge per MW is proposed to be Rs 5923.
- Scheduling and system operating charges of Rs 3000/day or part thereof shall be paid by the short-term customers.

GIST OF THE PROPOSAL

Section 31(1) of the electricity Act, 2003 provides that the state government shall establish a State Load Despatch Centre (SLDC). Government of Orissa, Dept of Energy vide Notification No. 6892 dated 09.06.2005 issued the Orissa Electricity Reform (Transfer of Transmission and related activities) scheme 2005 and have notified OPTCL as the STU and vested the SLD functions with OPTCL. As per section 32 of the Act, SLDC shall be the apex body to ensure the integrated operation of the power system in a state discharge functions.

Considering some guiding factors, the manpower planning and related expenses, the R&M expenses, A&G expenses and other expenses provisions are made for smooth functioning of SLDC for 2008-09, which are explained below.

A- SLDC is to be equipped with state of the art communication and data acquisition capability to play the pivotal role of an independent system operator.

B- SLDC should have broadly three wings, viz. Grid Operation, Commercial, and Telecommunication & IT activity for satisfactory operation as per the Act, codes and regulations.
The proposed functional manpower, organizational structure for each category are there for each category. The SLDC function shall be headed by the Chief Load Despatcher (CGM/CEO rank). He shall be assisted by 3 Senior General Managers who are the functional head of the Grid operation, Commercial and Telecommunication.

C- Establish Energy Billing/Accounting Centre (EBC) for preparation of monthly state energy accounting, weekly UI and Reactive Energy Accounting (both provisional & final) for billing and payment by stakeholders deploying requisite personnel, software and hardware. Provision of Rs. 2 crore is made for FY 2008-09 towards infrastructure development of energy accounting centre.

D- Transfer of all assets that belong to Unified State Load Despatch Centre (ULDC) to SLDC to function as an independent autonomous entity under OPTCL is proposed. Provision of Rs. 2.50 crore is made for smooth operation and maintenance of ULDC operation.

ARR for FY 2008-09

1. Employee Cost of Rs. 5.11 crore is projected for FY 2008-09, which is provisional. SLDC will submit the final employee cost after receiving report from NPC.
2. Administrative and General Expenses (A&G) have been projected as Rs. 3.58 crore.
3. Repair and Maintenance (R & M) Cost is projected as Rs. 6.85 crores to meet the annual R&M expenditure of both SLDC (Rs 1 crore) & ULDC (Rs 5.85 crore).
4. Provision of Rs. 0.06 crore is being provided towards depreciation of SLDC and ULDC related assets.

5. There is no provision for interest on long-term liabilities, interest on working capital and contingency reserve.

Therefore, the ARR of SLDC function is estimated at Rs. 20.10 crores, which would be recovered through annual fee and operating charges.

Annual Fee

The annual fee is to cover any investment made for upgradation and modernization of SLDC that may be required for repayment of principal and payment of interest on investment in a year, plus any residual cost of past investment.

The total generation capacity is estimated as 2250 MW considering the availability to GRIDCO from different stations. By using the required formula, capital cost would be Rs. 0.7012 crore and annual fee would be Rs. 3117/MW/PA.

Thus, OPTCL proposes Rs 3117 per MW per annum as the annual fees to be levied for the FY 2008-09.

Operating Charges

The total operating charges estimated for 2008-09 is Rs 15.60 crore and monthly operating charges per MW is computed as Rs. 5778.

Considering the order of the Central Government (vide S.0795(E). dt 8.6.2005), OPTCL submits to levy and collection of annual fees and operating charges for using transmission system from the licensees like DISTCOs and CPPs.

The energy to be wheeled in OPTCL's system is estimated as 19222 MU (or an average of 2195 MW) for 2008-09.

OPTCL proposed to levy Rs. 3195/MW/Annum as the annual fee, Rs. 5923/MW/PM as operating charges and Rs. 3000/day or part thereof as scheduling and system operation charges for the FY 2008-09.

Prayer

OPTCL prays the Hon'ble Commission to approve the ARR of Rs 20.10 crore for FY 2008-09 towards SLDC function separately and allow recovering the cost through:

(i) Annual fee of Rs 3195 per MW per annum
(ii) Operating charges Rs 5923 per MW per month
(iii) Scheduling & system operation charges of Rs 3000 per day or part thereof from licensees using intra-state transmission system.

ANALYSIS OF THE PROPOSAL

SLDC which shall be the apex body to ensure the integrated function of the power system and the activities and functions of SLDC are mingled with the activities of OPTCL although separate ARR and Transmission Tariff application is to be submitted for SLDC. Accordingly, SLDC has given the proposal for revenue requirement of Rs 20.10 crore which would be recovered through annual fee and operating charges.

Annual Revenue Requirement

The Annual Revenue Requirement for the FY 2008-09 is reproduced in the table given below.

Item	**Proposal for Separate SLDC function for FY 2008-09 (Rs crore)**
Employee cost	5.11
R&M cost for both SLDC and ULDC	6.85
A&G cost	3.58
Interest on Loan	0.00
Interest on Working capital	0.00
Depreciation	0.06
Provision for reinvestment for infrastructure development for EBC (Rs 2 crore) and ULDC project (Rs 2.5 crore)	4.50
Contingency Reserve	0.00
Bad & Doubtful Debt	0.00
Reasonable Return	0.00
Total	**20.10**

The Revenue Requirement includes employment cost of Rs 5.11 crore, which is provisional. NPC has been entrusted to submit a report on the manpower structuring of OPTCL & SLDC. The report is yet to be received from NPC for finalisation. Since SLDC will submit the final employee cost after receiving the report from NPC, the Hon'ble Commission may approve it provisionally.

SLDC has projected Administrative and General (A&G) expenditure as Rs. 3.58 crore. This is to be based on certain principles as per recommendation of the Hon'ble Commission for FY 2008-09.

Repair and Maintenance (R&M) of Rs 6.85 crore includes both for ULDC project and SLDC project. OPTCL submits to the Hon'ble Commission that an MOU has been signed between Power Grid Corporation of India Limited (PGCIL) and all the constituents of Eastern Regional Power Committee including GRIDCO on 18.3.1998 for establishment of Load Despatch Centres with associated communication facilities in the Eastern Region under Unified Scheme and subsequent operation and maintenance of these facilities. PGCIL is claiming monthly fees and charges from GRIDCO as PGCIL has made investment for commissioning of the unified scheme on behalf of the constituents. GRIDCO has been allowed the fees and charges for FY 2007-08 and GRIDCO has also informed their claiming fees and charges amounting to Rs 14.13 crore to be recovered through bulk supply price for the FY 2008-09 which do not include O&M charges which will be payable by SLDC as it will own and operate the system. SLDC has not claimed in its ARR for FY 2008-09 towards fees and charges for commissioning of the said unified scheme. However, SLDC claims Rs. 5.85 crore for R&M of the system which is 5.4% of the total capital investment of Rs. 108.85 crore allocated to the state of Orissa/GRIDCO for SLDC project. Provision of Rs. 1 crore is kept to meet R & M cost of SLDC considering the previous years' expenditure.

No provisions have been made for interest on loan, interest on working capital, contingency reserve, bad and doubtful debt and reasonable return. However, an amount of Rs 0.06 crore has been projected for depreciation, the asset value of which is assessed as Rs. 1.17 crore.

The provision of reinvestment for infrastructure development for EBC has been kept at Rs. 2 crore and for ULDC project it has been kept as Rs. 2.5 crore.

OPTCL proposes transfer of all assets that belong to ULDC at Mancheswar and sub-load despatch centers at Bhubaneswar, Meramundali, Jaya Nagar and Budhipadar with the land, buildings, plants and equipments associated or related to the state load and sub-load dispatch center to SLDC to function as an independent autonomous entity under OPTCL (transfer scheme of 2005 of GOO). Provision of man power, repayment of loan, R & M expenses etc. are made for smooth operation and maintenance of the ULDC operation.

Annual fee and operating charges

OPTCL proposes the basis of determination/calculation of annual fees as ratio of capital costs to total generation capacity. The parameters taken by OPTCL for fixing annual fee are: rate of interest at 9% for 2008-09, 10 years of recovery investment, and generation capacity of 2250 MW considering the availability to GRIDCO from different stations.

For investment of Rs. 4.50 crore for SLDC function, capital cost is calculated as Rs. 0.7012 crore and annual fee as Rs. 3117/MW/PA.

Monthly operating charges are calculated by the ratio of annual operating charges and total generation capacity for 12 months. The operating charges covers employment cost, A&G cost, R&M expenses and any other relevant costs and expenses deemed appropriate by the Commission. These charges will cover Rs. 15.60 crore. On the basis of this formula the monthly operating charge are calculated as Rs. 5778/MW.

Considering the provision in the electricity (removal of difficulty), where the central govt. in exercise of its power made the order in respect of levy and collection of fees and charges for using the transmission system, OPTCL proposes to levy and collection of annual fee and operating charges for SLDC from the licensee using the inter-state transmission system (i.e. from DISTCOs and CPPs). The estimated energy of DISTCOs and CPPs to be wheeled in OPTCL's system is estimated at 19222 MU for FY 2008-09 or an average of 2195 MW.

By using the above formula, OPTCL proposes to levy Rs. 3195/MW/PA as the annual fees to be levied and Rs. 5923 as the monthly operating charge per MW.

Scheduling and system operating charges of Rs. 3000 per day or part thereof shall be paid by the short-term customers.

Summing Up

OPTCL has submitted an annual revenue requirement of Rs 20.10 crore for the FY 2008-09 towards SLDC function separately. It has requested the Hon'ble Commission to recover the cost through annual fee of Rs 3195 per MW per annum, operating charges of Rs 5923 per MW per month, and scheduling & system operation charges of Rs 3000 per day or part thereof from the licensees using intra-state transmission system. Since, this is the first time OPTCL has submitted a separate proposal there is a need to examine it carefully so that it can be the base.

Central Electricity Supply Utility of Orissa (CESU)

A BRIEF SUMMARY OF THE PROPOSAL

- CESU has projected energy purchase of 5742.69 MU based on the estimated consumption of 3544.63 MU and distribution loss of 38.28%. The projection of energy sale to LT consumers is 1955.43 MU, HT consumers is 711.85 MU and EHT consumers is 877.35 MU.
- The power purchase cost has been estimated at Rs 825.22 crore, considering energy purchase 5742.69 MU at present average BST rate of Rs. 1.437/KWH.
- The distribution loss has been projected at 38.28% during FY 2008-09 as against 41.43% during FY 2007-08.
- For the year 2008-09, the petitioner is targeting AT&C loss of 41.36% as against 44.35% during FY 2007-08, thereby reducing the AT&C loss by 3 percentage points. The petitioner has taken it as a challenge and planned the measures like consumer metering, feeder metering and detection and regulation of unauthorized consumer and use of spot billing etc. in entire areas of CESU.
- The revenue requirement of CESU is Rs. 1258.77 crore for FY 2008-09. With the existing tariff rates, the revenue generation including miscellaneous income will be Rs. 1097.07 crore. Hence, the short fall is Rs. 161.70 crore.
- The licensee has requested to bridge the revenue gap by reduction in BST or Govt. subsidy or part revision of retail tariff or a combination of all.
- Different loss reduction programmes fully committed by the licensee by providing full management expertise are:
  - (a) Focus on implementation of sound commercial procedures and implementation of billing calendar.
  - (b) The preparation of schemative diagram for HT and LT networks.
  - (c) Frequent checking of metres and installation in industries through RT to prevent metre tampering.
  - (d) Continuation of de-hooking squads.
  - (e) Technological upgradation of sub-station and SCADA for distribution licenses.
  - (f) Energy audit and consumer indexing
  - (g) Monthly review meeting.
  - (h) Web site and customer care.
  - (i) Implementation of pillar box system.

GIST OF THE PROPOSAL

1. Introduction

The central electricity supply company of Orissa Ltd. (CESCO) was granted electricity distribution and retail supply license "The Orissa distribution and retail supply license, 1999(No.1/99)". The Hon'ble Commission, vide its order dated 8.9.2006, has formulated the central electricity supply utility of Orissa (operation and Management) schemes, 2006 and from the said date the utility is renamed as "CESU" and all assets, liabilities, rights, proceedings and manpower as well as the license held by CESCO devoted to CESU and vested on it.

2. Projection of Energy Sale for FY 2008-09

The petitioner has analysed the past trends of consumption pattern of different categories of consumer for last three years and projected total sale of 3544.63 MU for FY 2008-09.

(i) For LT category, the sale of energy is projected at 1955.43 MU against 1620.40 MU estimated for 2007-08.

(ii) For HT category, the growth is linked to the growth of industrial sector in general based on the current and past trends. The projected sale for FY 2008-09 at the estimated growth rate of around 3% is arrived at 711.85 MU against estimated sale of 687.92 MU for 2007-08.

(iii) For EHT category, the expected overall growth rate of sale is 17% for the FY 2008-09. For large industries it is 5%, for railway station it is 9%, heavy industries 0% and power intensive industry 42%. On the basis of this growth the projected sale for FY 2008-09 is arrived at 877.35 MU against 746.80 MU estimated for FY 2007-08.

3. Distribution Loss:

Considering the trend of FY 2005-06, 2006-07, 2007-08 the system loss for FY 2008-09 has been projected at 38.28%, against 41.43% for FY 2007-08.

4. AT & C Loss:

For the year 2008-09, the petitioner is targeting AT & C loss of 41.36%, a reduction of 3 percentage points from 44.35% for the FY 2007-08. The petitioner has taken it as a challenge and planned the following measures for reduction in AT & C loss.

(i) **Consumer Metering:** All the consumers of CESU are being supplied electricity through metering by replacing defective meters.

(ii) **Feeder Metering:** All the 33 KV and 11 KV Feeder Metering has been completed. Distribution transformer metering of the major cities like Bhubaneswar, Cuttack, Puri and other important towns have been completed and the balance is in progress.

(iii) Detection and Regularisation of unauthorized consumers and use of billing in entire areas of CESU:

a) Ex-military personnel have been deployed for de-hooking for unauthorized connection of non-paying consumers.
b) MRT squads have been deployed for vigilance activities.
c) One OMBUDSMAN with headquarter at Bhubaneswar has been appointed.
d) Teams have been deployed for verification of meter readings and obtaining check meter readings.
e) Bills are being generated through spot billing machines since four years.

(iv) **APDRP Scheme:** CESU has undertaken distribution system upgradation and modernization programme under this scheme of Ministry of Power, Govt. of India. The schemes involve a capital outlay of Rs 296.73 crore. It has also planned Rs 100 crore for the year 2008-09 from Power Finance Corporation Ltd.

(v) **Energy Audit:** It has been started in some areas under CESU, which will be extended to other areas in due course.

5. Annual Revenue Requirement:

CESU has projected annual revenue requirement (ARR) of Rs 1258.77 crore, including reasonable return amounting Rs 11.64 crore for the FY 2008-09. The break-up is as follows.

(i) **Power Purchase Expense:** For the FY 2008-09, power purchase cost has been estimated at Rs. 825.22 crore, considering energy purchase of 5742.69 MU at the present average BST rate of Rs. 1.437 per KWH.

(ii) **Employee Cost:** For the year 2008-09, the expenses have been projected considering an overall increase of 15% over the estimated expenditure of 2007-08, considering the merger of 50% DA with the basic salary. This cost has been arrived at Rs. 167.59 crores.

(iii) **A & G Expenses:** The petitioner has proposed a hike of 14% in the A & G expenses in the ensuing year as compared to previous year, and the projected expenditure is arrived at Rs. 39.91 crore.

(iv) **R & M Expenses:** The R & M expenses for the ensuing year have been estimated at 5.4% of the gross fixed assets. The projected expenditure for 2008-09 is arrived at Rs. 58.54 crore. The petitioner requested the Hon'ble Commission to allow at least Rs. 1 crore towards R & M of the assets created under RGGVY scheme for the FY 2008-09.

(v) **Provision for bad and Doubtful Debts:** The petitioner has made a provision of 15% for bad and doubtful debts, which amounts to Rs. 8.14 crores for FY 2008-09.

(vi) **Depreciation:** Depreciation has been provided only on assets available at the beginning of the year for which SLM (straight line method) is adopted for calculation at pre-92 rate. An amount of Rs 83.39 crore has been projected as depreciation for the FY 2008-09.

(vii) **Interest on Loans:** The interest on loan is projected at Rs 64.34 crore for the FY 2008-09.

(viii) **Reasonable return:** The reasonable return has been calculated @ 16% on equity capital. The projected figure is Rs. 11.64 crore for the FY 2008-09.

6. Revenue Gap for FY 2008-09

The annual revenue requirement of CESU for FY 2008-09 is projected at Rs 1258.77 crore. With the existing tariff rates, the revenue including miscellaneous income is projected to be Rs. 1097.07 crore. Thus, the shortfall is projected at Rs. 161.70 crore.

7. Tariff Proposal:

The petitioner requested the Hon'ble Commission that the revenue gap of Rs 161.70 crore be bridged by either reduction in BST or Govt. subsidy or part revision of retail tariff or a combination of all.

8. Loss Reduction Programme for FY 2008-09:

The licensee has set the following ambitious targets to reduce losses by providing full managerial expertise:

a. Focus on implementation of sound commercial procedures and implementation of the billing calendar.
b. The preparation of schematic diagram for HT and LT network.
c. Frequent checking of meters and installations in industries through MRT squads to prevent meter tampering.
d. Continuation of de-hooking squads.
e. Technological upgradation of sub-stations and SCADA for distribution licensees.
f. Energy audit and consumer indexing.
g. Monthly review meeting
h. Website and customer care
i. Implementation of pillar-box system.

ANALYSIS OF THE PROPOSAL

Revenue Gap

The CESU has submitted a proposal for Revenue Gap of Rs 161.70 Crore during the FY 2008-09 with the Revenue Requirement of Rs. 1258.77 Crore and Revenue Receipts at existing tariff of Rs 1097.07 Crore. It has requested the Hon'ble Commission for directing order to bridge the revenue gap by reduction in BST and /or Government subsidy or part revision of retail tariff or a combination of all the above.

The revenue gap proposal for the FY 2008-09 is reproduced in the following Table. The revenue gap projected by the Company during the FY 2008-09 is on the higher side as the projection of distribution loss is high. The gap can, therefore, be reduced by reducing distribution loss.

Revenue Gap of CESU for FY 2008-09
(Rs. in Crore)

Expenditure	1247.14
Reasonable return	11.63
Revenue requirement	1258.77
Revenue from Tariff	1097.07
Revenue gap	**161.70**

Distribution Loss

CESU has proposed a higher revenue gap in order to attract more tariffs from the consumer along with Govt. subsidy and/or reduction in BST. However, CESU has shown inefficiency in reducing distribution loss as per the recommendation of the Kanungo Committee. The licensee has estimated distribution loss of 38.28% in 2008-09 against 41.43% (estimated) in 2007-08. However, the Utility had projected 39.05% in 2007-08, which is now estimated at 41.43%. Even though CESU has projected a reduction in the distribution loss, the figure estimated for 2007-08 (41.43%) is much higher than the distribution loss (30%) approved by the Hon'ble Commission in the Business Plan for 2007-08.

While computing the overall loss, the licensee has taken into consideration sale together at LT, HT and EHT. But in Orissa, energy input to the DISTCOs is measured at GRID substations and at metering points of the EHT consumers. Therefore, any sale at EHT by DISTCOs carries zero loss. Distribution loss in respect of CESU excluding sale at EHT level is, however, much higher than that computed by CESU. It becomes 45.18% in 2008-09 as against 38.28% computed by CESU. Similarly, the distribution loss excluding sale at EHT level during 2007-08 is much higher than that computed by CESU (See Table below).

The loss at the LT side, which we understand as domestic and other low voltage categories, is a matter of concern. It is projected at about 48% during the FY 2008-09. Though CESU has shown a reduction in the LT loss from 52.67% during 2007-08 to 48.05% during 2008-09, there is a need to reduce this loss still more. Further, CESU has not shown any reduction in HT loss during FY 2008-09.

However, distribution loss calculated by excluding sale at EHT level has a declining trend from 52.88% in 2005-06 to 48.35% in 2007-08 and 45.18% in 2008-09. But still this is at a very high level. In the Business Plan, the distribution loss during 2007-08 was prescribed at 30%. It therefore seems that CESU has not satisfied the requirement of power reform. Kanungo Committee had recommended reduction of 5% loss each year, while the business plan recorded reduction of 3% loss each year. Neither of these two is adhered by the licensee.

The projection of LT demand also seems to be unrealistic. CESU has projected a significant increase (20.68%) in demand by LT consumers for which no specific reason is given. The Utility had projected 1836.70 MU during 2007-08, which has now estimated at 1620.40 MU for the same year. If we project the demand by LT consumers during 2008-09 as per the growth of 9.48% in the previous year then it would come around 1774 MU instead of 1955.43 MU as projected by CESU. CESU has projected high LT demand as by projecting high LT demand it can show high distribution loss.

Sale of Power to different Categories of Consumers and Distribution Loss of CESU

(in MU)

	2005-06	2006-07	2007-08	% change over 2006-07	2008-09 (Projected)	% Change over 2007-08
LT	1503.53	1480.10	1620.40	9.48	1955.43	20.68
HT	508.76	636.56	687.92	8.07	711.85	3.48
EHT	379.29	494.89	746.80	50.90	877.35	17.48
Both LT & HT	2012.29	2116.66	2308.32	9.05	2667.28	15.55
Total Sale	2391.58	2611.55	3055.12	16.98	3544.63	16.02
Total Purchase	4184.50	4623.66	5216.26	12.82	5742.69	10.09
Distribution Loss	1792.92	2012.11	2161.14	7.41	2198.06	1.71
% Distribution Loss (including EHT as per CESU)	43	43.52	41.43	2.09	38.28	3.15
% Distribution loss (excluding sale at EHT)	52.88	48.73	48.35	0.38	45.18	3.17
Distribution Loss as per Business Plan	36.0	33.0	30.0			

AT&C Loss

The Hon'ble Commission had approved AT&C loss at 35% for FY 2007-08, but the licensee has estimated it at 44.35%, an increase of 9.35 percentage points. Though it is a reduction from the FY 2006-07 by 2.76 percentage points, still the licensee has not adhered to the Commission's approval of AT&C loss during FY 2007-08. On the other hand, the licensee has projected a higher percentage of AT&C loss (41.36%) for the FY 2008-09 than that was approved for the FY 2007-08.

AT&C Loss of CESU

Year	Percentage loss
2006-07	47.11
2007-08 (Approved)	35.0
2007-08 (Estimated)	44.35
2008-09 (Projected)	41.36

Collection Efficiency

The company has estimated 95% collection efficiency during the FY 2007-08 and has projected the same percentage for the FY 2008-09. However, this also includes the collection efficiency from the new connections, which is expected to be cent per cent. If we consider the new connections, then CESU needs to increase the collection efficiency more than the estimated one. The Kanungo Committee had recommended for achieving 95% collection efficiency by 2005-06, which the Utility is estimated during FY 2007-08 and projected during FY 2008-09. The CESU should therefore make effort to reach a target of at least 97% collection efficiency during 2008-09. With this increase in collection efficiency the revenue of the Company would increase further. This would reduce the AT & C loss further.

Outstanding Arrears

The licensee has not put any effort to collect the arrears, which is huge. If these arrears could be collected then the deficit would be reduced drastically and there would not be any need to raise tariff.

Annual Revenue Requirement

Distribution Cost

CESU has projected distribution cost by an increase of 9.71% during the FY 2008-09 over the estimated figure of FY 2007-08. But this is an increase of about 39 per cent over the figure approved by the Hon'ble Commission for 2007-08. Further, the estimated figure for 2007-08 is 27 per cent higher than the figure approved by the Hon'ble Commission. That means the Utility has not adhered to the approved figure. The highest percentage increase is in the case of Administrative and General expenses. The A & G expenses projected for 2008-09 is an increase of 112.19% over the approved figure for FY 2007-08, while the estimated A&G figure of 2007-08 is 89 per cent higher than the approved figure. The projected figure of employee cost and R&M cost for 2008-09 is 33% and 34% respectively higher over the approved figure for 2007-08. Hence, the projected distribution cost for 2008-09 is on the very high side. This can be reduced in order to reduce the revenue gap.

Distribution Cost of CESU (Rs in Crore)

	2007-08			2008-09	% Change over 2007-08 estimated
	Approved	Estimated	% Change over approved		
Employee Cost	126.14	152.94	21.25	167.59	9.58 (32.86)
R&M Cost	43.64	53.82	23.33	58.54	8.77 (34.14)
A&G Cost	14.03	26.50	88.88	29.77	12.34 (112.19)
Distribution Cost	183.81	233.26	26.90	255.90	9.71 (39.22)

Note: Figures in the parentheses indicate percentage change over approved figure for 2007-08

Reasonable Return

CESU has claimed Rs 11.64 Crore return on the equity in its revenue requirement proposal. We have an apprehension that such a practice would violate the very basic principles of finance, i.e. the capital increases/decreases due to the profit/losses of the business. Ignoring the loss (accumulated loss) and allowing return on the equity would have negative effect on the sector in general and consumers in particular. When the licensee gets return on the equity there is an incentive for more equity financing.

Bad and Doubtful Debt

The licensee has projected Rs 8.14 crore as bad debts and included in the ARR of FY 2008-09. Since it is due to the inefficiency of the licensee, this should not be imposed on the general consumers. Hence, the Hon'ble Commission may not consider this proposal of the licensee.

Summing Up

It is found from the foregoing analysis that CESU has neither taken any step to reduce distribution loss substantially as recommended by the Kanungo Committee and OERC nor tried to project a significant improvement in collection efficiency. By reducing distribution loss as suggested above and improving collection efficiency the proposal of raising tariff can be avoided, which is for the best interest of the consumers and in conformity with the power sector reform. Further, there is a need to make effort to collect arrears in order to reduce deficit.

North Eastern Electricity Supply Company of Orissa Limited (NESCO)

ABRIEF SUMMARY OF THE PROPOSAL

NESCO has projected energy purchase of 4659.499 MU during FY 2008-09 based on the estimated consumption of 3374.036 MU by different categories of consumers and distribution loss of 27.59%. The projection of sale of energy to LT consumers is 1078.43 MU, HT consumer is 678.10 MU and EHT consumer is 1617.51 MU.

The distribution loss is projected at 27.59% during FY 2008-09 against 29.99% during FY 2007-08.

Power purchase cost for the FY 2008-09 has been estimated at Rs. 556.47 crore.

The AT&C loss is estimated at 31.21% during FY 2008-09 against 34.19% in the year 2007-08, thereby reducing 2.98 percentage points. The petitioner has taken it as a challenge and planned different measures like metering, spot billing roll out plan, ARDRP works for up gradation & modernization, energy audit, consumer indexing etc.

The licensee has calculated the cost estimates and has worked out the costs of energy audit exercise.

(A) Rs. 45 per consumer for consumer indexing.
(B) Rs. 15 per pole for pole scheduling.
(C) Rs. 200 per transformer/month for preparation of monthly energy accounting reports.

Total no. of consumers are 395970, total no. of poles are 155768 and total no. of DTRS are 15251.

Expenditure including special appropriation, reasonable return, amortisation of regulatory assets, truing up of revenue gap of FY 2007-08 during the FY 2008-09 is projected as Rs. 1099.79 crore. After deducting revenue from sale of power (at existing tariffs) amounting Rs. 924.28 crore and non-tariff income amounting Rs. 4.50 crore, an amount of Rs. 171.01 crore remains as total revenue gap for the FY 2008-09.

NESCO proposes to invest Rs. 362.88 crore on capital expenditure scheme including new and ongoing schemes. The licensee humbly requests to bridge the revenue gap through combination of grant/subsidy from state govt., reduction in BST and/or increase in RST in an appropriate manner.

The licensee has also proposed tariff rationalization measures like surcharge on delayed payment, rebate on prompt payment, special tariff for the EOU units, KHAH billing for LT industrial consumer, increase in connection and reconnection charges, etc.

GIST OF THE PROPOSAL

Introduction

North Eastern Electricity supply Company pf Orissa (NESCO) is the holder of licensee No. 3/99 granted by OERC under section 15 of OERA vide their order dated 31st March, 1999 and has been operating under the license granted by the Commission. It has been carrying out the business of distribution and retail supply of electricity in the five districts of Orissa namely Balasore, Bhadrk, Jaipur, Keonjhar and Mayurbhanj.

The licensee is carrying out the business of retail supply of electricity under tremendous duress and the licensee has made remarkable turnaround during the FY 2005-06, which has been persistently making losses since inception. It is unable to meet its costs at existing tariffs and unless there is an increase in RST or decrease in input cost in FY 08 or any grant/subsidy is provided to compensate the licensee will found it extremely difficult to meet its obligations.

Projection of Energy for FY 2008-09

The purchase of energy has been projected at 4659.499 MU during FY 2008-09 based on the distribution loss of 27.59% and energy sale of 3374.036 MU. The petitioner has analysed the past trends of consumption pattern of different categories of consumer and projected total sale of 3374.04 MU for FY 2008-09.

(i) For LT category, the sale of energy is projected at 1078.43 MU against 891.40 MU estimated for 2007-08.

(ii) For HT category, the growth is linked to the growth of industrial sector in general based on the current and past trends. The projected sale for FY 2008-09 is arrived at 678.10 MU against estimated sale of 679.24 MU for 2007-08.

(iii) For EHT category, the sale of energy for FY 2008-09 is arrived at 1617.51 MU against 1585.73 MU estimated for FY 2007-08.

Distribution Loss

The licensee has projected distribution loss at 27.59% in FY 2008-09 against 29.99% in FY 2007-08, by a reduction of around 2.4%.

Collection Efficiency

The collection efficiency of NESCO during FY 2006-07 was 92% and is expected to increase by 2% during FY 2007-08 i.e. to 94%. During FY 2008-09, NESCO proposes to increase the collection efficiency by 1% to reach at 95%.

AT & C Loss:

While approving the ARR for the year 2003-04, the Hon'ble Commission through a landmark and revolutionary decision recognized for the first time in the regulatory regime. The At & C loss concepts as distinct from the conventional T & D loss and adopted the same a s a performance parameter.

For the FY 2008-09, the petitioner is targeting 31.21% AT&C loss against 34.19% in the year 2007-08. The licensee has taken it as a challenge and has planned the following measures to reduce AT&C loss.

Metering: The licensee had inherited a system in which more than 70% of the consumers were unmetered or had defective metres. The billing databases were incorrect, did not have details of metres and other vital importations. So, the licensee immediately launched multiple activities to rectify these problems. In compliance with the directions issued by OERC, NESCO has made substantial progress in metering. It has completed almost all the consumers are being given power supply with metres.

Spot Billing Roll Out Plan: The spot billing activity started as early as 2004 through M/S Phonix IT solutions, an experienced in this field. Despite of several hardware and software problems as on date, spot billing is being carried out in 10 divisions covering around 3.61 lakh consumers. By the end of FY 2008-09, NESCO proposes to bring all of its single-phase consumers in spot billing fold.

APDRP Works: NESCO has initiated the distribution system up gradation and modernization programme under this scheme of Ministry of power, Govt. of India from FY 2004-05. The programme involves a capital outlay of around Rs. 101.81 crore which includes metering, new lines and sub-stations, modernization of existing sub-station etc. For the year 2008-09, the expenditure under this head is estimated to be Rs. 53.00 crore.

Energy Audit: NESCO initiated energy audit in January 2005 and commenced the exercise in its licensed area of supply departmentally. It has completed the significant metering of the 11 KV and 33 KV feeders. As a result there has been substantial reduction in commercial losses and improvement in revenue income. Losses have been come down in same of the industrial feeders from 22% to 3%. In the second phase also, energy audit activity will be spread in a phased manner in near future in balance feeders and transformer.

Consumer Indexing: NESCO has initiated the process of consumer indexing. It will be one time activity aimed to identify all the existing consumers receiving supply from individual distribution transformer and creation of network diagrams and assets details. The activity will include (i) consumer and network survey (ii) building data base and indexing consumer (iii) pointing of electrical address on poles, DTR and at consumers' premises.

Monthly Energy Accounting: It will done for 11 KV downwards networks to determines the AT & C loss. The work will involve reading of all 11 KV feeders input metres, DTR metres and evaluation of KV feeder losses by subtracting sum of all DTR metres consumption from input metres consumptions of respective 11 KV feeder.

Costs Estimates: The licenses has calculate the cost estimated and has worked out the costs of energy audit exercise

(A) Rs. 45 per consumer for consumer indexing
(B) Rs. 15 per pole for pole scheduling
(C) Rs. 200 per transformer per month for preparation of monthly energy accounting reports.

Total no. of consumers are 395970, total no. of poles are 155768 and total no. of DTRS are 15251. Thus Rs. 567.58 lakh is the cost of energy as a part of A & G expenses for the ensuring year.

Special Police Station: The DISTCO has to bear salary costs and TA bill of police force deputed at special police stations. Thus. The licensee has estimated Rs. 1.29 crore towards this expenditure under the head of A & G expenses.

Revenue Requirement:

Sales Forecasts: For projecting the consumption of different categories, the licenses has analysed the post trends of consumption pattern for the last six years i.e. FY 2001-2007

The growth of Lt category has been estimated in the FY 2008-09 to be 21%. However, for HT and EHT category of consumers, the consumption has been projected based on current/past trends and other factors such as additional load from existing and new consumers etc.

The sales for the FY 2008-09 of LT category, HT category, and EHT category are 1078.426 MU. 678.10 MU, 1617.507 MU respectively. Thus the total sale is 3374.036 MU.

Power Purchase Expenses: For the year FY 2008-09, energy input of 4659.499 MU has been estimated based in the estimated consumption of 3314.036 MU and distribution loss of 27.59% power purchase cost has been estimated at Rs. 556.48 crore.

Employee Cost: The total employee expenses after capitalization projected for FY 2008-09 is Rs. 139.79 crore.

Administration and General Expenses: The total A & G expenses for Fy 2008-09 is projected at Rs. 27.25 crore considering the additional A & G expenses of Rs. 16.75 crore.

Repair & Maintenance expenses: The total R & M expenses for 2008-09 os projected at Rs. 32.70 crore.

Provision for Bad and Doubtful debts: Considering the proposed collection efficiency of 95 % for the FY 2008-09, the bad debts equivalent to 5% of the estimated revenue billed i.e. Rs. 46.21 crore has been considered.

Depreciation: It is projected at Rs. 21.73 crore.

Interest Expenses: the total interest chargeable to revenue proposed by the licensee for the year 2008-09 is Rs. 60.11 crore.

Provision for Contingency:
The contingency estimated for FY 2008-09 is Rs. 2.27 crore at the rate of 0.375% of the opening gross fixed assets added during the year to the maximum ceiling of 5% of the gross fixed assets.

Amortisation of regulatory Assets: the licensee humbly requests the Hon'ble Commission to allow this expenses to the extent of Rs. 145.42 crore for the ensuring year.

Truing up of revenue gap for FY 2007-08: the licensee has proposed to include the revenue gap of FY 2007-08 amounting to Rs. 56.78 crore along with the revenue gap for Fy 2008-09 in the ARR for FY 20008-09.

Reasonable return: The licensee has assumed reasonable return amounting to Rs. 10.55 crore as calculated @ 16%.

Revenue at Existing tariffs: the total revenue based on the existing tariffs applicable for the projected sales is estimated at Rs. 924.28 crore.

Non-Tariff Income: the licensee has proposed Rs. 4.50 crore towards this for the ensuring year FY 2008-09.

Summary of ARR & Revenue gap

The revenue gap for the year 2008-09is arrived at Rs. 171.01 crore.

	Rs in Crore
Expenditure including special appropriation on FY 2008-09	887.04
Reasonable return for FY 2008-09	10.55
Amortization of Regulatory Assets	145.42
Truing up of revenue gap for FY 2007-08	56.78
Sub-Total	1099.79
Revenue from sale of power at existing tariffs in FY 2008-09	924.28
Non-Tariff Income	4.50
Total Revenue gap	171.01

Capital Expenditure Programme:

NESCO proposes to invest Rs. 362.88 crore on capital expenditure scheme including new schemes and ongoing schemes.

Tariff Proposal

The licensee requests the Hon'ble Commission to bridge the revenue gap through combination of grant/subsidy from State Government, reduction in BST and/or increase in RST in an appropriate manner.

Tariff Rationalisation Measures

NESCO proposes to take the following tariff rationalization measures during the FY 2008-09.

Delayed Payment Surcharge: As per the Hon'ble Commission's decision, the licensee has proposed a surcharge of 1.25% per month if payment is not made within the due date. DPS is chargeable for every day of delay at 1.25% per month on the amount remaining unpaid (excluding arrears on account of DPS) in response of certain categories of consumers.

Connection Charges: In case of single-phase domestic/general purpose consumers up to 3KW loads the licensee can collect a flat rate of Rs 500/- towards the cost of service connection. But the actual total cost works out to Rs 987/-. Thus, considering this, the licensee has proposed to increase from Rs 500/- to Rs 1000/- for single-phase domestic/general purpose consumers. The licensee also proposes the rate of labour component to be taken by consumers equivalent to Rs 400/- where single-phase consumers come forward and provide service connection materials.

Reconnection Charges: The licensee collects reconnection charges from different classes at the time of reconnection which were last revised in 2004.

Class of consumers	Existing rate	proposed rate
Single-phase domestic consumer	Rs 50/-	Rs 75/-
Single-phase other consumers	Rs 100/-	Rs 150/-
3 phase line	Rs 200/-	Rs 300/-
HT & EHT lines	Rs 1000/-	Rs 1500/-

Rebate on Prompt Payment: The licensee can avail a rebate of 2% for prompt payment of BST bill within two working days of presentation of BST bills. Further, it is directed that all consumers except domestic, general purpose, small industry category, if payment was made within three days of bill presentation and seven days in case of others.

ANALYSIS OF THE PROPOSAL

Revenue Gap

The NESCO has submitted a proposal for Revenue Gap of Rs 171.01 Crore during the FY 2008-09. This gap is calculated taking into account truing up of Revenue Gap for FY 2007-08 amounting Rs 56.78 Crore and amortisation of Regulatory Assets amounting Rs 145.42 Crore. The Company has requested the Commission to bridge the total revenue gap through combination of reduction in Bulk Supply Tariff, grant/subsidy from the Government of Orissa and/or increase in Retail Supply Tariff. The calculation of Revenue Gap by the Company is presented in the following.

Revenue Gap of NESCO for FY 2008-09

(Rs in Crore)

Expenditure including special appropriation	887.04
Reasonable return for FY 2008-09	10.55
Revenue requirement during FY 2008-09	**897.59**
Revenue from Tariff in FY 2008-09	924.28
Non Tariff Income	4.50
Total Revenue during 2008-09	**928.78**
Revenue surplus during FY 2008-09	**31.19**
Amortisation of Regulatory assets	145.42
Truing up of Revenue Gap for FY 2007-08	56.78
Total Revenue Gap	**171.01**

If we look into the projected Revenue Requirement and Revenue at existing tariff for the FY 2008-09, we find that there is a revenue surplus of Rs 31.19 Crore. The Company has shown revenue gap by including amortisation of Regulatory Assets and uncovered revenue gap for FY 2007-08 in the revenue requirement for FY 2008-09.

The revenue gap projected by the Company during the FY 2007-08 is high as the projection of distribution loss is high as per the recommendation of Kanungo Committee. The gap can, therefore, be reduced by reducing distribution loss. Further, there is no rationale for transferring the past loss of the Company amounting Rs 56.78 Crore to the consumers.

Distribution Loss

NESCO has proposed a higher revenue gap in order to attract more tariffs from the consumer along with Govt. subsidy and/or reduction in BST. However, NESCO has shown inefficiency in reducing distribution loss as per the recommendation of the Kanungo Committee. The Company has projected distribution loss of 27.59% in 2008-09 against 29.99% (estimated) in 2007-08. However, while computing the distribution loss, the licensee has taken into consideration sale together at LT, HT and EHT. But in Orissa, energy input to the DISTCOs is measured at GRID substations and at metering points of the EHT consumers. Therefore, any sale at EHT by DISTCOs carries zero loss.

Distribution loss in respect of NESCO excluding sale at EHT level is, however, much higher than that computed by NESCO. It becomes 42.26% in 2008-09 as against 27.59% computed by NESCO. Similarly, the distribution loss excluding sale at EHT level during 2007-08 is much higher than that computed by NESCO (See Table below).

The loss at the LT side, which we understand as domestic and other low voltage categories, is a matter of concern. It is projected at about 43% during the FY 2008-09. Though NESCO has shown a reduction in the LT loss from 46% during 2007-08 to 43% during 2008-09, there is a need to reduce this loss still more.

It is a matter of concern that the distribution loss calculated by excluding sale at EHT level has an increasing trend from 51.33% in 2005-06 to 52.42% in 2007-08. Though the projection of loss for 2008-09 excluding sale at EHT comes down to 42.26%, the earlier experience shows that it would be much more than that. As per the projection for 2007-08, the distribution loss excluding sale at EHT comes to 48.08 per cent, but as per estimated figure this becomes 52.42 per cent. However, in the Business Plan, the distribution loss during 2007-08 was prescribed at 29% by OERC. It therefore seems that NESCO has not satisfied the requirement of power reform. Kanungo Committee had recommended reduction of 5% loss each year, while the business plan recorded reduction of 3% loss each year. Neither of these two is adhered to by the licensee.

The projection of demand by LT consumers also seems to be unrealistic. NESCO has projected a significant increase (20.98%) in demand by LT consumers for which no specific reason is given. The Company had projected 882.84 MU during 2007-08, which has now estimated at 891.40 MU for the same year, i.e. an increase of only 8.56 MU (i.e., 0.97%). Therefore, the projection of demand of 20.98 per cent by the LT consumers during 2008-09 seems to be very high. NESCO has projected high LT demand as by projecting high LT demand it can show high distribution loss.

Sale of Power to different Categories of Consumers and Distribution Loss of NESCO (in MU)

	2005-06	2007-08 (Projected)	2007-08 (Estimated)	2008-09 (Projected)	% Change
LT	735.03	882.84	891.40	1078.43	20.98
HT	463.09	658.37	679.24	678.10	-0.17
EHT	946.09	1791.45	1585.73	1617.51	2.00
Sale at LT & HT	1198.12	1541.21	1570.64	1756.53	11.84
Total Sale	2144.21	3332.67	3156.37	3374.04	6.90
Total Purchase	3407.57	4760.0	4508.20	4659.50	3.36
Distribution Loss	1263.36	1427.33	1531.83	1285.46	-16.08
% Distribution Loss (including EHT as per NESCO)	37.08	29.99	29.99	27.59	
% Distribution loss (excluding sale at EHT)	51.33	48.08	52.42	42.26	
Distribution Loss as per Business Plan	35.00		29.00		

AT&C Loss

The Hon'ble Commission had approved AT&C loss at 30.40% for FY 2007-08, but the licensee has estimated it at 34.19%, an increase of 3.79 percentage points. Though it is a reduction from the FY 2006-07, still the licensee has not adhered to the Commission's approval of AT&C loss during FY 2007-08. On the other hand, the licensee has projected a higher percentage of AT&C loss (31.21%) for the FY 2008-09 than that was approved for the FY 2007-08.

AT&C Loss of NESCO

Year	Percentage loss
2006-07	40.91
2007-08 (Approved)	30.40
2007-08 (Estimated)	34.19
2008-09 (Projected)	31.21

Collection Efficiency

The licensee has estimated 94 per cent collection efficiency for the FY 2007-08 and projected 95 per cent for the FY 2008-09. However, this includes the collection efficiency from the new connections, which is expected to be cent per cent. If we consider the new connections, then NESCO needs to increase the collection efficiency more than the estimated one. However, the collection efficiency estimated for FY 2007-08 has achieved figure approved by OERC (i.e. 94%). The Company should make more effort to reach a target of 97% collection efficiency during 2008-09. With this increase in collection efficiency the revenue of the Company would increase further. This would reduce the AT & C loss further.

Outstanding Arrears

The Company has included previous loss in the calculation of revenue gap. But it has not put any effort to collect the arrears, which is huge. If these arrears could be collected then the deficit would be reduced drastically and there would not be any need to raise tariff.

Annual Revenue Requirement

Distribution Cost

NESCO has projected distribution cost by an increase of 32.32 per cent during the FY 2008-09 over the estimated figure of FY 2007-08. But this is an increase of about 65.58 per cent over the figure approved by the Hon'ble Commission for 2007-08. Further, the estimated figure for 2007-08 is 25.13 per cent higher than the figure approved by the Hon'ble Commission. That means the Company has not adhered to the approved figure. The highest percentage increase is in the case of Administrative and General expenses. The A & G expenses projected for 2008-09 is an increase of 112.39% over the approved figure for FY 2007-08, while the estimated A&G figure of 2007-08 is 4.36 per cent higher than the approved figure. The projected figure of employee cost and R&M cost for 2008-09 is 67.67% and 33.85% respectively higher over the approved figure for 2007-08. Hence, the projected distribution cost for 2008-09 is on the very high side. This can be reduced in order to reduce the revenue gap.

Distribution Cost of NESCO (Rs in Crore)

	2007-08			2008-09	% Change over 2007-08 estimated
	Approved	Estimated	% Change		
Employee Cost	83.37	110.02	31.97	139.79	27.06 (67.67)
R&M Cost	24.43	27.54	12.73	32.70	18.74 (33.85)
A&G Cost	12.83	13.39	4.36	27.25	103.51 (112.39)
Distribution Cost	120.63	150.95	25.13	199.74	32.32 (65.58)

Note: Figures in the parentheses indicate percentage change over approved figure for 2007-08

Reasonable Return

NESCO has claimed Rs 10.55 Crore return on the equity in its revenue requirement proposal. We have an apprehension that such a practice would violate the very basic principles of finance, i.e. the capital increases/decreases due to the profit/losses of the business. Ignoring the loss (accumulated loss) and allowing return on the equity would have negative effect on the sector in general and consumers in particular. When the licensee gets return on the equity there is an incentive for more equity financing.

Bad and Doubtful Debt

The licensee has projected Rs 46.21 crore as bad debts and included in the ARR of FY 2008-09. Since it is due to the inefficiency of the licensee, this should not be imposed on the general consumers. Hence, the Hon'ble Commission may not consider this proposal of the licensee.

Summing Up

It is found from the foregoing analysis that NESCO has not taken any step to reduce distribution loss substantially as recommended by the Kanungo Committee and OERC. Though it has tried to maintain the approved collection efficiency, still the company needs to improve. By reducing distribution loss as suggested above and improving collection efficiency the proposal of raising tariff can be avoided, which is for the best interest of the consumers and in conformity with the power sector reform. Further, there is a need to make effort to collect arrears in order to reduce deficit.

Southern Electricity Supply Company of Orissa Limited (SOUTHCO)

A BRIEF SUMMARY OF THE PROPOSAL

SOUTHCO has projected energy purchase of 1980 MU during FY 2008-09 based on the estimated consumption of 1201.70 MU by different categories of consumers and distribution loss of 39.31%. The projection of sale of energy to LT consumers is 744.21 MU, HT consumer is 249.82 MU and EHT consumer is 207.66 MU.

The distribution loss is projected at 39.31% during FY 2008-09 against 41.54% during FY 2007-08.

Power purchase cost for the FY 2008-09 has been estimated at Rs. 194.63 crore.

The AT&C loss is estimated at 42.95% during FY 2008-09 against 45.63% in the year 2007-08, thereby reducing 2.68 percentage points. The petitioner has taken it as a challenge and planned different measures like metering, spot billing roll out plan, ARDRP works for up gradation & modernization, energy audit, consumer indexing etc.

The licensee has calculated the cost estimates and has worked out the costs of energy audit exercise.

(D) Rs. 45 per consumer for consumer indexing.
(E) Rs. 15 per pole for pole scheduling.
(F) Rs. 200 per transformer/month for preparation of monthly energy accounting reports.

Total no. of consumers are 291671, total no. of poles are 204364 and total no. of DTRS are 6098.

Expenditure including special appropriation, reasonable return, amortisation of regulatory assets, truing up of revenue gap of FY 2007-08 during the FY 2008-09 is projected as Rs. 701.19 crore. After deducting revenue from sale of power (at existing tariffs) amounting Rs. 326.25 crore and non-tariff income amounting Rs. 3.89 crore, an amount of Rs. 371.05 crore remains as total revenue gap for the FY 2008-09.

SOUTHCO proposes to invest Rs. 541.29 crore on capital expenditure scheme including new and ongoing schemes. The licensee humbly requests to bridge the revenue gap through combination of grant/subsidy from state govt., reduction in BST and/or increase in RST in an appropriate manner.

The licensee has also proposed tariff rationalization measures like surcharge on delayed payment, rebate on prompt payment, special tariff for the EOU units, KHAH billing for LT industrial consumer, increase in connection and reconnection charges, etc.

GIST OF THE PROPOSAL

1. **Introduction:**

Southern Electricity Supply Company of Orissa Ltd., Berhampur, (SOUTHCO), is the holder of The Orissa Distribution and Retail Supply License, 1999 (No 2/99) and has been carrying out the business of distribution and retail supply of electricity in the eight districts of Orissa namely Ganjam, Gajapati, Kandhamal, Boudh, Rayagada, Koraaput, Nawarangpur and Malkangiri.

2. **Projection of Energy for FY 2008-09:**

The purchase of energy for FY 2008-09 has been projected at 1980 MU, based on the distribution loss of 39.31% and energy sale of 1201.70 MU.

For projecting the consumption of different categories of consumers, the license has analysed the past trends of consumption pattern for last six years i.e. from 2001-2002 to FY 2006-07. The growth in the LT category has been estimated in FY 2008-09 to be 11.55%. However, for HT and EHT category of consumers, the consumption has been projected based on current/past trends and other factors such as additional load from existing and new consumers etc.

(i) For LT category, the sale of energy for the FY 2008-09 is projected at 744.21 MU.

(ii) For LT category, the growth is inked to the growth of industrial sector in general based on the current and past trends. The average sales growth rate of 3% has been estimated for the next five years. For large industries, sales is 86.022 MU, for power intensive industries, it is 78.70 MU & for others of is 85.108 MU. Thus the total sale for HT category is 249.82 MU.

(iii) For EHT category, the average sales growth is 1%. For large industry, the average sales growth is 1%, no growth for power intensive industries and 1% for railway traction. Thus, on the basis of this growth, total projected sale is 207.66 MU.

3. **Distribution Loss**

The system loss for FY 2008-09 has been projected at 39.31% against 41.54% during FY 2007-08.

4. **AT & C Loss**

The licensee has projected a reduction in AT&C loss from 45.63% in FY 2007-08 to 42.95% in 2008-09. The licensee has taken up it as a challenge and has planned the following measures to reduce AT&C loss.

(i) Metering: The licensee had inherited a system in which more than 70% of the consumers were unmetered or defective metres. The billing databases were incorrect, did not have details of metres and other vital information. So, the licensee immediately launched multiple activities to rectify these problems. In compliance with the directions issued by the OERC, SOUTHCO has made substantial progress in metering. It has completed, almost 100% feeder level metering and almost all the consumer are being given power supply with meters.

(ii) **Spot Billing Roll out Plan:** The spot billing activity started as early as 2004 through M/S Phonix IT solutions, an experienced form in this field. Despite of several hardware and software problems as on date, it is being carried out in 9 divisions covering around 3.62 lakh consumers. By the end of FY 2008-09, SOUTHCO proposes to cover 100% of its consumers in spot billing fold.

(iii) **APDRP Works:** SOUTHCO has initiated the distribution system up-gradation and modernization programme under this scheme of Ministry of power, Govt. of India from 2004-05. The programme involves a capital outlay of around Rs. 106.03 crore which includes metering, new lines and sub-stations, modernization of existing sub-station etc. For the year 2008-09, the expenditure under this head is estimated to be Rs. 70.31 crore.

(iv) **Energy Audit:** The licensee has initiated steps and commenced energy audit exercise on its licensed area of supply. It has completed the metering of 584 feeder metres and 8993 distribution transformer metres so as to implement the energy audit successfully. Currently. Energy audit is being carried out on a monthly basis on 116.33 KV feeders.

(v) **Consumer Indexing:** SOUTHCO has initiated the process of consumer indexing. It will be one time activity aimed to identify all the existing consumers receiving supply from individual distribution transformer and creation of network diagrams and asset details. The activity will include (i) consumer and network survey, (ii) Building data base and indexing consumer, (iii) pointing of electrical address on poles, DTR and at consumers' premises.

(vi) **Monthly Energy Accounting:** It will be done for 11 KV downwards network to determine the AT & C loss. The work will involve reading of all 11 KV feeder input metres, DTR metres and evaluation of 11 KV feeder losses by subtracting sum of all DTR metre consumption from input metre consumption of respective 11 KV feeder.

(vii) **Cost Estimates:** The licensee has calculated the cost estimates and has worked out the costs of energy audit exercise.

(A) Rs. 45 per consumer for consumer indexing
(B) Rs. 15 per pole for pole scheduling
(C) Rs. 200 per transformer per month for preparation of monthly energy accounting report.

Total number of consumers are 291671, total number of poles are 204364 and total no. of DTRs are 6098. Thus, 174.10 lakhs is the cost of energy as a part of A & G expenses for the ensuring year.

(viii) **Special Police Station:** The DISTCO has to bear salary costs and TA bills of police force deputed at special police stations. Thus, the licensee has estimated Rs. 1.03 crore towards this expenditure under the head of A & G expenses.

5. Revenue Requirement:

(i) **Power Purchase Expenses:** For the FY 2008-09, energy input of 1980 MU has been estimated based on the estimated consumption of 1202 MU and distribution loss of 39.31%. For the FY 2008-09, power purchase cost has been estimated at Rs. 194.63 crores.

(ii) **Employee Expenses:** The total employee expenses after capitalization projected for FY 2008-09 is Rs. 143.72 crore.

(iii) **Administration and General Expenses:** The total A & G expenses for FY 2008-09 are projected at Rs. 29.01 crores considering the additional A & G expenses of Rs. 12.73 crore.

(iv) **Repair and Maintenance Expenses:** The total R & M expenses for FY 2008-09 is projected at Rs. 30.72 crore.

(v) **Provision for Bad and Doubtful Debts:** Considering the proposed collection efficiency of 94% for FY 2008-09, the bad debts equivalent to 6% of the estimated revenue billed i.e. Rs. 19.59 crore has been estimated.

(vi) **Depreciation:** It is projected at Rs. 20.55 crore.

(vii) **Interest Expenses:** The licensee has estimated the total interest of Rs. 45.47 crore towards the differential interest.

(viii) **Provision for Contingency:** The contingency estimated for FY 2008-09 is Rs. 2.14 crore at the rate of 0.375% of Gross Fixed Assets at beginning of the year.

(ix) **Amortization of Regulatory Assets:** The licensee humbly requests the Hon'ble Commission to allow Rs. 127.55 crore towards these expenses.

(x) **Truing Up of Revenue Gap for FY 2007-08:** The licensee has the proposal to include revenue gap of FY 2007-08 amounting to Rs. 97.26 crore along with the revenue gap for FY 2008-09 in the ARR for FY 2008-09.

(xi) **Reasonable Return:** The licensee has assures reasonable return amounting to Rs. 6.03 crore as calculated @ 16% on equity capital.

6. **Revenue at Existing Tariff:**

The total revenue based on the existing tariffs applicable for the projected sales are estimated at Rs. 326.24 crore for the FY 2008-09. The Licensee has also proposed Rs. 3.89 crore towards non-tariff income.

7. **Capital Expenditure Programme:**

SOUTHCO proposes to inverse Rs. 541.29 crore on capital expenditure scheme including new schemes and ongoing schemes.

8. **Tariff Proposal:**

The licensee humbly requests the Hon'ble Commission to bridge the revenue gap through combination of grant/subsidy from state govt, reduction in BST and/or increase in RST in appropriate manner. No special tariff should be allowed to the industries, which were earlier covered as EOUs.

9 **Tariff Rationalisation Measures:**

The SOUTHCO has proposed to take the following tariff rationalization measures during the FY 2008-09.

Delayed Payment Surcharge: As DPS is not appropriate in respect of LT industrial (small) consumers, so the licensee request the Hon'ble Commission to approve DPS to be levied to LT industries (small) consumer also. It shall be charged for everyday of delay at 1.25% per month on the amount remaining unpaid (excluding arrears on account of DPS) in certain categories of consumers.

Connection Charges: Considering the actual cost of Rs. 987, the licensee has proposed to increase it from Rs. 500 to Rs. 1000 for single-phase domestic/general purpose consumers. The licensee also proposes the rate of labour component to be taken by consumer equivalent to Rs. 400 where single-phase consumers come forward and provide services connection materials.

Reconnection Charges: The licensee collects reconnection charges from different classes at the time of reconnection, which were last revised in 2004.

Class of Consumer	Existing Rate	Proposed rate
Single Phase Domestic Consumer	Rs. 50	Rs. 75
Single Phase Other consumer	Rs. 100	Rs. 150
3 Phase Line	Rs. 200	Rs. 300
HT & EHT Lines	Rs. 1000	Rs. 1500

Rebate on Prompt Payment: The licensee can avail a rebate of 2% for prompt payment of BST bill within two working days of presentation of BST bills. Further, it is directed that all consumers except domestic, general purpose, small industry category, if payment was made within three days of bill presentation and seven days in case of others.

ANALYSIS OF THE PROPOSAL

Revenue Gap

The SOUTHCO has submitted a proposal for Revenue Gap of Rs 371.05 Crore during the FY 2008-09. This gap is calculated taking into account truing up of Revenue Gap for FY 2007-08 amounting Rs 97.26 Crore and amortisation of Regulatory Assets amounting Rs 112.09 Crore. The Company has requested the Commission to bridge the total revenue gap through combination of reduction in Bulk Supply Tariff, grant/subsidy from the Government of Orissa and/or increase in Retail Supply Tariff. The calculation of Revenue Gap by the Company is presented in the following.

Revenue Gap of SOUTHCO for FY 2008-09

(Rs in Crore)

Expenditure including special appropriation	485.81
Reasonable return for FY 2008-09	6.03
Revenue requirement during FY 2008-09	**491.84**
Revenue from Tariff in FY 2008-09	326.25
Non Tariff Income	3.89
Total Revenue during 2008-09	**330.14**
Revenue gap during FY 2008-09	**161.70**
Amortisation of Regulatory assets	112.09
Truing up of Revenue Gap for FY 2007-08	97.26
Total Revenue Gap	**371.05**

The revenue gap projected by the Company during the FY 2007-08 is high as the projection of distribution loss is high as per the recommendation of Kanungo Committee. The gap can, therefore, be reduced by reducing distribution loss. Further, there is no rationale for transferring the past loss of the Company amounting Rs 97.26 Crore to the consumers.

Distribution Loss

SOUTHCO has proposed a higher revenue gap in order to attract more tariffs from the consumer along with Govt. subsidy and/or reduction in BST. However, SOUTHCO has shown inefficiency in reducing distribution loss as per the recommendation of the Kanungo Committee. The Company has projected distribution loss of 39.31% in 2008-09 against 41.54% (estimated) in 2007-08. However, while computing the distribution loss, the Company has taken into consideration sale together at LT, HT and EHT. But in Orissa, energy input to the DISTCOs is measured at GRID substations and at metering points of the EHT consumers. Therefore, any sale at EHT by DISTCOs carries zero loss. Distribution loss in respect of SOUTHCO excluding sale at EHT level is, however, much higher than that computed by SOUTHCO. It becomes 43.91% in 2008-09 as against 39.31% computed by SOUTHCO. Similarly, the distribution loss excluding sale at EHT level during 2007-08 is much higher than that computed by SOUTHCO (See Table below).

The loss at the LT side, which we understand as domestic and other low voltage categories, is a matter of concern. It is projected at about 38.30% during the FY 2008-09. Though SOUTHCO has shown a reduction in the LT loss from 40.30% during 2007-08 to 38.30% during 2008-09, there is a need to reduce this loss still more.

It is a matter of concern that the distribution loss calculated by excluding sale at EHT level has an increasing trend from 45.53% in 2005-06 to 46.58% in 2007-08. Though the projection of loss for 2008-09 excluding sale at EHT comes down to 43.91%, the earlier experience shows that it would be more than that. As per the projection for 2007-08, the distribution loss excluding sale at EHT comes to 44.68 per cent, but as per estimated figure this becomes 46.58 per cent. However, in the Business Plan, the distribution loss during 2007-08 was prescribed at 30% by OERC. Therefore, it seems that SOUTHCO has not satisfied the requirement of power reform. Kanungo Committee had recommended reduction of 5% loss each year, while the business plan recorded reduction of 3% loss each year. Neither of these two is adhered by the licensee.

The projection of demand by LT consumers also seems to be unrealistic. SOUTHCO has projected a significant increase (11.55%) in demand by LT consumers for which no specific reason is given. The Company had projected 677.41 MU during 2007-08, which has now estimated at 667.14 MU for the same year, i.e. a decrease of 10.27 MU (i.e., 1.52%). Therefore, the projection of increase in demand of 11.55 per cent by the LT consumers during 2008-09 seems to be very high. SOUTHCO has projected high LT demand as by projecting high LT demand it can show high distribution loss.

Sale of Power to different Categories of Consumers and Distribution Loss of SOUTHCO

(in MU)

	2005-06	2007-08 (Projected)	2007-08 (Estimated)	2008-09 (Projected)	% Change over 2007-08
LT	585.99	677.41	667.14	744.21	11.55
HT	250.13	245.09	237.88	249.82	5.02
EHT	167.04	187.44	205.67	207.66	0.97
Sale at LT & HT	936.12	922.50	905.03	994.04	9.83
Total Sale	1003.16	1109.94	1110.70	1201.70	8.19
Total Purchase	1702.16	1855.00	1900.00	1980.00	4.21
Distribution Loss	699	745.06	789.30	778.30	-1.39
% Distribution Loss (including EHT as per SOUTHCO)	41.07	40.16	41.54	39.31	
% Dist loss (excluding sale at EHT)	45.53	44.68	46.58	43.91	
Dist Loss as per Business Plan	36.00		30.00		

AT&C Loss

The Hon'ble Commission had approved AT&C loss at 34.60% for FY 2007-08, but the licensee has estimated it at 45.63%, an increase of 11.03 percentage points. Though it is a reduction of 2.07 percentage points from the FY 2006-07, still the licensee has not adhered to the Commission's approval of AT&C loss during FY 2007-08. On the other hand, the licensee has projected a higher percentage of AT&C loss (42.95%) for the FY 2008-09 than that was approved for the FY 2007-08.

AT&C Loss of SOUTHCO

Year	Percentage loss
2006-07	47.70
2007-08 (Approved)	34.60
2007-08 (Estimated)	45.63
2008-09 (Projected)	42.95

Collection Efficiency

The licensee has estimated 93 per cent collection efficiency for the FY 2007-08 and projected 94 per cent for the FY 2008-09. However, this includes the collection efficiency from the new connections, which is expected to be cent per cent. If we consider the new connections, then SOUTHCO needs to increase the collection efficiency more than the estimated one. However, the collection efficiency estimated for FY 2007-08 has not achieved figure approved by OERC (i.e. 94%). The Company should make more effort to reach a target of 97% collection efficiency during 2008-09. With this increase in collection efficiency the revenue of the Company would increase further. This would reduce the AT & C loss further.

Outstanding Arrears

The Company has included previous loss in the calculation of revenue gap. But it has not put any effort to collect the arrears, which is huge. If these arrears could be collected then the deficit would be reduced drastically and there would not be any need to raise tariff.

Annual Revenue Requirement

Distribution Cost

SOUTHCO has projected distribution cost by an increase of 17.49 per cent during the FY 2008-09 over the estimated figure of FY 2007-08. But this is an increase of about 43.91 per cent over the figure approved by the Hon'ble Commission for 2007-08. Further, the estimated figure for 2007-08 is 22.48 per cent higher than the figure approved by the Hon'ble Commission. That means the Company has not adhered to the approved figure. The highest percentage increase is in the case of Administrative and General expenses. The A & G expenses projected for 2008-09 is an increase of 129.97% over the approved figure for FY 2007-08, while the estimated A&G figure of 2007-08 is 44.87 per cent higher than the approved figure. The projected figure of employee cost and R&M cost for 2008-09 is 24.99% and 67.14% respectively higher over the approved figure for 2007-08. Hence, the projected distribution cost for 2008-09 is on the very high side. This can be reduced in order to reduce the revenue gap.

Distribution Cost of SOUTHCO (Rs in Crore)

	2007-08			2008-09	% Change over 2007-08 estimated
	Approved	Estimated	% Change		
Employee Cost	77.48	94.26	21.66	96.84	2.74 (24.99)
R&M Cost	18.38	20.45	11.26	30.72	50.22 (67.14)
A&G Cost	12.08	17.50	44.87	27.78	58.74 (129.97)
Distribution Cost	107.94	132.21	22.48	155.34	17.49 (43.91)

Note: Figures in the parentheses indicate percentage change over approved figure for 2007-08

Reasonable Return

SOUTHCO has claimed Rs 6.03 Crore return on the equity in its revenue requirement proposal. We have an apprehension that such a practice would violate the very basic principles of finance, i.e. the capital increases/decreases due to the profit/losses of the business. Ignoring the loss (accumulated loss) and allowing return on the equity would have negative effect on the sector in general and consumers in particular. When the licensee gets return on the equity there is an incentive for more equity financing.

Bad and Doubtful Debt

The licensee has projected Rs 19.57 crore as bad debts and included in the ARR of FY 2008-09. Since it is due to the inefficiency of the licensee, this should not be imposed on the general consumers. Hence, the Hon'ble Commission may not consider this proposal of the licensee.

Summing Up

It is found from the foregoing analysis that SOUTHCO has neither taken any step to reduce distribution loss substantially as recommended by the Kanungo Committee and OERC nor has tried to project a significant improvement in collection efficiency. By reducing distribution loss as suggested above and improving collection efficiency the proposal of raising tariff can be avoided, which is for the best interest of the consumers and in conformity with the power sector reform. Further, there is a need to make effort to collect arrears in order to reduce deficit.

Western Electricity Supply Company of Orissa Limited (WESCO)

A BRIEF SUMMARY OF THE PROPOSAL

WESCO has projected energy purchase of 5756 MU during FY 2008-09 based on the estimated consumption of 3963 MU by different categories of consumers and distribution loss of 31.51%. The projection of sale of energy to LT consumers is 1066 MU, HT consumer is 1475 MU and EHT consumer is 1422 MU.

The distribution loss is projected at 31.51% during FY 2008-09 against 33.71% during FY 2007-08.

Power purchase cost for the FY 2008-09 has been estimated at Rs. 793 crore.

The AT&C loss is estimated at 33.87% during FY 2008-09 against 36.37% in the year 2007-08, thereby reducing 2.50 percentage points. The petitioner has taken it as a challenge and planned different measures like metering, spot billing roll out plan, ARDRP works for up gradation & modernization, energy audit, consumer indexing etc.

The licensee has calculated the cost estimates and has worked out the costs of energy audit exercise.

(G) Rs. 45 per consumer for consumer indexing.
(H) Rs. 15 per pole for pole scheduling.
(I) Rs. 200 per transformer/month for preparation of monthly energy accounting reports.

Total no. of consumers are 177665, total no. of poles are 227406 and total no. of DTRS are 3425.

Expenditure including special appropriation, reasonable return, amortisation of regulatory assets, truing up of revenue gap of FY 2007-08 during the FY 2008-09 is projected as Rs. 1452.82 crore. After deducting revenue from sale of power (at existing tariffs) amounting Rs. 1161.84 crore and non-tariff income amounting Rs. 14.62 crore, an amount of Rs. 276.36 crore remains as total revenue gap for the FY 2008-09.

WESCO proposes to invest Rs. 225 crore on capital expenditure scheme including new and ongoing schemes. The licensee humbly requests to bridge the revenue gap through combination of grant/subsidy from state govt., reduction in BST and/or increase in RST in an appropriate manner.

The licensee has also proposed tariff rationalization measures like surcharge on delayed payment, rebate on prompt payment, special tariff for the EOU units, KHAH billing for LT industrial consumer, increase in connection and reconnection charges, etc.

GIST OF THE PROPOSAL

1. Introduction

Western Electricity Supply Company of Orissa Ltd., Burla (WSECO), is the holder of the Orissa Distribution and Retail Supply Licensee, 1999 (No. 4/99) and has been carrying out the business of distribution and retail supply of electricity in the nine districts of Orissa, namely, Sambalpur, Sundargarh, Bolangir, Bargarh, Deogarh, Nuapara, Kalahandi, Sonepur and Jharsuguda.

2. Forecasting of Energy for FY 2008-09

The purchase of energy has been projected at 5786 MU during 2008-09 based on the distribution loss of 31.51 per cent and energy sale of 3963 MU. For projecting the consumption of different categories of consumers, the Licensee has analysed the past trends of consumption pattern for the last six years, i.e. FY 2001-07.

(i) For LT category, the growth has been estimated in 2008-09 by 26% and the sale of energy is projected at 1066 MU.

(ii) For HT category, the consumption has been projected based on current and part trends and other factors such as additional load from existing and new consumers, etc. The projected sale for FY 2008-09 is arrived at 1475 MU.

(iii) For EHT category, the consumption has been projected based on current and part trends and other factors such as additional load from existing and new consumers, etc. The projected sale for FY 2008-09 is arrived at 1422 MU**.**

3. Distribution Loss

The system loss for FY 2008-09 has been projected at 31.51%, with the reduction of loss by 2.20 percentage points from 33.71 per cent estimated for FY 2007-08.

4. AT & C Loss

While approving the ARR for the year 2003-04, the Hon'ble Commission through a landmark and revolutionary decision, recognised for the first time in the regulatory regime, the AT&C loss concept as district from the conventional T&D loss and adopted the same.

For the FY 2008-09, the petitioner is targeting 33.87% AT&C loss as against 36.37% during 2007-08. The petitioner has taken it a challenge and planned the following measures to reduce AT&C loss.

(i) **Metering:** The licensee had inherited a system in which more than 70% of the consumers were unmetered or had defective meters. The billing databases were incorrect, did not have details of meters and other vital information. So the licensee had lunched multiple activities to rectify these problems.

(ii) **Spot Billing Rollout Plan:** The spot billing activity in WESCO started as early as 2004 through M/S Phoenix IT Solutions, an experienced firm in this field. As on date, spot billing is covering around 2.20 lakh customers. During 2008-09 it is estimated as 237.31 lakhs.

(iii) **APDRP Works:** WESCO has initiated the Distribution System upgradation and modernisation programme under this scheme of Ministry of Power, Govt. of India from FY 2004-05. The programme involves a capital outlay of around Rs 87.63 crore which includes metering, new lines, modernisation of existing sub-stations etc. For the FY 2008-09, the expenditure estimated to be Rs 70 crore out of the total project cost of Rs 300 crore estimated in the 11th Five Year Plan period.

(iv) **Energy Audit:** WESCO has completed the metering of 504 feeder meters and 12588 distribution transformer meters so as to implement the Energy Audit successfully. It is carried out as a team effort, which is divided into 3 groups.

(v) **Consumer Indexing:** WESCO has initiated the process of consumer indexing. It will be one time activity aimed to identify all the existing consumers receiving supply from individual Distribution Transformer and creation of network diagrams and asset details. The activity will include (i) consumer and network survey, (ii) building database and indexing consumer, (iii) painting of electrical address on poles, DTR and at consumers premises.

5. Annual Revenue Requirement:

WESCO has projected annual revenue requirement (ARR) of Rs 1452.82 crore, including reasonable return amounting Rs 7.78 crore and amortisation of Regulatory Assets amounting Rs 104.68 crore for the FY 2008-09, and truing up of revenue gap of FY 2007-08 amounting Rs 222.47 crore. The break-up is as follows.

(i) **Power purchase expenses:** For the FY 2008-09, energy input of 5786 MU has been projected based on the estimated consumption of 3963 MU and distribution loss of 31.51%. Power purchase cost has been estimated at Rs 793 crore based on the projected consumption at the existing energy rate.

(ii) **Employee expenses:** The total employee expenses after capitalisation during 2008-09 is projected at Rs 150.06 crore.

(iii) **A&G Expenses:** The total A&G expense for 2008-09 is projected at Rs 27.88 crore.

(iv) **Repair and Maintenance expenses:** R&M expenses for FY 2008-09 has been estimated based on OERC's Regulation of 5.4% of Gross Fixed Assets (GFA). Thus, it is projected at Rs 33 crore.

(v) **Provision for bad and doubtful debts:** Considering the proposed collection efficiency of 96.56% for FY 2008-09, the bad debts equivalent to 3.44% of the estimated revenue is projected at Rs 39.97 crore.

(vi) **Depreciation:** It is projected at Rs 21.79 crore.

(vii) **Interest expenses:** It is projected to be Rs 50.23 crore.

(viii) **Provision of contingency:** WESCO has claimed Rs 1.96 crore towards this at the rate of 0.375% of the opening gross fixed assets added during the year to the maximum ceiling of 5% of the GFA.

(ix) **Amortisation of Regulatory Assets:** The Licensee humbly requests the Hon'ble Commission to allow amortisation of regulatory assets to the extent of Rs 104.68 crore.

(x) **Truing up of revenue gap of FY 2007-08:** The Licensee has proposed to include the revenue gap of FY 2007-08 amounting to Rs 222.47 crore along with the revenue gap for FY 2008-09 in the ARR for Fy2008-09.

(xi) **Reasonable Return:** The Licensee has assumed reasonable return amounting to Rs 7.78 crore as calculated @ 16% on equity capital.

6. Revenue Gap for FY 2008-09

The annual revenue requirement of WESCO for FY 2008-09 is projected at Rs 1452.82 crore. With the existing tariff rates, the revenue including miscellaneous income is projected to be Rs. 1176.46 crore. Thus, the shortfall is projected at Rs. 276.36 crore.

7. Tariff Proposal:

The petitioner requests the Hon'ble Commission to bridge the revenue gap through combination of grant/subsidy from state govt., reduction in BST and/or increase in Retail Supply Tariff in appropriate manner.

8. Tariff Rationalisation Measures:

The WESCO has proposed to take the following tariff rationalisation measures during the FY 2008-09:

a. Surcharge on delayed payment
b. KVAH billing for LT industrial consumers
c. Raising of service connection charges
d. Raising of reconnection charges
e. Rebate on prompt payment

ANALYSIS OF THE PROPOSAL

Revenue Gap

The WESCO has submitted a proposal for Revenue Gap of Rs 276.29 Crore during the FY 2008-09. This gap is calculated taking into account truing up of Revenue Gap for FY 2007-08 amounting Rs 222.47 Crore and amortisation of Regulatory Assets amounting Rs 104.68 Crore. The Company has requested the Commission to bridge the total revenue gap through combination of reduction in Bulk Supply Tariff, grant/subsidy from the Government of Orissa and/or increase in Retail Supply Tariff. The calculation of Revenue Gap by the Company is presented in the following.

Revenue Gap of WESCO for FY 2008-09

(Rs in Crore)

Expenditure including special appropriation	1117.82
Reasonable return for FY 2008-09	7.78
Revenue requirement during FY 2008-09	**1125.60**
Revenue from sale of power at existing tariff in FY 2008-09	1161.84
Non-Tariff Income	14.62
Total Revenue during 2008-09	**1176.46**
Revenue surplus during FY 2008-09	**50.86**
Amortisation of Regulatory assets	104.68
Truing up of Revenue Gap for FY 2007-08	222.47
Total Revenue Gap	**276.29**

If we look into the projected Revenue Requirement and Revenue at existing tariff for the FY 2008-09, we find that there is a revenue surplus of Rs 50.86 Crore. The Company has shown revenue gap by including amortisation of Regulatory Assets and uncovered revenue gap for FY 2007-08 in the revenue requirement for FY 2008-09.

The revenue gap projected by the Company during the FY 2007-08 is high as the projection of distribution loss is high as per the recommendation of Kanungo Committee. The gap can, therefore, be reduced by reducing distribution loss. Further, there is no rationale for transferring the past loss of the Company amounting Rs 222.47 Crore to the consumers.

Distribution Loss

WESCO has proposed a higher revenue gap in order to attract more tariffs from the consumer along with Govt. subsidy and/or reduction in BST. However, WESCO has shown inefficiency in reducing distribution loss as per the recommendation of the Kanungo Committee. The Company has estimated distribution loss of 31.51% in 2008-09 against 33.71% (estimated) in 2007-08. However, WESCO had projected 31% during 2007-08, which is now estimated at 33.71%. Even though WESCO has projected a reduction in the distribution loss, the figure estimated for 2007-08 (33.71%) is much higher than the distribution loss (25%) approved by the Hon'ble Commission in the Business Plan for 2007-08.

While computing the overall loss, the licensee has taken into consideration sale together at LT, HT and EHT. But in Orissa, energy input to the DISTCOs is measured at GRID substations and at metering points of the EHT consumers. Therefore, any sale at EHT by DISTCOs carries zero loss. Distribution loss in respect of WESCO excluding sale at EHT level is, however, much higher than that computed by WESCO. It becomes 42.06% in 2008-09 as against 31.51% computed by WESCO. Similarly, the distribution loss excluding sale at EHT level during 2007-08 is much higher than that computed by WESCO (See Table below).

The loss at the LT side, which we understand as domestic and other low voltage categories, is a matter of concern. It is projected at about 40.71% during the FY 2008-09. It is also surprising to observe that WESCO has shown a marginal increase in the LT loss from 40.14% during 2007-08 to 40.71% during 2008-09, though there is a need to reduce this significantly.

However, distribution loss calculated by excluding sale at EHT level has a declining trend from 47.82% in 2005-06 to 43.87% in 2007-08 and 42.06% in 2008-09. But still this is at a very high level. In the Business Plan, the distribution loss during 2007-08 was prescribed at 25%. Therefore, it seems that WESCO has not satisfied the requirement of power reform. Kanungo Committee had recommended reduction of 5% loss each year, while the business plan recorded reduction of 3% loss each year. Neither of these two is adhered by the licensee.

The projection of demand by LT consumers also seems to be unrealistic. WESCO has projected a significant increase (26.30%) in demand by LT consumers for which no specific reason is given. The Company had projected 890 MU during 2007-08, which has now estimated at 844 MU for the same year, i.e. a decline of 46 MU. Therefore, the projection of demand of 26.30 per cent by the LT consumers during 2008-09 seems to be very high. WESCO has projected high LT demand as by projecting high LT demand it can show high distribution loss.

Sale of Power to different Categories of Consumers and Distribution Loss of WESCO

(in MU)

	2005-06	2007-08 (Projected)	2007-08 (Estimated)	2008-09 (Projected)	% Change over 2007-08
LT	694	890	844	1066	26.30
HT	1033	1560	1446	1475	2.01
EHT	878	1690	1230	1422	15.61
Sale at LT & HT	1727	2450	2290	2541	10.96
Total Sale	2605	4140	3520	3963	12.59
Total Purchase	4189	6000	5310	5756	8.40
Distribution Loss	1583.23	1860	1790	1823	1.84
% Distribution Loss (including EHT as per WESCO)	37.80	31	33.71	31.51	
% Dist loss (excluding sale at EHT)	47.82	43.16	43.87	42.06	
Dist Loss as per Business Plan	31.00		25.00		

AT&C Loss

The Hon’ble Commission had approved AT&C loss at 28% for FY 2007-08, but the licensee has estimated it at 36.37%, an increase of 8.37 percentage points. Though it is a reduction of 3.49 percentage points from the FY 2006-07, still the licensee has not adhered to the Commission’s approval of AT&C loss during FY 2007-08. On the other hand, the licensee has projected a higher percentage of AT&C loss (33.87%) for the FY 2008-09 than that was approved for the FY 2007-08.

AT&C Loss of WESCO

Year	Percentage loss
2006-07	39.86
2007-08 (Approved)	28.00
2007-08 (Estimated)	36.37
2008-09 (Projected)	33.87

Collection Efficiency

The licensee has estimated 95.98 per cent collection efficiency for the FY 2007-08 and has projected 96.56 per cent for the FY 2008-09. However, this includes the collection efficiency from the new connections, which is expected to be cent per cent. If we consider the new connections, then WESCO needs to increase the collection efficiency more than the estimated one. However, the collection efficiency estimated for FY 2007-08 has achieved near the figure approved by OERC (i.e. 96%). The Company should make more effort to reach a target of 98% collection efficiency during 2008-09. With this increase in collection efficiency the revenue of the Company would increase further. This would reduce the AT & C loss further.

Outstanding Arrears

The Company has included previous loss in the calculation of revenue gap. But it has not put any effort to collect the arrears, which is huge. If these arrears could be collected then the deficit would be reduced drastically and there would not be any need to raise tariff.

Annual Revenue Requirement

Distribution Cost

WESCO has projected distribution cost by an increase of 24.06 per cent during the FY 2008-09 over the estimated figure of FY 2007-08. But this is an increase of about 28.47 per cent over the figure approved by the Hon'ble Commission for 2007-08. Further, the estimated figure for 2007-08 is 3.55 per cent higher than the figure approved by the Hon'ble Commission. That means the Company has not adhered to the approved figure. The highest percentage increase is in the case of Administrative and General expenses. The A & G expenses projected for 2008-09 is an increase of 70.30% over the approved figure for FY 2007-08, while the estimated A&G figure of 2007-08 is 16.38 per cent higher than the approved figure. The projected figure of employee cost and R&M cost for 2008-09 is 18.37% and 38.58% respectively higher over the approved figure for 2007-08. Hence, the projected distribution cost for 2008-09 is on the very high side. This can be reduced in order to reduce the revenue gap.

Distribution Cost of WESCO (Rs in Crore)

	2007-08			2008-09	% Change over 2007-08 estimated
	Approved	Estimated	% Change		
Employee Cost	87.28	89.26	2.27	103.31	15.74 (18.37)
R&M Cost	23.82	23.82	0.00	33.01	38.58 (38.58)
A&G Cost	15.32	17.83	16.38	26.09	43.87 (70.30)
Distribution Cost	126.42	130.91	3.55	162.41	24.06 (28.47)

Note: Figures in the parentheses indicate percentage change over approved figure for 2007-08

Reasonable Return

WESCO has claimed Rs 7.78 Crore return on the equity in its revenue requirement proposal. We have an apprehension that such a practice would violate the very basic principles of finance, i.e. the capital increases/decreases due to the profit/losses of the business. Ignoring the loss (accumulated loss) and allowing return on the equity would have negative effect on the sector in general and consumers in particular. When the licensee gets return on the equity there is an incentive for more equity financing.

Bad and Doubtful Debt

The licensee has projected Rs 39.97 crore as bad debts and included in the ARR of FY 2008-09. Since it is due to the inefficiency of the licensee, this should not be imposed on the general consumers. Hence, the Hon'ble Commission may not consider this proposal of the licensee.

Summing Up

It is found from the foregoing analysis that WESCO has not taken any step to reduce distribution loss substantially as recommended by the Kanungo Committee and OERC. Though it has tried to project an improvement in collection efficiency, still it is not sufficient and the company needs to increase more. By reducing distribution loss as suggested above and improving collection efficiency the proposal of raising tariff can be avoided, which is for the best interest of the consumers and in conformity with the power sector reform. Further, there is a need to make effort to collect arrears in order to reduce deficit.