

ORISSA ELECTRICITY REGULATORY COMMISSION

BIDYUT NIYAMAK BHAWAN,
UNIT – VIII, BHUBANESWAR – 751 012

*** **

Present : Shri B. K. Das, Chairperson
Shri S.K. Jena, Member
Shri K.C. Badu, Member

CASE NO. 61 OF 2007

DATE OF HEARING : **07.02.2008**

DATE OF ORDER : **20.03.2008**

IN THE MATTER OF : An application for approval of Annual Revenue Requirement and determination of Bulk Supply Price by GRIDCO under Section 86(1)(b) and other applied provisions of the Electricity Act, 2003 read with OERC (Conduct of Business) Regulations, 2004 for the year 2008-09.

ORDER

The Commission is required by Section 86(1)(b) of the Electricity Act, 2003 to fix procurement price structure for distribution companies operating in the state of Orissa. Under the existing Bulk Supply Agreements with GRIDCO, the DISTCOs are under obligation to purchase power solely from GRIDCO. For determining the procurement price, the Commission has to hear not only the buyers (DISTCOs) but also the seller (GRIDCO). No meaningful hearing of GRIDCO is possible unless GRIDCO files its Annual Revenue Requirement and expected revenue. GRIDCO has done so. The Commission has taken the filings of GRIDCO into consideration even though GRIDCO as deemed trading licensee under the 5th Proviso to the Section 14 of the Electricity Act, 2003 (hereinafter referred to as the Act) is outside purview of the Section 62 of the Act. The prices at which GRIDCO supply power to DISTCOs coincides with the procurement price hereby fixed. If GRIDCO supplies its surplus power to any other person anywhere after satisfying the requirements of DISTCOs of Orissa, the prices hereby fixed would not be applicable.

PROCEDURAL HISTORY (Para 1 to 6)

1. The Commission directed GRIDCO to publish its ARR application in the approved format in the leading and widely circulated daily newspapers and the matter was also posted in the Commission's website (www.orierc.org) in order to invite objections from the intending objectors. The said public notice was published in the leading daily newspapers, Commission's website and GRIDCO's website. The Commission directed the GRIDCO to file its rejoinder to the objections filed by the various objectors before the Commission and to serve copy to them.

2. In response to the aforesaid public notice of the GRIDCO, the Commission received 13 nos. of objections/ suggestions from the following persons/ associations/ institutions/ licensees: -
 - (1) Jayadev Mishra, N-4/98, Nayapalli, Bhubaneswar, (2) Orissa Consumers' Association & FOCO, Biswanath Lane, Cuttack, (3) Confederation of India Industry(CII), 8, Forest Park, Bhubaneswar, (4) Mr. K.C. Mohapatra, Chairman, PDC, F/6, BJB Nagar, Bhubaneswar, (5) Ferro Alloys Corpn. Ltd., GD-2/10, Chandrasekharpur, Bhubaneswar-751023, (6) Mr. Mangu Srinivas, AGM(Tech.), Rawmet Ferros Industries Pvt. Ltd., 2B, Fortune Towers, CSPur, Bhubaneswar, (7) Utkal Chamber of Commerce & Industry, N/6, IRC Village, Nayapalli, Bhubaneswar, (8) NESCO, Januganj, Balasore, (9) Balasore Alloys Limited , Balgopalpur, Balasore, Orissa, (10) Mr. R.P. Mohapatra, 775, Jayadev Vihar, Bhubaneswar, (11) WESCO, Burla, Sambalpur, (12) SOUTHCO, Courtpetta, Berhampur, (13) Mr. G.N. Agrawal, General Secy., Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur.
3. The date for hearing was fixed to 07.02.2008 and it was duly notified in the leading newspapers mentioning the list of the objectors. Commission also issued notice to the Government of Orissa through the Department of Energy informing about the date of hearing and requesting to send the Government's authorised representative to take part in the proceeding.
4. In exercise of the power u/s.94(3) of the Electricity Act, 2003, in order to protect the interest of the consumers, the Commission appointed Nabakrushna Choudhury Centre for Development Studies, Chandrasekharpur, Bhubaneswar, the premier Govt. of Orissa's Institute as Consumer Counsel for objective analysis of the licensee's Annual Revenue Requirement and Bulk Supply Price proposal. The consumer counsel submitted its report to the Commission and its representative put forth its analysis & views on the matter in the presence of all the parties present during the hearing.
5. In its consultative process, the Commission conducted a public hearing at its premises on 07.02.2008 and heard GRIDCO, WESCO, NESCO, SOUTHCO, objectors and the consumer counsel. The written objections/suggestions of the objectors who remained absent during the hearing have also taken into record and considered by the Commission.
6. The Commission convened the State Advisory Committee (SAC) meeting on 12.02.2008 to discuss about the prices of GRIDCO. The members of SAC presented their valuable suggestions and views on the matter and the Commission have duly considered the same.

GRIDCO'S ANNUAL REVENUE REQUIREMENT (ARR) FOR FY 2008-09 (Para 7 to 28)

7. GRIDCO holds the Bulk Supply License for the State of Orissa and is a constituent of the Eastern Regional Power Committee. The licensee supplies power to DISTCOs to cater to the requirements of consumers of the State. It also provides emergency power to Captive Generating Plants (CGPs) and as and when available sells the surplus

power within the State to intending agencies for use elsewhere. GRIDCO purchases power from OHPC, OPGC, TTPS and Central Sector Generators located in the Eastern Region and Chukka and Tala HEP in Bhutan and surplus power from some CGPs within the State.

8. GRIDCO has filed an application for Annual Revenue Requirement and revision of Bulk Supply Price (BSP) for 2008-09 to enable it to carry out its functions of bulk supply to DISTCOs and emergency supply to CGPs.

Projection of Demand and Energy for DISTCOs

9. The average actual Simultaneous Maximum Demand (SMD) for 2006-07, the actual SMD for first six months of 2007-08 and projection for 2008-09 as submitted by GRIDCO in the BSP and ARR application, are given in Table-1.

Table – 1
Simultaneous Maximum Demand Projection for 2008-09
(Figures in MVA)

Name of the Company	2006-07 (Actual)	Avg. of the actual for first six months of 2007-08 (April'07to Sept.'07)	DISTCOs' Projection for 2008-09	GRIDCO's Projection for 2008-09
CESU	775.67	837.07	-	834.69
NESCO	562.62	616.47	724	724.00
WESCO	699.28	773.10	900	837.98
SOUTHCO	298.99	320.28	325	325.00
Total DISTCOs	2336.56	2546.92	1949.00	2721.67

10. The actual energy requirement for 2006-07, actual for first six months of 2007-08 and GRIDCO's energy projections for 2008-09 as submitted by GRIDCO in its ARR filing, are indicated in Table below:

Table - 2
Energy Projection for 2008-09
(Figures in MU)

Name of the Company	2006-07 (Actual)	Actual for 1 st six months of 2007-08 (April'07to Sept.'07)	Projection for 2007-08 on pro rata basis	GRIDCO's Projection for 2008-09
CESU	4623.26	2592.54	5185.08	5760.00
NESCO	3981.12	2180.21	4360.42	4730.00
WESCO	4671.19	2575.87	5151.74	5627.00
SOUTHCO	1826.88	966.75	1933.50	2027.00
Total DISTCOs	15102.45	8135.37	16630.74	18144.00
CGPs	15.96	68.86	137.72	10.00
Total Sale	15118.41	8384.23	16768.46	18154.00

Power Procurement Projected by GRIDCO

11. GRIDCO projected the total power availability of 19110.05.00 MU and considered transmission loss of 5% for 2008-09. In order to meet the demand of DISTCOs and CGPs and make necessary allowance for transmission loss, GRIDCO has proposed as under:-

Table – 3
DEMAND AND ENERGY PROJECTION FOR FY 2008-09

Item	Projection for FY 2008-09
SMD for DISTCOs (MVA)	2721.67
Sale of Energy to DISTCOs (MU)	18144.00
Emergency Power to CGPs (MU)	10
Total Sale of Energy (MU)	18154.00
Transmission loss @ 5% (MU) in OPTCL system	956.00
Total Energy Requirement (MU)	19110.05
Total Energy Availability (MU)	19110.05

Revenue Requirement Projected for 2008-09

12. GRIDCO has projected to procure hydel power of 5955.75 MU from OHPC including power from Machkund, thermal power of 2946.76 MU from OPGC, 3162.17 MU from TTPS, 543 MU from State CGPs, 375 MU from Renewable Energy and 6127.36 MU Orissa share of power from Eastern Regional NTPC stations as well as from Tala and Chukha of Bhutan during 2008-09 totalling to 19110 MU.
13. As stated above, GRIDCO has considered total energy procurement of 19110.05 MU for 2008-09 including transmission loss of 5% over DISTCOs' and CGPs' proposed drawl of 19110.00 MU for 2008-09.
14. GRIDCO has projected drawl of 375 MU from the Renewable sources during the year 2008-09. GRIDCO has taken power procurement from NINL, Arati Steel and Tata Sponge under Renewable energy sources as the generation of power in these cases are considered as co-generation. The generation of power in these cases is stated to be from waste heat recovery and hence treated as renewable energy.
15. The detailed cost of power purchase as furnished by GRIDCO for 2008-09 is reproduced hereunder in Table-4.

Table – 4
Projected Power Procurement by GRIDCO for 2008-09

Source	MU	Per Unit (P/U)	Total cost (Rs.Cr.)
OHPC (Old)			
(a) Hirakud	1037.75	61.36	63.68
(b) Balimela	1168.20	53.66	62.68
(c) Rengali	693.00	35.17	24.37
(d) Upper Kolab	829.62	21.24	17.62
OHPC (New)			
(a) Indravati	1962.18	66.49	130.46
OHPC (Joint Project)			
(a) Machkund	265.00	25.06	6.64
Total Hydro	5955.75	51.29	305.45
OPGC	2946.76	154.15	454.24
TTPS	3162.17	149.06	471.36
CGP			
NALCO	320.00	111.16	35.57
ICCL	4.00	93.76	0.38
HINDALCO(HIRAKUD)	15.00	77.00	1.16
RSP (SAIL)	13.00	80.20	1.04
SHYAM DRI	11.00	202.00	2.22
Sterlite Industries(Vedant)	30	202.00	6.06
Jindal	150	230.00	34.50
Total CGP	543.00	149.03	80.93
Renewable Energy Source	375.00	218.43	81.91
State Total (A)	12982.69		1393.89
Chukha	234.90	183.17	43.03
TSTPS Stage-I	1986.78	168.35	334.48
TSTPS Stage-II	1249.55	181.77	227.13
FSTPS	1361.12	209.73	285.47
KHSTPS I	564.83	229.20	129.46
KHSTPS II	534.74	229.20	122.56
Tala HEP	195.44	213.25	41.68
From other sources			
Total ER Power (B)	6127.36		1183.79
Total (A) + (B)	19110.05	134.89	2577.68

Pass Through of Previous Loss

16. GRIDCO has proposed a sum of Rs.532.80 crore to be recovered through tariff on account of past losses and uncovered expenses during 2007-08 as detailed in table below.

Table – 5
Pass through of Previous Loss & Uncovered Expenses for 2008-09

Sl. No.	Item	Initial Proposal (Rs. Crore)
1	Past losses towards repayment of principal	481.87
2	Claim in the Review Petition by GRIDCO against ARR & BSP order dated 22.03.2007 for FY 2007-08	
a	Difference in the Interest Liability proposed by GRIDCO and allowed by OERC	35.28
b	Additional Interest Liability claimed towards loan of RS. 170 crore for one time settlement of NTPC(DISCOM) Bonds	15.65
	Total	532.80

Interest and Financing Charges

17. The interest & financing charges, repayment towards principal including establishment cost etc. as proposed by GRIDCO is presented hereunder.

Table – 6
Interest, Financing & Establishment Charges for 2008-09
(Rs. Crore)

	GRIDCO's Proposal for 2008-09
1. Interest Cost	169.79
2. Other Costs:	
a. Employee Cost	3.87
b. A&G Cost	2.41
c. ERLDC, NLDC fees and SLDC scheduling Charges	1.32
d. Repair & Maintenance expenses	0.35
Sub-Total – Other Costs:	7.95
Total (1+2)	177.74

Return on Equity:

18. GRIDCO proposes RoE of Rs.60.62 Cr @ 14% on equity capital of Rs. 432.98 Cr.
19. The proposal for Annual Revenue requirement of GRIDCO is summarised in the Table -7

Table - 7
Annual Revenue Requirement of GRIDCO for 2008-09

(Rs. Crore)

	Item	OERC approval for 2007-08	GRIDCO's Proposal for 2008-09
a)	Power Purchase Cost	2103.11	2577.68
b)	Previous Loss including repayment of principal	644.38	481.87
c)	Interest, Finance & Establishment Charges	163.21	177.74
d)	Contribution to contingency reserve	-	Nil
e)	Reasonable Return	-	60.62
f)	Revenue Requirement (a+b+c+d+e)	2910.70	3348.84
g)	(-) Misc. Receipts	186.63	3.30
h)	Net Revenue Requirement (f-g)	2724.07	3345.54

Proposed Revenue Earning at Existing Rate

20. GRIDCO proposes to earn revenue of Rs.2439.18 crore from sale to DISTCOs at the existing rates of 2007-08 during 2008-09.
21. A summary of the proposal of GRIDCO's expected revenue earning during 2008-09 is furnished in Table-8.

Table – 8

Expected Revenue with anticipated sale at existing rates from DISTCOs during 2008-09

	CESU	NESCO	WESCO	SOUTHCO	TOTAL
Energy in MU	5760.00	4730.00	5727.00	2027.00	18144.00
Rate P/U	121.70	125.80	175.67	76.30	135.66
Gross Revenue from Energy Charges (in Rs. Crores)	700.99	595.03	988.50	154.66	2439.22

Excess or Deficit in the ARR for 2008-09

22. With the present tariff structure, GRIDCO cannot meet its total current cost estimated at Rs.3348.84 crore. The estimated revenue to be earned by GRIDCO during the year is Rs.2439.22 at the existing BSP rate. As a result there accrues a deficit of Rs.906.35 crore, as shown in Table-9.

Table - 9

Excess or Deficit on Revenue Requirement for 2008-09

(Rs. Crore)

	Item	OERC approval for 2007-08	GRIDCO's Proposal for 2008-09
a)	Revenue Requirement	2910.70	3348.84
b)	Misc. Receipts	186.63	3.30
c)	Net Revenue Requirement	2724.07	3345.54
d)	Net Receipt from sale of power to DISTCOs and CGP	2259.21	2439.22 (at existing tariff)
e)	Excess or Deficit	(-) 464.86	(-) 906.35

Recovery of Cost in the ARR during 2008-09

23. In order to meet this estimated deficit of Rs. 906.35 crore, GRIDCO submitted the application before the Commission requesting for revision of bulk supply price for 2008-09. The licensee proposes to recover the full costs of supply of Rs.3348.84 crore from the Distribution Licensees through rise in BSP from the existing average energy charge of 135.66 p/u to 184.39 p/u during 2008-09 which represents 36% rise over the previous year.

Over Drawl Charges

24. Any excess drawl of energy by a distribution and retail supply licensee over and above the approved drawl would be payable at a cost of imported power on monthly basis.

Rebate

25. GRIDCO proposes that on payment of the monthly bill, the DISTCOs shall be entitled to a rebate as mentioned below:
- 2% rebate on monthly bill if full payment is made within 2 (two) working days of submission of bill.
 - 1% rebate on monthly bill if full payment is made within 30 days from submission of the bill.

Delayed Payment Surcharge

26. GRIDCO has proposed that the monthly charges as calculated above together with other charges and surcharge on account of delayed payments, if any, shall be payable within 30 days from the date of bill. If payment is not made within the said period of 30 days, delayed payment surcharge @ 1.25% per month shall be levied prorata for the period of delay from the due date, i.e. from the 31st day of the bill, on amount remaining unpaid (excluding arrears on account of delayed payment surcharge).

Duty and Taxes

27. GRIDCO prays that the electricity Duty levied by the Government of Orissa and any other Statutory levy/duty/Tax/Cess/Toll etc imposed under any law from time to time shall be charged over and above tariff.

Summary of Tariff Filing for 2008-09

28. GRIDCO prays that the Commission may approve the following for 2008-09:
- i) Energy charges @ 184.36 paise/unit on energy supplied.
 - ii) Charges for over drawl in energy at a cost of imported power on monthly settlement basis.
 - iii) Delayed Payment Surcharge as proposed (@1.25% per month on prorata basis for the period of delay).
 - iv) Rebate as proposed (2-1%).
 - v) Duty and Taxes as proposed

VIEWS OF THE OBJECTORS ON BULK SUPPLY PRICE PROPOSAL FOR 2008-09 (Para 29 to 164)

29. The Licensee was allowed in the beginning of the hearing to give a power point presentation regarding its ARR and tariff application for the FY 2008-09. Director (Tariff) then raised certain queries on the licensee's filing. The representative of Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar was appointed as consumer counsel and its representative put up certain queries and objections regarding ARR and price filing of GRIDCO. The objectors then made a number of comments/observations regarding the submission of the licensee.
30. The Commission has considered all the issues raised by the participants in their written as well as oral submissions during the public hearing. Some of the objections were found to be of general nature whereas others were specific to the proposed Revenue Requirement and Tariff filing for the financial year 2008-09. Based on their nature and type, these objections have been categorized broadly as indicated below:

Nabakrushna Choudhury Centre for Development Studies (NCCDS) (Para 31 to 41)

31. In accordance with Section 94(3) of Electricity Act, 2003 which stipulates that the appropriate Commission may authorize any person as it deems fit to represent the interest of consumers in the proceedings before it. The Commission engaged Nabakrushna Choudhury Centre for Development Studies as consumer counsel in order to receive quality inputs/feed back on the tariff matters in the interest of different sections of consumers. The representative of NCCDS had analyzed the application of the licensee in the light of Kanungo Committee Report and some of the important observations are as follows:

Revenue Gap

32. 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 (see Table-7) 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 2008-09 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.

Table - 10
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

33. The gap arises as a result of the proposal for increase in ARR during FY 2008-09 towards accumulated past losses (Rs. 481.89 crore) and pass through of unforeseen expenses (Rs. 50.93 crore) for FY 2007-08 by GRIDCO.

Pass Through Past Losses

34. 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

35. 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

36. 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.

Table - 11

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

37. 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 CGPs during 2008-09.

Projection of Demand

38. GRIDCO has projected lower increase in sale of energy to DISTCOs during the FY 2008-09 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.

Table - 12

Energy Sale to DISTCOs (MU)

Agency	2006-07 Actual	Projection for 2007-08 prorating 1 st 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

39. 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

40. 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.
41. The Commission has considered all the views of various objectors on the Bulk Supply Price Proposal of GRIDCO. Some of these views were found to be of general nature and others were specific to the proposed tariff filing for the FY 2008-09. Based on their nature and type, these views have been classified issue-wise as discussed below:

Legal Issues:

42. GRIDCO is not a licensee or a trader and the application is not bonafide and tenable under law, as such the same is liable to be rejected.
43. The application so filed by the licensees for determination of tariff is not tenable as the Commission has no authority under law and particularly u/s 62 of E. Act, 03 separately for the company/licensee who is neither a trading or transmission company that too for bulk supply.
44. The notice so published inviting objection does not confirm to the requirements of law and does not disclose for what purpose such revenue requirements are asked for without giving details of its calculations.
45. The law contemplates that the Commission has to determine licensee's revenue for the purpose of fixing of the tariff first but not on composite application which would be in contravention to the law.
46. The distribution companies have stalled the Bulk Supply Prices fixed by OERC by appealing in the Appellate Tribunal. The BSP for the years 2006-07 and 2007-08 are pending in Supreme Court and ATE respectively.
47. Chairman of the GRIDCO still continues to be the Chairman of the WESCO/NESCO/SOUTHCO. The difference of opinion is not ruled out in the Board meetings.
48. The GRIDCO account has not been audited for the financial year 2006-07 and 2007-08 as such there is no availability of its yearly audited account.

49. In accordance with Section 14 of the Electricity Act, 2003 GRIDCO is a Deemed Licensee. The Licensees under the Electricity Act, 2003 are transmission Licensee, Distribution Licensee and Trading Licensee. Since GRIDCO is neither a Transmission Licensee nor Distribution Licensee, it is a Electricity Trader for Intra-State trading of power.
50. The transfer scheme notified by the Government of Orissa on 09.06.2005 was required as the GRIDCO constituted under the Orissa Electricity Reforms Act, 1995 was debarred as per Section-41 of the Electricity Act, 2003, from being both a Transmission Licensee and a Trader.
51. GRIDCO submitted that Section 131(1) is applicable only to State Electricity Boards. Section 131(1) states that the purpose of vesting of the property in the State Government is to “give effect to the objects and purpose of this Act (Electricity Act, 2003)”, which is to prevent a transmission licensee from trading. Therefore, this contention of GRIDCO is not tenable.
52. The transfer scheme was prepared in accordance with Section 131(4) by the State Government in which only transmission activities and SLDC along with the assets and liabilities were transferred to OPTCL and the balance remained with GRIDCO.
53. The Section 131(4) provides that the State Government may require any transferor (being STU or Generating Company or Transmission Licensee or Distribution Licensee) referred to in Sub-Section (2) to vest in a transferee being any other generating Company or Transmission Licensee or Distribution Licensee the property, interest on property, rights and liabilities which have been vested in the transferor under this Section and publish such scheme as statutory transfer scheme under this Act.
54. A proper interpretation of the Government of Orissa Transfer Scheme dated 09.06.2005, is that the State Government only re-vested the property, interest in property, rights & liabilities of the GRIDCO (created under the earlier Reform Act)it was vested in the State Government as on 31.03.2005.
55. In the OERC (Terms and Conditions for Determination of Tariff) Regulation, 2004 there is provision for filling of ARR to determine the tariff only for(a) supply of power from a generating company to a distribution company, (b) transmission of electricity, (c) wheeling of electricity and (d) retail sale of electricity. There is no provision for filing of ARR by any Trader nor is there any provision for determination of any bulk supply price for such a trader by the Commission.
56. GRIDCO should in accordance with the transfer notification dated 09.06.2005 established a letter of credit for payment of the transmission charges to OPTCL as a first charge. OPTCL should not be burdened with billing of the individual Distribution Licensees and CGPs drawing emergency power. In any case OPTCL has no legal right to bill the transmission charges to the DISTCOs in view of the notification dated 09.06.2005.

Simultaneous Maximum Demand, Contract Demand and Billing Demand

57. The simultaneous Maximum Demand as projected by GRIDCO (2721 MVA) for the year 2008-09 seems to be reasonable and may be accepted.
58. While calculating the ARR for the DISTCOs, the maximum demand should be calculated based on the lower and permitted distribution loss.
59. The power is purchased with fixed and variable cost and is also sold with demand charges and energy charges. There is no reason as to why a single part tariff for sale by GRIDCO to the Distribution Licensees is to be prescribed. The contention of GRIDCO that due to inflated SMD projected by the Distribution Licensees, it is not able to recover the full cost is totally irrelevant. GRIDCO has a sizeable data bank on the SMD projected and achieved by the Distribution Companies, from which realistic SMD can be projected for the ensuing year. The Demand Charges can be levied on the actual SMD or 90% of the projected SMD by the Distribution Licensees whichever is higher. Loss of revenue if any can be recovered by truing up. A formula may be devised by which recovery of monthly energy charges of GRIDCO can be automatically varied for a variation of the SMD.

Energy Requirement & Availability:

60. The quantum of energy estimated by GRIDCO for sale to DISTCOs might not be considered as the DISTCOs had submitted their requirement in their respective ARR. The drawl of energy submitted by the DISTCOs may be considered.
61. Cheaper power in order of merit from the central sector power plants should be reserved for the requirement of the State's consumers and costlier power from the Central Sector power plants be treated to earn higher revenue which will reduce the total annual requirement of GRIDCO.
62. The energy demand will reduce considerably when calculated with the distribution loss.
63. GRIDCO may take up with OHPC/State Govt. and extend deemed generation and adjust this from the drawl of Andhra Pradesh Govt. through the EREB networks.
64. The availability of power from state hydro stations would be 7285 MU in FY 09 as against the GRIDCO's proposal of 5956 MU.
65. Higher availability from Central Thermal Stations at about 90% PLF during off peak hours be purchased to create a surplus by closure of Hydro generation.
66. Hydro availability can be taken as 7360 MU for 2008-09. The total energy availability could be 20790 MU.
67. The demand of DISCOMs is a projected figure basing on consumption of first six (6) months of Financial Year 2007-08 and 9.10% rise in demand. The rise in demand is a proposed figure without any basis.

68. Distribution Losses are to be considered by GRIDCO while projecting the Power demand of the distribution companies.
69. The Commission should scrutinize the projection given by the GRIDCO regarding the power availability from the generation stations, CGPs and procurement proposed by GRIDCO for the year 2008-09, by applying the distribution losses and transmission losses as approved by the OERC in earlier orders/projections for the year 2008-09.
70. The projections given by state Generating Stations OHPC and OPGC both on the generation capacities and tariffs are not matching with the projections given by GRIDCO. The same is the case with the Distribution Companies regarding power requirement.
71. In absence of any communication from the DISTCOs regarding projection, GRIDCO has considered the energy demand on its own considering the past trend which has however been limited to availability of power towards energy demand and simultaneous maximum demand.

OHPC:

72. GRIDCO should schedule for higher energy availability from OHPC through suitable incentives in PPAs.
73. The financial position of GRIDCO may improve by selling the available hydro power potential of the state during the peak load hours in the system.
74. In spite of GoI's letter for renovation of the Machkund Power station, there is little response from OHPC/Energy Department of the state to follow-up with the Andhra Pradesh Govt. who is operating the power house for the last fifty years.
75. GRIDCO has merely accepted the data submitted by the OHPC, based on "Design Energy".
76. GRIDCO should submit the data relating to the maximum and minimum draw down levels of the Hydro Reservoirs and the Reservoir level from 01.11.2006 to 01.11.2007 along with month wise generation in each of the power station.

TSTPS:

77. TSTPS stage 1 (1000) is operating at higher PLF, hence Orissa's share from TSTPS stage-I shall be more than what GRIDCO has projected.

CGPs:

78. The energy demand of CGPs figure should be 150 MU for 2008-09.

Generation from Renewable Energy

79. As per OERC order against case 51/04 dated 23.04.2005, GRIDCO had to reach a target of generation from Renewable Energy source for 200 MU for 2006-07 and 5% of the total generation in the year 2007-08. GRIDCO have not spelt out whether the targets for both these years have been achieved.
80. GRIDCO to come up with specified projects where generation to the above target is achieved by end of 2007-08. GRIDCO must spell out the steps which will be taken during the year to reach the 5% target in a phased manner.
81. GRIDCO have not taken active steps to respond for early disposal of feasibility reports/ detailed project reports/ PPAs.
82. GRIDCO has responsibility to achieve the target of pollution free energy in the spirit of National Electricity Policy.

Total Power Availability:

83. WESCO, NESCO and SOUTHCO do not agree with the projected availability of power of 19110 MU as proposed by GRIDCO and estimated that the total availability of power would be 21100 MU during FY 2009.

Transmission Loss

84. All central generation is availed through central transmission system at the load center after accounting 3.62% as central transmission loss. A computer program maybe developed to estimate the actual technical loss.
85. Transmission Loss of only 4% on the OPTCL transmission line should be allowed. Thus, the total requirement of energy by GRIDCO will be 18910 MU.

Power Procurement Cost

86. GRIDCO may procure maximum power available from the Captive Generating Plants in the State and then avail the allocation of the Central Power Stations in the merit order to meet the power drawl of the State Consumers.

Fixed Cost:

87. The existing rate of fixed cost approved by CERC/OERC may be considered for ARR 2008-09.

FPA:

88. Escalation of 4% should be included instead of 10%.

89. The WESCO, NESCO and SOUTHCO do not agree with the submissions made by GRIDCO regarding the FPA per unit. The FPA allowed earlier is in excess of the actuals and should be trued up.
90. **Year end Charges:** This should not be allowed to increase from year to year basis.
91. GRIDCO is entitled only to recover the cost of procurement of power and the trading margin less miscellaneous revenue on account of earnings from export and U.I. charges.
92. GRIDCO can verify the data submitted by the Generators. GRIDCO should confirm whether the fuel cost and the FPA have been verified in relation to at least TTPS and TSTPS.
93. GRIDCO should supply power to the Distribution Licensees based on the cost of power procurement, SLDC charges, transmission charges and a trading margin as determined by the CERC. The Commission may however specify differential prices for the 4 Distribution Companies based on the principle that the retail supply tariff shall be common all over the State.
94. GRIDCO who is the PPA holder with the State Level Generating Companies and the Central Sector Generators for procurement of power for Orissa is not aggressively pursuing verification of the data relating to anticipated generation and various costs.
95. It is the responsibility of GRIDCO to procure power on least cost basis. GRIDCO should have Engineers experienced in Thermal Power Plant, Hydro-Electric Power Plant and Transmission System so as to fulfil the above functions.
96. The Commission may allow provisionally the cost of power procured from OPGC based on the applicable Regulations and not as billed by OPGC.

OPGC:

97. The fixed cost element ought to reduce in each subsequent year due to repayment of principal loan which would offset any increase in O&M in each year. The WESCO, NESCO and SOUTHCO submit that the truing up exercises are essential to find out the actual fixed cost paid by GRIDCO to OPGC in comparison to the fixed cost allowed in GRIDCO ARR in each year.
98. The Fixed Cost to OPGC may be estimated for 2008-09 separately without considering the figure of 2006-07 as there would be a substantial reduction of fixed cost on account of depreciation and interest on loan notwithstanding the nominal increase in O&M expenses.
99. GRIDCO being a party to the PPA with OPGC, it should be directed to take adequate steps to expedite the Case in the Hon'ble Supreme Court so that the tariff for purchase of power from the OPGC shall be in accordance with the Regulations for determination of tariff for Generating Companies enunciated by CERC/OERC under Electricity Act, 2003.

CGPs

100. CGPs may be encouraged with higher charges for their surplus power injected to the system beyond quantity provided in previous year.

CGSs:

101. GRIDCO should be directed to provide for the latest CERC notifications/tariff approvals for the concerned stations.
102. Commission in its previous tariff orders for GRIDCO allowed higher fixed cost due to non-fixation of tariff by CERC on normative basis vide Order dated 26.03.2001 applicable from 01.04.2001 and vide Order dated 26.03.2004 applicable from 01.04.2004 and submit that the fixed cost approved by OERC in the respective FY 2001-02 to 2006-07 may be trued up.

PGCIL Charges:

103. Projection made by GRIDCO is on higher side and should not be allowed to be increased from year to year as optimum utilization of transmission system of PGCIL is available during ABT and Open Access regime.
104. GRIDCO to furnish evidential documents for the transmission charges along with the corresponding CERC norms pertaining to tariff approved for the various transmission links.

Establishment & Financing Cost

Employee Cost and A&G Expenses

105. The employee cost projected for FY 2008-09 at Rs. 2.87 crore is on the higher side and needs a detailed scrutiny by the Commission. With 6% escalation, it will be Rs. 2.15 crore.
106. By allowing 5.2% escalation per year under this head as permitted by the Commission, the A&G cost should be Rs. 1.83 crore for FY 2008-09.
107. GRIDCO must spell out steps for improvement of the system since EHT grid substations have adequate and experienced officers to attend to routine operations/preventive maintenance.
108. Power generators have earned substantially and the fund thereof needs to be well utilization for upgrading and repairing the existing generation.
109. The level of accuracy of the meters and how often it is checked may be indicated by GRIDCO. OERC may get test checked few of these meters by independent inspectors.

Interest on Long Term Liabilities

110. In view of the ATE order in Appeal No. 74, 75 and 76 of 2006, the interest cost may not be recovered through the BSP.
111. GRIDCO had asked for an amount of Rs.169.79 crore for the year 2008-09. The consumers had already paid this cost for the energy purchased from generating companies to the DISTCOs and it was the duty of GRIDCO to collect the amount from DISTCOs and if necessary with 2% surcharge per month for delayed payment.
112. Commission has allowed interest on NTPC Bond of Rs. 1102.8 crore @ 8.5% without considering the incentive provision as per the OTS scheme of GOI. In the truing up exercise for the period upto 2005-06 by the Commission, the actual reasonable interest cost of GRIDCO has been considered.
113. The interest waiver amounting Rs.91.50 crore is required to be considered as income in the ARR.
114. GRIDCO has submitted an excess amount of Rs. 21.77 crore towards the interest cost for the year 2008-09 and income of interest for the year 2008-09 amounting to Rs 221crore (Rs 400crore @ 8.5% for the period from 1.01.2000 to 31.03.2007) from DISCOMS is not being considered as income of GRIDCO.
115. GRIDCO is claiming for the interest @12.5% p.a. while the interest allowed by the Commission on the NTPC Bond to DISTCOs is at 8.5%.
116. While carrying the truing up exercise of the interest of GRIDCO, the incentive received in cash or adjusted with GRIDCO dues under One Time Settlement (OTS) Scheme from 01.10.2001 to 30.09.2007 may be allowed in the best interest of passed on to the consumers of Orissa.
117. The arrear payment to be received from DISCOMs and outside the State is to be considered for repayment of GRIDCO loan. Any shortfall of funds for repayment may be rephased for GRIDCO for a longer tenure and the interest on the same may be allowed in the ARR of GRIDCO.
118. Since all the liabilities of GRIDCO are being taken care of in the ARR, the interest income from the DISTCOs to be considered on a totality concept in the ARR of the GRIDCO and the interest on the Bonds are to be taken as income in the ARR of GRIDCO.

Past Losses:

119. First claim of Rs.50.93 crore in the review petition of tariff order 2006-07 filed by GRIDCO, includes additional interest liability now claimed on the loan of Rs.170 crore for one time settlement of NTPC bonds. It is not a liability of the consumers to pay extra charges for any delay on the part of GRIDCO to pay the cost of energy charges to the generating companies.

120. The figure of Rs. 481.87 crore as a gap is only a delay in collection at a later date and with delayed payment surcharge of 2% per month. As such the huge gap of Rs.481.87 core does not seem to be real and reasonable.
121. GRIDCO being a Trader of electricity cannot be burdened with any past liabilities in accordance with the principles annunciated in Section 132(2) of the Electricity Act, 2003. It is provided there that any property, interest in property, rights and liabilities shall be re-vested by the State Government in a Government Company or Company or Companies in accordance with the transfer scheme so published along with such other property, interest in property, rights and liabilities of the Government as may be stipulated in such scheme, on such terms and conditions as may be agreed between the State Government and such Company or Companies being State Transmission Utility or Generating Company or Transmission Licensee or Distribution Licensee as the case may be.
122. Any transfer scheme under Section-131 (4) should have been notified by GRIDCO, if it were a generating company or a transmission licensee or distribution licensee. In any case GRIDCO being a Trader in electricity cannot be burdened with past liabilities.
123. GRIDCO did not insist on the Distribution Licensees to open escrow account / LC for nearly 2 years after the Distribution Licensees started operation with effect from 01.04.1999 (01.09.1999 for CESCO). The bulk of the arrears of the DISTCOs relate to this period.
124. That the Government of Orissa in S.R.O. No. 750/98 dated 25.11.1998 for transfer from GRIDCO to the Distribution Companies provided for the following amount towards bad debts.
- | | | | |
|------|--------------|----------|---------------------------|
| i) | CESCO | - | Rs. 182.46 crores |
| ii) | NESCO | - | Rs. 71.99 crores |
| iii) | WESCO | - | Rs. 104.28 crores |
| iv) | SOUTHCO | - | <u>Rs. 90.07 crores</u> |
| | Total | - | Rs. 448.80- crores |
125. However, bad debt allowed by the State Government in the transfer scheme notified in S.R.O No. 257/96, relating to the combined transmission and distribution business of GRIDCO, as on 31.03.1996, was only Rs. 438.90 crores.
126. Govt. of Orissa notification Para-6(ii) of the S.R.O No. 750/98 stipulated that provisions for bad debt when collected shall be shared between GRIDCO and DISTCOs equally. GRIDCO has consistently failed to ask for these amount from the Distribution Licensees, even after 9 years Distribution Companies are utilizing the amount so collected. In view of the transfer scheme dated 09.06.2005 GRIDCO can act only as a representative of the State Government to collect these amount in future.
127. GRIDCO is yet to recover the amount of Rs. 19.4 crores (approximately) not collected in spite of the Hon'ble Supreme Court orders and the arrear dues of the

- Distribution Companies and past losses which may be collected and passed on directly to the Government. This should not be considered for determination of the price at which the power is to be sold to the Distribution Licensees.
128. Any increase in BST will have direct bearing on RST and in the past the burden of increase in BST was loaded on HT and EHT consumers availing load factor incentive tariffs.
 129. The Objectors opposed the consideration of past losses, securitization of arrear while approving the ARR of GRIDCO which is affecting the Bulk Supply Price and in turn burdening the consumers while fixing the RST.
 130. GRIDCO proposes to pass through of a substantial amount of the “past losses”, which are mostly on account of its inefficient operation and are therefore not payable.

Truing Up:

131. The fixed cost for Central Generating Stations (TSTPS, FSTPS, KhSTPS) approved by CERC and allowed by OERC in respective FY 2001-02 to 2006-07 may be trued up.
132. FPA allowed earlier in excess of actual in case of Central Generating Stations (TSTPS, FSTPS, KhSTPS) in respective FY 2001-02 to 2006-07 may be trued up.
133. While calculating interest cost of GRIDCO, incentive received by GRIDCO from NTPC under One Time Settlement (OTS) scheme from 1.01.01 to 30.09.07 may be trued up.

Export of Power & UI

134. The benefit of power exports/UI gains should be taken into account in GRIDCO ARR 09 and should not be used to offset past losses, a significant portion of which pertain to a period prior to 01.04.1999, i.e. before the DISTCOs were privatized.
135. Earnings from trading of surplus energy needs to be considered in the ARR of GRIDCO.
136. The WESCO, NESCO and SOUTHCO submitted that the sudden departure in principles of treatment of revenue from export of power in the tariff order for FY 07 and FY 08 led to a massive increase in bulk supply tariffs.
137. In pursuance to the ATE judgment and order dated 13th Dec 2006, the WESCO, NESCO and SOUTHCO submitted that the substantial earnings out of trading of surplus energy should be taken into consideration in the ARR of GRIDCO and in the larger interests of the consumer.
138. (a) GRIDCO’s earning from export of power during from FY 04 is as follows. Actual during the year FY 04: Export of 3299 MU for Rs.753 crore. (b) Actual during FY

- 05: Export of 452 MU for Rs.1177 crore. Actual during the year FY 06: Export of 2185 MU for Rs.743 crore with a higher rate of realization.
139. The UI charges have not been considered as Misc. receipts. GRIDCO may indicate the amount collected during the year 2006-07, the estimated amount to be collected during the year 2007-08 and the proposed amount for the year 2008-09 to assess the Misc. Revenue for FY 2008-09.
140. Any earning from export of power or U.I. charges should be deducted from the cost of power procured by GRIDCO for determination of sale price to the DISTCOs. Any variation in the estimate should be adjusted in the next year's price determination.

Revenue Requirement

141. GRIDCO being a Trader is entitled to get only 04 paise per unit as trading margin over the procurement cost from the generating stations plus transmission losses and transmission tariff to be paid to OPTCL as per the tariff fixed by OERC from time to time for arriving Bulk supply price applicable to the Distribution Companies.
142. GRIDCO is entitled to the Power Procurement Cost of the Generating Stations plus the Transmission losses and Transmission Tariff fixed by OERC plus 4 paise margin per unit of power for arriving at BSP for DISTCOs for 2008-09.
143. GRIDCO should submit a proposal for bulk supply price consisting of Demand Charges and energy Charges as two-part tariff.
144. Other expenses like repayment of principal, interest on long term loans and any other expenditure may not be included in ARR for 2008-09, since GRIDCO is having surplus power available after demand of DISCOMS.
145. The actual collections made for the year FY 2004-05, 2005-06 and 2006-07 from each of the Distribution Companies may be furnished by GRIDCO.
146. The law says that the Trader is entitled only to a trading margin as may be determined. The CERC has already determined the trading margin for Inter-State Traders which may be adopted as the trading margin for GRIDCO.
147. The Commission in its Order dated 22.03.2007 for the year 2007-08 has determined the single part cost for supply of power by GRIDCO to the Distribution Companies. Such a provision as submitted during hearing has made the Distribution Licensees insensitive to load factor and power factor of the consumer with consequential adverse impact on the Power System.

Return on Equity:

148. No amount should be allowed under this head, as the Commission had not permitted any return on equity as per Govt. of Orissa Notification dated 29.01.2003.

Other Income

149. GRIDCO should collect receivables from DISCOMs, IMFA and other states as outstanding arrears, which should be collected and a nil outstanding situation is morally binding on GRIDCO.
150. The DPS amount receivable from DISTCOs as per the OERC order should be treated as income in the ARR of GRIDCO.

Levy of Over Drawl Charge

151. Only the incremental cost for additional generation may be approved for billing. In case there is a over drawl by any DISCOMs over and above the quantum fixed by OERC as the entire fixed cost is taken while computation of power purchase cost of GRIDCO, this is to be recovered from DISCOMs.

Rebate

152. To approve the rebate of 2% to the DISTCOs for prompt payment of BST bills within three working days excluded Sunday and holidays.

RLDC/NLDC Fees:

153. The Commission may allow the same amount Rs. 1.32 crore for 2008-09.

Other Issues:

154. Functioning of GRIDCO as a company is unnecessary in absence of competition who acts as a middle man between the generating licensee and distribution licensees.
155. GRIDCO has not improved its efficiency and standard of service, performance and has not reduced T&D losses, administrative expenditure etc.
156. GRIDCO has filed this application in question to confuse the consumer/public without disclosing the purpose for such filing.
157. The procedure/method so adopted by Commission be made simple and inexpensive to enable the public to file purposeful objection effectively.
158. It is not known as to whether GRIDCO has complied with direction issued in the earlier orders of the Commission. Licensees should not be allowed to have the revenue requirement without having nexus between actual and revenue requirement, cost and service and for not providing required level/standard of service.
159. GRIDCO has failed to arrest the system loss, bad expenses, rents, rates, taxes, legal expenses, audited fees, auditor fees, other expenses, expenses on contributions to P.F Staff pension, gratuity expenses on training and other schemes, publicity, advertisement, travelling and poster expenses as such violated conditions of licensees.

160. Commission is to regulate tariff for the area affected by displacement in Hirakud area in a separate way than the other areas both for retail and bulk supply.
161. Commission is to regulate tariff for old, current and prospective consumers in different stages with different tariff and not vesting every thing with the utilities.
162. Benefits of the progressive laws are not reaching to the normal honest prudent consumers at the grass root, hilly tract, and agriculture field.
163. Now GRIDCO being bifurcated to OPTCL and OPTCL has made out further bifurcation of SLDC but proper co-ordination with the generating and trading agencies is still lacking.
164. Proper appreciation about maintaining distance of electricity line and the ground in all the sectors is required.

GRIDCO's RESPONSE TO THE OBJECTORS (Para 165 to 239)

165. In response to the views of the objectors on GRIDCO's application for approval of the Annual Revenue Requirement and Bulk Supply Price for 2008-09, GRIDCO had filed rejoinders on the same. GRIDCO's rejoinder on views expressed by the objectors has been broadly classified into the following main issues.

Legal Issues

166. GRIDCO is a deemed licensee under provision 1 & 5 of Section 14 of Electricity Act. Further, OERC is empowered to determine the Bulk Supply Price under Section 86 (1)(A) of Electricity Act, 2003. Orissa follows the Single-Buyer-Model which is otherwise essential in a state where in distribution is privatized. GRID CORPORATION OF ORISSA LIMITED (GRIDCO) is a wholly owned undertaking of the State Government and a Company incorporated under Companies Act, 1956 for discharging its obligations of the Transferee under clause 11 of the Transfer Scheme in accordance with the Govt. of Orissa, Department of Energy Notification No.6899 dt.09.06.2005 from the date of transfer i.e. w.e.f. 01.04.2005.
167. The Accounts of GRIDCO have been finalized & audited upto FY 2005-06. The Accounts for FY 2006-07 has been finalized and Statutory Auditors have also furnished their report.
168. The present ARR & BSP application has been prepared and submitted to the OERC on 30-11-2007 basing on the audited accounts for the year 2005-06 and Provisional Accounts for FY 2006-07, facts and materials.
169. The public notice published on 12.12.2007 & 13.12.2007 by GRIDCO is absolutely in line with the provisions contained in The Electricity Act, 2003 and conforms to the requirement of the regulations framed under the Act.
170. There are several Agreements existing between GRIDCO and the DISCOMs including the Bulk Supply Agreements for power purchase by DISCOMs from

GRIDCO. Similarly, GRIDCO has Long Term Power Purchase Agreements with the various generators under the Single-Buyer-Model in the Orissa Power Sector at present.

Simultaneous Maximum Demand and Energy Demand

171. The objection with regard to Maximum Demand pertains to DISCOMs. The suggestion offered by the objector to consider lower distribution loss is within the domain of the Commission.

Energy Availability and Procurement

172. GRIDCO has projected the power procurement at 19110 MU based on generation plan furnished by OHPC, OPGC and from Central Generating Stations (CGSs) as per CERC norms and from other sources based on the present trend. Sales to DISCOMs has been shown as 18144 MU and emergency sale to CGPs as 10 MU, after deducting the transmission loss of 5%. GRIDCO has made a reasonable allocation of power to the four DISCOMs considering the availability of power and the load growth of the DISCOMs based on current trend of drawl. The contention of the objector that there is a surplus of energy to the tune of 950 MU is misconceived.
173. The DISCOMs are to make projections for load growth of different categories of consumers, which are to be considered by the Commission. DISCOMs did not submit their energy & demand requirement in time to GRIDCO. GRIDCO therefore estimated the energy and demand projection for DISCOMs based on the current trend of drawal.
174. GRIDCO's Sales Projection is limited to its long-term contracted capacity with the generators. DISCOMs are free to purchase any quantum of power beyond the Projected Sale of GRIDCO from the open market to meet their shortfall, if any. As per GRIDCO's projection, there is no surplus power during FY 2008-09 for sale. In any case if at all there is any surplus availability due to good monsoon and better availability of thermal station, the revenue from sale of surplus power & UI if any will be utilized to meet the past losses and liabilities.
175. During off-peak hours, the prospect of drawing additional energy to the State Grid becomes too limited due to prevalence of high frequency in the grid during such times.

Hydro: (OHPC)

176. GRIDCO has relied upon the projections given by OHPC for the year 2008-09.
177. In case of any additional availability from cheaper sources like OHPC, GRIDCO will do its best to maximize such drawals subject to the other conditions like Grid frequency, System Stability and U.I. etc.
178. The reservoir level of the current year can not be taken as the yard-stick for projecting drawls in the next year since rainfall / monsoon is always uncertain. It is to further

- point out that the water in the various hydro stations is not only for power generation but also for irrigation.
179. The impact of tariff for OHPC will be determined by the Commission which may be factored into the ARR & BSP of GRIDCO for FY 2008-09. The same principle may be applied for OPGC as well.
 180. In case of OHPC, 1% loss consisting of 0.5% towards Transformation loss and 0.5% towards Auxiliary consumption is deducted from the gross energy to arrive at the ESO (Energy Sent Out) figure from the respective Generating Stations of OHPC. Calculated on this basis, the generation plan as submitted by OHPC for FY 2008-09 has been considered in ARR & BSP Application of GRIDCO.
 181. The projected generation plan furnished by OHPC for FY 2008-09 has been relied upon, which is almost equivalent to the Design Energy of respective Hydel Stations.
 182. The availability of hydro power is always estimated on the basis of Design Energy assessed scientifically by Central Electricity Authority or by any expert body. The actual availability of hydro power depends on rainfall during the year, discharge schedule approved by State Water Board etc. At the time of finalization of ARR during the month of February-March for the ensuing FY, it is difficult to assess the actual rainfall so also the reservoir level. Therefore, it is always projected on the basis of design energy. In some years, the availability exceeds design energy whereas in other years it falls short of forecast/design energy.

Thermal

183. **OPGC:** GRIDCO has relied upon the generation plan submitted by OPGC in so far the gross generation of energy is concerned. However, the ESO taken by GRIDCO is estimated as 2946.76 MU as GRIDCO has taken 9.50% of energy towards Auxiliary Consumption as per PPA signed with OPGC whereas OPGC has taken 2930.127 MU by assuming 10% towards Auxiliary Consumption.
184. GRIDCO has considered the generation plan submitted by OPGC and 80% PLF for CGSs including TTPS as per the CERC Norms. The generation plan is prepared by the generators considering a host of factors and GRIDCO has no scope to examine the same.
185. **TTPS:** In the absence of receipt of any generation plan from TTPS for FY 2008-09, GRIDCO projected the net energy availability from TTPS at 3162.17 MU at a PLF of 87.68% based upon the last year's projection and the revised Auxiliary Consumption of 10.50% as per the current CERC Norm.
186. **CGPs:** Procurement from CGPs has been taken as 543 MU in the ARR & BSP Application for FY 2008-09. Based on the availability during FY 2007-08 at a price approved by the Board of GRIDCO after carefully evaluating the availability from such sources in view of the prevalent circumstances of Open Access, avenues for power trading by the CGPs and also increasing demand of the power for captive use etc. by the industries themselves.

187. The drawal from CGPs are considered as infirm since these drawals occur only when CGPs have surpluses. Moreover, CGPs are treated as Bulk Consumers of the Grid rather than as Generators. In view of the prevalent Open Access Regime, scope of drawal by GRIDCO from CGPs is again limited because of the price factor offered by other Traders / Consumers including the Inter-State Traders etc. The forecast made by GRIDCO is based upon actual availability in the 1st half of FY 2007-08 and the current trend of drawal from such sources.
188. **CGSs:** In absence of Load Generation Balance Report (LGBR) of the Central Generating Stations for FY 2008-09 at the time of filing the ARR & BSP application on 30.11.2007, GRIDCO has assumed procurement projection from CGSs at 5697.02 MU based on the allocated share to GRIDCO from ER and as per the prevailing CERC Norms of 80% PLF and the Auxiliary Consumption in percentage applicable to the respective Stations on normative basis.
189. In the ABT mechanism, 80% PLF is the CERC approved norm for tariff setting for the block period from 04-05 to 08-09 FY. Therefore, availability at normative PLF level is considered by GRIDCO while forecasting the quantum of drawl from Central Generating Stations.
190. **TSTPS:** GRIDCO has 31.8% share in TSTPS Stage-I having capacity of 1000MW.
191. After prolonged persuasion with Ministry of Power, Govt. of India, 200 MW i.e.10% of the installed capacity of 2000 MW of TSTPS stage-II have been allocated to Orissa as home state quota.

Renewable Energy

192. GRIDCO is agreeable to purchase power from renewable and non-conventional sources provided such power is available at an affordable cost. This is to further state that GRIDCO has already proposed to procure 375 MU of energy (which is considered as co-generation as the power generated is from waste heat) from such sources in ARR for FY 2008-09. GRIDCO hopes to increase the purchase of this power in the pool as & when such power from renewable sources is available. Generation of power from renewable sources being altogether a different domain, GRIDCO may not be in a position to increase the generation of such power by itself.

Transmission Loss:

193. The occurrence of transmission loss in the grid is independent of the licensee. The transmission loss of OPTCL System is one of the lowest in the country.
194. The Central Transmission Loss is a bit lower than that of the loss of the State Grid since the transmission lines of the State Transmission Utility (STU) operate at a comparatively lower voltage levels than that of CTU.
195. OERC has prescribed an independent Gross Method of calculation of Transmission Loss in the OPTCL System which is based on the premise of "*As the System*

- Operates*” leaving hardly any scope for the licensee to influence the transmission loss.
196. With increased flow of power in the Orissa Grid than ever before, most of the age-old transmission lines are becoming overloaded contributing to enhanced loss in the system.
 197. Due to uneven spread of the load, some of the lines are equally under loaded which is also another reason for the increased loss in the OPTCL System.
 198. OERC approved Gross Method which worked out to be 5.04% for FY 2006-07 (April'06 to march'07) & 5.20% for FY 2007-08 (April'07 to Sept.'07). GRIDCO, therefore, considered a transmission loss of 5% in the ARR & BSP Application for FY 2008-09 as has been projected by OPTCL for FY 2008-09.
 199. During FY 2008-09, the total power allocation from Central Sector Generating Stations will be utilized for state consumption instead of trading in the State on displacement method unlike previous years. Hence, the transmission loss will obviously rise during FY 2008-09 in comparison to previous years.

Power Procurement Cost:

200. The applicable Fixed Cost, Variable Charges, FPA & Year-end Charges of the various Stations for respective years are derived based on norms and prevalent conditions like Fuel Prices etc. outlined by the concerned Regulators for the concerned year. Hence, it is not logical to say that the existing fixed cost approved by CERC / OERC may be followed for the ensuing year i.e. FY 2008-09.
201. **TTPS:** GRIDCO has proposed the TTPS tariff as per the CERC Norm and proposed FPA @ 22.99 P/U by assuming 10% escalation over the actual FPA for Sept'07 i.e. @ 20.90 P/U. The Fixed Cost has been proposed as Rs.183.92 crore as approved by CERC. A projection of 10% rise in FPA cannot be said to be an overestimation.
202. **OPGC:** During the initial two years, the depreciation was not recovered by OPGC in full as the units have come into commercial operation in phased manner. Therefore, the depreciation may not reach 90% of the fixed assets during the year FY. 2008-09.
203. GRIDCO has explained the basis of calculation of FPA in the ARR & BSP Application itself that have been derived from the Bills of respective generating stations.
204. GRIDCO have suffered a loss of Rs. 200 crore during FY-05-06 due to under provisioning of FPA by the Commission.
205. **CGSs:** The cost of any additional drawal as suggested by one objector over and above 80% PLF from such Central Stations would be automatically factored to GRIDCO as per the existing CERC Norms.

Employee Cost, A&G Cost & R&M Cost

206. The metering system to record the procurement from the generation and sale to DISCOMs is fully in place with the acceptable level of accuracy.
207. GRIDCO has asked for Rs.6.28 Cr. towards employees cost & A &G expenses for FY 2008-09 which is around 0.19 % of the projected turnover.
208. GRIDCO does not agree to projection made by one of the objectors projection of Rs.2.15 Crore towards Employee cost on assumption of 6% escalation over Commission's approval for FY 2007-08.
209. Based on past experience, GRIDCO have projected A&G requirement of Rs.2.41 Crore for FY 2008-09 which is reasonable.
210. GRIDCO has projected bare minimum reasonable R & M expenses of Rs.0.35 Crore towards Repair and Maintenance of vehicles, furniture and office equipments etc for FY 2008-09.

Interest on long term Liabilities:

211. GRIDCO was unable to pay the generators on account of failure on the part of the DISCOMS to pay the power purchase dues & loan to GRIDCO. This default compelled GRIDCO to securitize the dues of the generators and GRIDCO had to avail loan from bank to pay the dues of PFC etc. Failure to service the loan would result in regulation of power by the concerned generators, which would not be in the interest of consumers.
212. In view of the failure by DISTCOs to pay their dues, GRIDCO is entitled to collect 2% surcharge from DISCOMS which has never been materialized so far.
213. GRIDCO has to incur loans in order to continue the supply of power to the DISCOMs whether DISCOMS pays the BSP dues in full or not to GRIDCO.

Return on Equity

214. Return on Equity is projected based on CERC (Terms and Conditions of Tariff) Regulations, 2004. The notification of Govt. of Orissa referred to does not hold good after FY 2005-06. No business can run & survive without provision of Return on Equity.

Past Losses

215. **NTPC Bond:** The DISCOMs (WESCO, NESCO & SOUTHCO) did not fulfill their obligation to repay the dues under Rs.400 Crore bonds issued by them to GRIDCO, which was then transferred to NTPC. Due to default by the DISCOMs under the said bonds, NTPC threatened to impose power regulation in Orissa and asked GRIDCO to clear up such dues under the fallback arrangement in terms of the minutes of discussion. Besides, to avoid regulation of power supply to the State by NTPC, Govt. of Orissa also advised GRIDCO to go in for One Time Settlement of such dues. In

absence of funds at its disposal, GRIDCO had to incur loans of Rs.170 Crore from different Banks in order to settle the dues of NTPC.

216. Incentive received under one time settlement scheme from NTPC has no relationship with interest whatsoever. The incentive so received was utilized on year-to-year basis against items of expenditures, not provided for in the ARR like DPS payment to OPGC, Arrears of PGCIL bills due to upward revision of tariff, retrospective revision of capacity charges of TTPS from the FY 01-02 to FY 06-07 due to additional capitalization on account of R&M work etc. GRIDCO has projected interest cost strictly as per the loan/bond agreement executed with Financial Institutions/Banks /Generators. GRIDCO has incurred loans in order to settle the dues of NTPC linked to the bonds under the fallback arrangement since the DISCOMs defaulted in their obligation to service NTPC bonds. The Bonds are now being held by GRIDCO and the DISCOMs are now duty bound to service the same under the original terms and conditions of Bonds to GRIDCO.
217. GRIDCO's claim of Rs.481.87 Crore in the ARR & BSP Application for FY 2008-09, has been proposed for payment towards the loan amount for repayment / liquidation of GRIDCO' loan amount of Rs.2693.17 Crore over a period of 10 years from FY 2005-06 up to FY 2015-2016.
218. GRIDCO's losses are inherited and have arisen because of so many factors beyond control of GRIDCO. GRIDCO had to resort to borrowing to pay towards the Generators' bills in order to keep on supplying power to the State. When GRIDCO has incurred loans, it has to be paid.
219. It may be noted that GRIDCO has appealed against the impugned Order dated 13.12.2006 of Hon'ble ATE in Appeal No. 74,75 & 76 of 2006 before Hon'ble Supreme Court of India which has been registered as Civil Appeal No. 414 of 2007. The Appeal is now sub-judice before the Apex Court and hence, GRIDCO refrains itself to comment on the matter.
220. Non payment of principal may have serious consequences like regulation of power, recovery from Central Plan Assistance (CPA), Invocation of ESCROW mechanism, Invocation of Govt. Guarantee, Loss of Credibility in the Market, Difficulties in raising further loans etc. Therefore, considering practicality of situation, GRIDCO has proposed pass through of repayment of principal under Special Appropriation. However, the amount proposed towards Repayment of Principal may be reduced to the extent of commitments to be made by the defaulting DISCOMs for repayment of loan and outstanding dues and that the commitment should be in the form of securities acceptable to GRIDCO. OERC in BSP Order for FY 2007-08 allowed GRIDCO to collect Rs.41.36 Cr. from NESCO, Rs.31.91Cr. from SOUTHCO, Rs.36.83 from WESCO as against which NESCO has paid Rs.18.83Cr. and an amount of Rs.4.40 Cr only has been paid by the WESCO.
221. The matter of pass through of Rs. 50.93 crore (GRIDCO's review petition of BSP 08) is under the domain of the Commission for its consideration.
222. **Regulatory Assets:** GRIDCO is a 100% Govt. owned Company whose accounts are subject to Statutory Audit and audit by C&AG. Whatever unforeseen additional income/expenditure incurred during the year are duly accounted for in the books of

account. For an example, GRIDCO has lost a sum of RS. 550 Crs. due to change in hydro-thermal mix during 02-03 FY. Further, GRIDCO has also suffered a loss of Rs. 200 Crs. towards Fuel Price Adjustment during the year 05-06. Therefore, it is open to the Commission to assess the regulatory asset after taking into account both additional income as well as expenditure not provided in the tariff from year to year.

223. OERC in its ARR & BSP Orders have stated that the surplus, if any, earned from U.I. & Trading is to be adjusted against past losses of GRIDCO. Commission have even left a gap of Rs.504.52 Crore in the ARR for FY 2006-07 and Rs.464.86 Crore in the ARR for FY 2007-08 and opined that such deficits may be recouped from UI earnings and surplus, if any, from power Trading. Against the above backdrop, there is still a cumulative loss of Rs.765.44 Crore in the Books of Accounts of GRIDCO as on 31.03.2007 and the losses are yet to be replenished. The past losses have arisen because of the primary reason of non-payment of BSP dues by DISCOMs regularly in time.
224. The past losses are the losses of the sector which have been retained by GRIDCO in every stage of reform and restructurings. 1st April 1999 is not relevant for treatment of past losses as this is a date when the ownership of distribution function was only divested/ changed.
225. With respect to the submission that the ARR of GRIDCO should be determined in line with the Hon'ble ATE's Order dated 13.12.2006, GRIDCO has appealed against the said Order of ATE in Hon'ble Supreme Court of India which has been registered as Civil Appeal No. 414 of 2007 and the matter is now sub-judice. Hon'ble Supreme Court has passed an Interim Order dated 20.04.2007 directing OERC not to take any further steps pursuant to the impugned Order dated 13.12.2006 of Hon'ble ATE.

Computation of PGCIL Transmission Charges

226. The transmission charges by PGCIL are determined as per the Regulations in place, which GRIDCO is bound to pay.
227. The Orders of CERC pertaining to tariff for different transmission lines have been provided and the respective Orders are also available in CERC Website (cercind.gov.in).

Export of Power & UI Income

228. Regarding income from Trading of power & U.I. the Commission has left a gap of Rs.464.86 Crore in the ARR of GRIDCO for FY 2007-08 which is expected to be bridged through surplus earned from power trading & U.I.
229. Income from trading has become too uncertain in view of the Case relating to trading margin of GRIDCO which is pending before Hon'ble Supreme Court of India (Civil Appeal No. 5722 of 2007 in Hon'ble SCI). GRIDCO still has a cumulative loss of Rs.765.44 Crore as on 31.03.2007 which, as per the Commission's order, is to be recouped from the surplus, if any, which may accrue from trading & U.I.

230. GRIDCO is taking all out steps for recovery of its outstanding from other States and DISCOMs and such amount are being reflected in its revenue as and when collected.
231. As per GRIDCO's projection, the availability of power in the State during FY 2008-09 is hardly sufficient to meet the State's demand and therefore, GRIDCO has no surplus power for trading. With regard to surplus which may accrue from incidental trading of surplus power, if any, will be utilized to recoup the past losses / deficit being left by the Commission in the ARR of GRIDCO.

Miscellaneous receipts

232. GRIDCO has proposed 10 MU of energy as emergency sale to CGPS @ 330 P/U resulting in Misc. receipts of Rs.3.30 Crore.

Revenue Requirement

233. The Bulk Supply Price, which is approved by the Commission, is an input cost to the DISCOMs. The ARR of the DISCOMs as approved by the Commission is taken in to account while determining the RST. Increase of RST is therefore dependent upon many factors. It is not correct contention of the objector that in the past the burden of BSP was loaded to HT & EHT consumers. In fact, RST has remained almost unchanged for the last seven years irrespective of revision of BSP.
234. The Trading Margin of 4 Paise per Unit is applicable for Inter State Traders who have got their Inter State Trading License from Central Electricity Regulatory Commission (CERC). GRIDCO is a deemed Licensee under Orissa Electricity Reforms Act 1995 which has been saved by the Electricity Act 2003 in so far as it is compatible with the provisions of the new Act (The Electricity Act 2003.). Therefore the contention that the trading margin of 4 P/U is applicable to GRIDCO is misconceived.

Overdrawal Charges

235. As per the Merit Order Procurement Policy, the cheapest power will be considered first for the consumption inside the state. In a shortage scenario, any excess drawl over and above the approved drawl by any DISCOM will force GRIDCO to source from costly CGP sources / spot market at a very high cost. Therefore, any excess drawl shall have to be billed at the highest cost.

Rebate

236. GRIDCO is availing 2% rebate by paying the bills of generators in time on presentation of bills. DISCOMs may be allowed to avail the rebate on similar lines as approved OERC.

237. GRIDCO, therefore, submits that the existing system with regard to payment of rebate may be retained.

Miscellaneous

238. Any higher availability from hydro sources like OHPC or from any other Stations including Central Thermal Power Stations are being drawn by GRIDCO through suitable incentive schemes which are already in place. For example, drawal from Central Generating Stations (CGSs) over and above 80% PLF are incentivized as per applicable CERC Norms and vice versa.

239. In case of any additional availability from OHPC, GRIDCO follows a scheme of incentive for additional energy beyond design energy, which is available in the PPA signed with OHPC by way of payment towards secondary energy.

GRIDCO’S RESPONSE TO QUERIES RAISED BY THE COMMISSION STAFF IN THE PUBLIC HEARING (Para 240 to 266)

Long Term Liabilities

Joint reconciliation statement of BSP dues along with DPS with DISTCOs

240. GRIDCO has submitted the details of outstanding BSP along with DPS & other dues from DISCOMs to OERC on 01-01-08 against case No. 115/2004. Due to adjustment of the excess amount paid over and above BSP against the Power Bond as on 31-03-06, the Joint Reconciliation Statement has not been signed. A table below shows the difference on account of outstanding BST dues with the DISTCOs.

Table - 13

(Amount in Rs.)

Name of the DISTCOs	As per GRIDCO	As per DISTCOs	Difference (Amount In Crore)
WESCO	899,719,943	1,287,216,497	(-) 387,496,536
NESCO	2,011,471,626	2,202,396,456	(-) 190,924,830
SOUTHCO	816,687,312	754,522,835	62,164,477
CESU	6,926,777,666	6,792,101,410	134,677,156

241. Receivables to the tune of Rs. 371.97 crore

242. GRIDCO has given Breakup of receivables and Action Plan to the tune of Rs. 371.97 crore summed up in the table below:

Table - 14

Sl No.	Breakup receivables and Action Plan	Amount (In Crore)	Action Plan
1.	Amount adjusted/ received in 2007-08	56,986,314.50	Settled in 2007-08
2.	Amount adjusted against payables (to State Govt./ Central Govt. and Others)	4,412,005,596.42	Adjustable against payables of GRIDCO.
3.	Loss pending ledger balance	124,012,029.90	Provision to be made or amount to be written off as these are not recoverable.
	Total	4593,003,940.82	
4.	Loss: Provision for interest accorded and due on DISTCOs loan.	(-) 873,328,726.00	
	Total receivable	3,719,675,180.82	

NTPC bond of Rs.400 cr of the three DISTCOs (WESCO, NESCO and SOUTHCO). NTPC “one-time-settlement” with GRIDCO and waiver of interest to the tune of Rs.91.50 crore

243. The bonds of the three DISTCOs (WESCO, NESCO & SOUTHCO) along with the default interest have been transferred to GRIDCO on 31-03-2007. The copy of settlement between GRIDCO & NTPC is submitted. Excess payment made by GRIDCO to NTPC under the settlement over and above Rs.400 crore which was securitised through transfer of power bond of DISTCOs have been considered as DPS paid to NTPC. The total outstanding as on 01-10-2007 is as under.

Table - 15

(Rs. in Crore)

Particulars	WESCO	NESCO	SOUTHCO	Total (REL Managed DISTCOs)
Original Bond Value	103.00	167.00	130.00	400.00
Principal default for payment as on 01-10-07	103.00	167.00	130.00	400.00
Interest due upto 30-09-07 (from 01-10-00 @12.5%)	90.13	146.13	113.75	350.00
Less:-				
Payment made to NTPC upto 30-09-05	53.14	33.26	24.40	110.80
Payment made over and above BST in 2006-07	15.17	18.48	-	33.65
Sub Total	68.31	51.74	24.40	144.45
Outstanding as on 01-10-07				
Principal	103.00	167.00	130.00	400.00
Interest	21.82	94.39	89.35	205.55
Total	124.82	261.39	219.35	605.55

Miscellaneous Receipt

Receivable from outside the state for 2007-08 and 2008-09

244. The other receivables of GRIDCO are mainly from MP & AP which have been disputed and the matter is sub-judice. GRIDCO is not likely to receive any payment against these balances during FY 2008-09.
245. Out of the target for collection of arrears from Outside States to the tune of Rs 30 crore during 2007-08, GRIDCO has collected a sum of Rs 1.98 crore upto 31-01-2008. The details of the same are as under:

Table – 16

(Rs. in crore)

Sl. No.	Name of the State	As on 31-03-06	As on 31-03-07	OERC Approved receipts during FY 2007-08	Received in FY 2007-08	Remarks
1	West Bengal	0.01	0.01		-NIL-	Debit Ledger balance to be Written- off
2	Bihar	9.97	2.34		1.98	Claim revised & no outstanding
3	MP	71.78	71.78		-NIL-	Matter is under sub-judice
4	AP	32.29	32.29		-NIL-	Matter is under sub-judice
5	DVC	0.31	0.31		-NIL-	Old ledger balance to be written -off
	Sub-total	114.36	106.73	30.00	1.98	
6	EREB	5.73	90.13			UI Charges received subsequently
7	PTC	25.58	1.14			Trading Revenue received subsequently
	Total	145.67	198.00	30.00	1.98	

Receipts towards UI & Trading for the FY 2006-07 and status of gap of Rs.464.86 crore or allowed in Tariff Order 2007-08.

246. The Commission allowed a gap of Rs. 464.86 crore in the last Tariff Order i.e. 2007-08 which would be bridged by earnings from UI and trading.
247. The Gross & Net Earnings (provisional) from UI charges & Trading of surplus power are as under:

Table – 17**(Rs. in crore)**

Sale of Surplus Power	MU	Gross Earning up to 30-09-07	Cost of Power	Net earning (Provisional)
UI Charges	1,114.82	412.74	232.86	179.88
Trading	421.90	133.68	87.46	46.22
Total	1,536.72	546.42	320.32	226.10

248. Cost of power for trading is weighted average cost of power of KhSTPS & CGPs (excluding Nalco & ICCL). Cost of power for UI is weighted average high cost of power from FSTPS, CGPs & TSTPS-II and the period considered April - September 2007 Pool Cost.

Receipts by GRIDCO

Arrear BSP dues recovered from DISCOMs till date vis-à-vis approval (Rs. 153.33 crore) in Tariff order FY 2007-08

249. The Commission had approved recovery of arrears of BSP dues during 2007-08 to the tune of Rs. 153.33 crore from the four DISTCOs.
250. GRIDCO has recovered a sum of Rs. 22.87 crore from the DISTCOs upto 31-01-2008 towards arrears of BSP dues. The details are as under.

Table – 18**(Rs. in Crore)**

DISCOMs	OERC Approved to receive in FY 2007-08 Tariff Order	Actual Received upto Jan'08 of FY 2007-08
WESCO	36.83	4.40
NESCO	41.36	18.47
SOUTHCO	31.91	-
CESU	43.23	-
Total	153.33	22.87

Repayment of Loan

Repayment of principal to the tune of Rs. 480.12 crore projected in 2007-08

251. GRIDCO during 2007-08 projected a repayment of Rs. 480.12 crore towards principal.
252. GRIDCO has repaid Principal amounting to Rs. 481.98 Crore upto 31-01-2008 and has to repay further amount of Rs 129.03 Crore during the remaining two months of the FY 2007-08.

Previous Loss

Provision of Rs.91.64 crore towards “Other Loss & provision” in Annual Accounts for 2006-07.

253. Detailed booking of such "Other loss & provisions" at Schedule-12 are as under:

Table - 19

Purpose	(Rs Crore)
Provision created against Receivable from CESU towards interest on CESU CAP Loan of Rs 174crore	87.33
Provision created against Receivable from ICCL towards DPS	4.26
Carried forward Ledger Cash Balance written off	0.05
Total:	91.64

Energy Availability and Procurement

CGPs drawl and rate of Procurement

254. The latest drawl along with the rate of procurement and the cost from the individual CGPs for the period from April, 2007 to January 2008 are reflected in the **POOL COST Statements** submitted to OERC. The costly power available from CGPs (except NALCO, IMFA, INDAL & RSP, the cost of which has been considered by OERC while allowing ARR & fixing BSP) have been utilized through trading and UI route.

Drawl of power and cost thereof from different power stations including individual CGPs and Renewable Sources.

255. The Pool Cost Data from April'07 to January'08 giving the details of energy purchased (MU), rate (P/U) and the relevant cost (Rs. Crore) is submitted herewith for information of the Commission.

Revenue Requirement

Single part tariff against two-part tariff.

256. In the ARR & BSP Order dated 22.03.2007 for FY 2007-08 Commission has approved a BSP structure in which the DISTCOs are being billed on the basis of the applicable approved Energy Charge and the approved Demand Charge @Rs.200/kVA/Month to be levied if there is variation of actual SMD compared to that of the permitted SMD approved by the Commission. In this connection, the relevant **Para No.5.35.18.5 of the ARR & BSP Order dated 22.03.2007** of the Commission is quoted below for perusal of the Commission:

Quote:

.....**5.35.18.5** Therefore, the Commission directs that there shall not be any levy of separate maximum demand charges upto the permitted SMD for the distribution companies for the FY 07-08. Permitted SMD would mean monthly SMD recorded upto maximum of 10% over the approved SMD in the current tariff order to take care

of monthly variations. Any excess drawl over the permitted SMD will have to be paid @Rs.200 per KVA per month. This is again subject to the condition that the annual average SMD shall be limited to the SMD permitted in the order. This is necessary to maintain the planning of load and system's stability. Any drawl over and above the annual average SMD will be payable @Rs.200 per KVA per month, notwithstanding the fact that a utility might have paid the SMD charges for exceeding the permitted SMD in any month.....

Unquote

257. GRIDCO submits that it is agreeable to Commission's approving the SMD of DISTCOs and the associated Demand Charge for FY 2008-09 in line with the approval vide ARR & BSP Order dated 22.03.2007 for FY 2007-08.

Computation of PGCIL Transmission Charges

ULDC Charges in the PGCIL Transmission Charges calculation.

258. It is submitted that the ULDC Charges have **NOT** been included in the ARR of SLDC for FY 2008-09 and therefore, such charges may be included in the ARR & BSP of GRIDCO for FY 2008-09. Hon'ble Commission has been allowing the recovery of the cost of ULDC through ARR & Bulk Supply Price of GRIDCO and the payment to PGCIL is to be made as per approval of CERC.

Power Procurement Cost

Wide variation in FPA claimed by NTPC for FSTPS, KHSTPs and TSTPS.

259. The actual FPAs of the NTPC Stations as are being billed by NTPC. It may be noted that FPAs derived from the Coal and Oil prices on the basis of an approved formulae, are being claimed by NTPC in its monthly bills. GRIDCO has raised this issue of wide variation in the FPAs in the ERPC Forum but to of no avail.

Non-Finalization of PPA in case of five Small Hydel Projects

260. Only three Nos. of PPAs of Small Hydel Projects have not been finalized yet. These projects are; Middle Kolab and Lower Kolab being implemented by M/s. Minakshi Small Hydro Ltd. and Samal Small Hydro Project being set up by Orissa Power Consortium Ltd. (OPCL). The capacity of Middle & Lower Kolab is 25 MW and 12 MW respectively and that of Samal Small Hydro is 20 MW only.
261. Earlier, these small Hydel Projects signed agreements with PTC to sell their power since GRIDCO & Govt. of Orissa did not agree to procure power from them, as Orissa was surplus in power availability. GRIDCO, keeping view of the difficult situation on power availability during next year, has intended to procure power from these Small Hydel Units also for which it has filed Petitions in OERC.
262. The matter is now sub-judice (Case No. 57/2007: M/s. Minakshi Small Hydro vrs. GRIDCO & Others; Case No. 59/2007: M/s. OPCL vrs. GRIDCO & Others) before OERC for disposal.
263. GRIDCO is now negotiating with PTC as per the views expressed by Commission during the hearing of the above Petitions.

Simultaneous Maximum Demand and Energy Drawl

SMD -Variation between GRIDCO & DISTCOs filing

264. Despite requests made by GRIDCO, DISTCOs did not furnish their projection with regard to the Demand (SMD) and Energy Forecast for FY 2008-09 for preparing the ARR & BSP Application of GRIDCO for FY 2008-09. In absence of the same, GRIDCO relied upon the forecasts furnished by the DISTCOs in their Business Plans for FY 2008-09 to FY 2012-13 with singular exception of WESCO in whose case the SMD was quoted as 900 MVA whereas the actual for FY 2007-08 (April'07 to Sept'07) was only 773.1 MVA. GRIDCO, therefore, projected the SMD of 837.98 MVA as was approved by OERC for FY 2007-08.
265. CESU did not furnish any figures for SMD for FY 2008-09 whereas its actual SMD achieved for FY 2007-08 (during 1st Six months) was 837.07 MVA. GRIDCO, therefore, projected the SMD for CESU as 834.69 MVA by increasing the SMD by 5.00% over the Commission's approval for FY 2007-08, which is almost equivalent to that achieved during first six months of FY 2007-08.
266. Detailed explanation with regard to the projection of SMD is given at Para 2.3 of the main text of the ARR & BSP Application of GRIDCO for FY 2008-09.

OBSERVATION OF THE STATE ADVISORY COMMITTEE (SAC) (Para 267 to 272)

267. The SAC constituted under Section 87 of the Electricity Act, 2003 met for the 4th time on 12th February 2008 to deliberate on the Annual Revenue Requirement and Tariff Applications for the FY 2008-09 of utilities, namely, OHPC, OPTCL, GRIDCO, SLDC, CESU, NESCO, SOUTHCO and WESCO.
268. The Consumer Counsel, Dr. Shibalal Meher gave a brief presentation on the ARR and tariff applications for the FY 2008-09 of the above mentioned utilities. Members in general expressed their concern about the poor performance of the licensees rendering requisite services to the consumers, high distribution loss, non-investment by private entrepreneurs, GRIDCO's proposal for stiff hike in bulk supply price, proposed rise in R&M expenses by OPTCL despite its failure to spend the approved amount in the previous tariff orders, etc.
269. On OHPC, the Members said that the R&M expenses proposed for Hirakud and UIHEP was very high. There was a general objection that transmission loss claimed at 5% was also in the higher side transmission loss should less than 3%, they maintained. The members opined that the distribution losses projected by various distribution companies were in the higher side. There was no system improvement nor harnessing of renewable sources of energy by DISTCOs. The members observed that the licensees in general did not abide by OERC Regulations. They observed that the Commission's tariff order were pro-licensee. Even after 10 years of reform, quality of supply had not improved upto expectations. The members suggested that the licensees should improve their performance first and then come forward with the tariff application. Interruptions and voltage fluctuations took place in various places including industrial belts. In respect of past losses of licensees, the members observed

that the same be considered if the licensees have performed as per OERC's direction. In fact, losses are never parts of costs. The volume of arrears has not reduced and bad debts are still in sizeable amounts. Small scale industries with connected load of below 20 KW were earlier given concessions in the last tariff order which has been withdrawn. This concessional tariff should be restored during 2008-09. Some members opined that tariff should be linked to infusion of funds. They stated that differential Retail Supply Tariff across zones may bring in competitive forces into operation. The inefficiency of generators particularly of hydro stations may be avoided by implementing prudent commercial standards. Some members proposed continuous supply of power to farmers with rebate facility. They recommended higher rate of rebate for paying farmers. DISTCOs should take care of their Consumer Care Centres. GRIDCO should take adequate care of power supply to DISTCOs so that power interruptions may be reduced. OPTCL should upgrade its systems and installations in view of new industries coming up in many belts.

270. The Commission should finalize the CGP power policy soon. The state can ask for free power from new hydro stations.
271. Some members questioned the cost effectiveness of GRF. They stated that maintenance of lines and s/s by DISTCOs was very poor.
272. Some opined that the net fixed assets in case of DISTCOs had reduced which meant no new investment took place. DISTCOs should be advised to take up demand side management instead of asking for increase in tariff. Bad debt should go down from the present level. The State Govt. should play its vital role as the major stake-holder of the power sector. Franchisees should be introduced in order to improve collection so that DISTCO's performance may be improved.

COMMISSION'S OBSERVATION AND ANALYSIS OF LICENSEE'S PROPOSAL (Para 273 to 456)

Legal Status of GRIDCO and Nature of its Application

273. Before enactment of the Electricity Act, 2003 (hereinafter referred to as the Act) GRIDCO was "Transmission and Bulk Supply Licensee" under the Orissa Electricity Reforms Act, 1995 (hereinafter referred to as the Reforms Act). As such GRIDCO had entered into long-term Power Purchase Agreements (PPAs) with generating companies namely OPGC, OHPC, NTPC etc. and also Bulk Supply Agreements with the four DISTCOs namely, NESCO, WESCO, CESU (previously CESCO) and SOUTHCO. Under the said agreements GRIDCO was obliged to sell power on priority basis to the aforesaid DISTCOs of Orissa up to their full requirement and the DISTCOs were obliged to buy power only from GRIDCO. This arrangement is known as the "Single-Buyer-Model" of power procurement for DISTCOs of Orissa. The arrangement was convenient because GRIDCO was also the transmission licensee. The mutual obligations under the long term bulk supply agreements have devolved on GRIDCO & DISTCOs as of now and the Single-Buyer-Model still prevails in the state as a historical legacy.
274. Under the Fifth Proviso to Sec.14 of the Act, GRIDCO has become a deemed licensee; but its position has had to be consistent with the provisions of the Act. GRIDCO has had to belong to one of the categories of licensee as set forth in clauses

- (a) (b) or (c) of Sec.14 of the Act. It could not continue to maintain its position as “Transmission and Bulk Supply Licensee” under the Reforms Act. Its present activity, after its transmission business was taken over by OPTCL is now confined to bulk purchase of electricity for sale to DISTCOs of Orissa. This satisfies the definition of trading in Sec. 2(71) of Act. Therefore GRIDCO’s position under the Fifth Proviso to Sec. 14 of the Act is that of a deemed trading licensee, carrying on trading of electricity in bulk.
275. Bulk supply activity by a trader is not repugnant to any provision of the Act. Such activity is tenable in law. It is a historical legacy coming down from the period under the Reforms Act and it continues so long as the long term bulk supply agreements with DISTCOs subsist. Some objectors have canvassed the view that the single buyer model is against the spirit of the Act and adversely affects the consumers. In this tariff proceeding, the Commission has to set tariff in the situation as it stands now and therefore it refrains from addressing this larger issue.
276. Under Sec.86(1)(b) of the Act, the Commission is entitled to regulate the price at which DISTCOs may buy power from generating companies or licensees (such as GRIDCO, which is a deemed trading licensee) or from other sources through agreements. The power to regulate price includes the power to fix regulated price from time to time. This provision enables the Commission to fix a regulated price for procurement of power by DISTCOs under the existing Bulk Supply Agreements with GRIDCO. Conceptually this is different from setting of general tariff for sale of electricity by GRIDCO to any purchaser.
277. The Commission can not and does not fix tariff for sale of electricity by a trader, vide Sec.62 of the Act, and it does not intend to do so for GRIDCO as a trader; even though under Section 86(1) read with Sec.62 of the Act, the Commission may determine tariff for whole-sale or bulk supply of electricity by generators or distributors (*i.e. licensees other than traders*). This follows from a harmonious reading of Sec.62 and Sec.86 (1) (a) and Sec. 86(1) (j) of the Act. But it just happens that in the present situation of Single-Buyer-Model the regulated purchase price for DISTCOs fixed under Sec. 86(1)(b) coincides with the selling price of GRIDCO as a trader for sale of power *only to the present DISTCOs of Orissa*. If GRIDCO sells surplus power, after meeting its contractual obligation under existing bulk supply agreements, directly to any consumer u/s 42 read with Sec.49 or another trader, or even to another distributor licensed under the 6th proviso to Sec.14 of the Act, the procurement price, which coincides with GRIDCO’s selling price, fixed in this order is not applicable. Thus, this order does not fix tariff for GRIDCO as a trader.
278. The regulatory power under Section 86(1)(b) can be exercised by the Commission suo motu. GRIDCO has filed its application referring to Sec.62, Sec.64 and also referring to Sec.86 (1) (b) of the Act. GRIDCO has however prayed for fixation of its selling price qua the present distribution companies by virtue of the subsisting Bulk Supply Agreement and filed its ARR along with the application. The DISTCOs in their tariff application vide Case Nos.57, 58, 59 & 60 of 2006 have not prayed for fixation of their power procurement price but such fixation being fundamental determinant of tariff is implicit in their prayer for determination of tariff. In the circumstances GRIDCO’s application is not being treated as a tariff application but as material for the Commission to proceed *suo motu* for fixation of a regulatory price for

power procurement by the present DISTCOs under the existing Bulk Supply Agreements. In this context GRIDCO has been heard at length on its ARR because under the prevailing single buyer model, the procurement price of the present DISTCOs coincides with the selling price of GRIDCO. Therefore GRIDCO ought to have a say in the matter and ought to be heard even though the Commission is essentially fixing the procurement price for the present DISTCOs. No meaningful hearing can be given to GRIDCO in this context unless its ARR is considered and approved. It is in this context that ARR of GRIDCO was considered and analysed and not in the context of fixing a general tariff for GRIDCO.

279. On detailed scrutiny and examination of the Annual Revenue Requirement and Bulk Supply Price Applications for 2008-09, the written and oral submissions of the objectors, the Commission has passed the order as enunciated in the subsequent paragraphs.

Calculation of BSP for FY 2008-09

280. The Commission, for the determination and approval of the ARR for GRIDCO for FY 2008-09 continues to follow the same principles as in the previous year. For the purpose of tariff setting for FY 2008-09, the Commission has followed the principles laid down in its terms and conditions of tariff, and continues to be guided by the provisions of the National Tariff Policy as well other statutory notifications and directives, while giving due considerations to the complexities of the Orissa Power Sector.
281. Tariff determination, being a forecasting exercise, involves using various assumptions and principles to arrive at the individual ARR components for a future year – and hence, is liable to be at variance to actual turn of events. In order to insulate the licensee from all prudent and genuine expenses and eventualities, the Commission has also accepted the concept of true-up. As a part of this ARR exercise, the Commission has undertaken a comprehensive exercise to estimate the true-up requirement for GRIDCO for the past years, based on audited annual accounts of the licensee.
282. The Commission, as in the previous years, has continued to determine the ARR for the year FY 2008-09 using the following principles.
283. The submissions of the Distcos have been considered for the estimation of the energy to be procured by GRIDCO for supply to the Distcos. The SMD has been computed based on the actual demand for the period from April, 2007 to January, 2008 and keeping in mind the significant additions to HT and EHT load projected by the Distcos for FY 2008-09 as well as likely increase in growth due to Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Biju Gram Jyoti Yojana (BGJY).
284. The cost of power purchase for GRIDCO, which constitutes more than 95% of the total cost structure of GRIDCO has been considered on a merit-order basis, with hydro generation being computed based on the design energy of the stations, and the state thermal generation being considered as per norms of the PPA or CERC guidelines. Drawal from the CGPs have been maximised as well. Availability from the Eastern Region CGS has been considered as per the allocation of shares in these stations and the applicable CERC Regulations.

285. All the liabilities of the Distcos payable to GRIDCO are in a back-to-back arrangement with various lenders and financial institutions with GRIDCO, and GRIDCO continues to service these liabilities, even though the DISTCOs have not been able to meet their repayment obligations to GRIDCO in full and in time in the previous years. The servicing cost (corresponding interest charges on these liabilities) forms a part of the BSP and is being paid by GRIDCO. Hence, the Commission feels that charging the same from the DISTCOs over and above the component being recovered through the BSP would lead to double recovery from consumers, and hence has not been factored separately outside the BSP.
286. Following the hiving off of the transmission business along with related assets, liabilities and personnel to OPTCL w.e.f 01.04.2005, GRIDCO has virtually no fixed assets on its books. However, in contrast, it continues to carry the burden of past liabilities raised over a period of time to service operational losses and non-payment of arrears by the Distcos on time in the past. The Commission has, over the last few years, recognised these liabilities and the fact that these need to be serviced from within the sector. GRIDCO also does not have the benefit of depreciation provisions to meet these debt obligations. Keeping in line with its earlier order, to avoid any undue additional burden being passed on to the retail consumers, the Commission has provided for the servicing of these liabilities from the non-core activities of GRIDCO, namely from export earnings, which now stand greatly limited, and any earnings from un-scheduled interchanges.
287. The Commission has scrutinised in detail the energy requirement proposed by the Distcos for FY 2008-09. The Distcos have proposed a significant increase in their power requirement over the previous year, and based on the energy availability, the Commission is of the view that after availability of power from KhSTPS Stage-II, some surplus energy may be available after meeting the State demand for 2008-09.
288. GRIDCO has made considerable profits in the past years of operations from trading and un-scheduled interchanges. On the other hand, GRIDCO has also been burdened with past liabilities, which have been recognised by the Commission. These profits have been accounted for in the truing-up exercise for GRIDCO. These principles forming the basis of this ARR determination exercise are dealt in greater detail in the main text of this order under the relevant components of the ARR.

Quantum of Power Purchase

289. GRIDCO as a deemed Licensee procures power from the generating stations inside and outside the State to meet the requirements of the consumers of the State. The power purchased by GRIDCO is transmitted through the OPTCL system & supplied to the DISTCOs. There are four Distribution Companies operating within the State. They purchase power in bulk from GRIDCO for supply to the consumers.
290. The estimate for purchase of power for a financial year is worked out in accordance with the following principles laid down in OERC (Determination of Tariff) Regulation, 2004:
- (a) *The quantum of power purchase for the ensuing financial year shall be estimated on the basis of actual purchase made during the previous financial year(s), actuals to the extent available for the current year and any projections for the balance period of the current year with appropriate*

adjustments for any abnormal variations during the period. The licensee through appropriate documentation shall justify all the abnormal deviations. This quantity will be evaluated at the price based on the power purchase agreements, bulk supply agreements etc. consented to by the Commission.

- (b) *The Commission will not ordinarily consider the additional power purchases beyond the approved level of power purchases. However, if the variation in the actual purchase vis-à-vis the quantum of power as ordered by the Commission is on account of events beyond the reasonable control of the licensee, as established to the satisfaction of the Commission, the resultant effect will be taken into account in subsequent accounting years. To meet this additional requirement of power, the licensee shall follow the least cost combination of power procurement.*
291. The Distribution Companies have furnished projections for 2008-09 for drawl of power from GRIDCO and GRIDCO have projected the total power purchase to be made from the Generators after taking into account the requirement of distribution companies and emergency requirement of CGP owning industries & the energy loss in transmission system of OPTCL.
292. Consumer's demand as worked out by DISTCOs and GRIDCO gives different projections in their respective filings.
293. The quantum of power to be purchased for the year 2008-09 in respect of the four distribution companies has been assessed and approved by the Commission while determining the Revenue Requirement and tariff for the DISTCOs in Case Nos. 64/2007 (CESU), 66/2007 (NESCO), 65/2007 (WESCO) & 67/2007 (SOUTHCO) by following the guidelines of the Regulation quoted above. The Commission approves the quantum of power to be purchased for the year 2008-09 relating to NESCO, WESCO, SOUTHCO and CESU as 4660 MU, 5680 MU, 1980 MU and 5300 MU respectively totalling to 17620 MU.
294. The Commission has approved a figure of 4.5% towards transmission loss in the OPTCL system for the year 2008-09 against 5% adopted for 2007-08 (Actual being 4.56% upto January 2008). The details of calculations of transmission loss are furnished in the tariff order for OPTCL for the year 2008-09.
295. GRIDCO shall purchase power from the generators and at inter-state points from outside sources while OPTCL will bill the customers at the delivery points. There would be a gap between the units treated as lost on account of delivery to the customers on the normative basis approved by the Commission and the actual figure. It will be desirable that existing practice of billing on the basis of actual loss shall be followed and final adjustment shall be carried out at the end of FY 2008-09 between GRIDCO and OPTCL. GRIDCO shall give credit to OPTCL for the units deemed to have been lost on account of export of power, if any.
296. After having determined the quantum of power purchase from the DISTCOs, the Commission has to estimate the quantum of energy lost on account of transmission at EHT within the State for delivery to the DISTCOs. The commission has taken into account the sale to CGPs and approves the emergency drawal by CGPs at 10 MU for 2008-09, as projected by GRIDCO. The detailed requirement of power purchase for use within the State is projected in the table below:

Table – 20
Purchase of Power by GRIDCO for State Use for 2008-09

(Figures in MU)

Name of the DISTCOs	Commission's Approval 2007-08	GRIDCO's Proposal in ARR 2008-09	Commission's Approval 2008-09
CESU	4842.00	5760.00	5300.00
NESCO	4497.00	4730.00	4660.00
WESCO	5496.00	5627.00	5680.00
SOUTHCO	1818.00	2027.00	1980.00
TOTAL DISTCOs	16653.00	18144.00	17620.00
CGP	10.00	10.00	10.00
TOTAL SALE	16663.00	18154.00	17630.00
Transmission loss at EHT in MU (Distcos Purchase only)	876.47 @ (5% transmission loss)	955.47 @ (5% transmission loss)	830.26 @ (4.5% transmission loss)
Total Purchase	17539.47	19109.47	18460.26

Determination of Simultaneous Maximum Demand (SMD) in MVA

297. Bulk supply price contains a component of demand charge, which is calculated on the basis of average system demand of the distribution companies. The simultaneous maximum demand projected by GRIDCO varies from those of the DISTCOs. The DISTCOs projected a higher maximum demand keeping in view the up-coming load growth on account of rapid industrialization. The monthly drawl of DISTCOs for the period from April 07 to Jan 08 is furnished in a table as under:

Table - 21
Demand in MVA for 2007-08

	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Average (4/07 to 1/08)
CESU	832.04	831.71	826.75	841.87	852.04	839.19	854.04	857.67	851.59	861.06	844.79
NESCO	620.27	622.42	618.16	598.53	597.74	635.00	684.72	710.17	670.05	710.25	646.73
WESCO	739.57	771.89	769.83	770.70	781.31	799.93	838.94	805.84	792.85	845.12	791.60
SOUTHCO	312.12	310.69	310.19	331.70	327.13	343.99	341.05	336.58	346.02	342.68	330.21
ALL ORISSA	2,504.00	2,536.70	2,524.92	2,542.80	2,558.22	2,618.11	2,718.74	2,710.25	2,660.50	2,759.11	2,613.33

298. It is observed from the above table that the summation of billing demand has registered a rising trend during the months under review and has reached a peak of 2759.11 MVA during January, 08. The billing demand recorded in January, 2008 is even higher than the hottest month of the year i.e. May, 2007 by about 223 MVA. This drawl is expected to continue during the next two months of the current financial year as January is within the last quarter of the current FY, when the industrial and

production activities are supposed to have picked up at a greater speed along with the irrigation and agricultural loads due to Rabi season.

299. The Commission analysed the drawl pattern by the HT and EHT consumers as well as the requirement of area loads. After recasting the estimated requirement of power during the current FY 07-08 it was observed that due to industrialization, there may be an additional requirement of about 343 MU by the HT and EHT group only excluding NESCO, as NESCO is likely to register a negative growth of 36MU during 2008-09 due to non drawal of power by Jindal Stainless Ltd. As far as the requirement of low voltage consumers are concerned it is expected that the additional load growth in this category will be met out of the savings due to reduction of distribution loss. Thus, for meeting this additional demand of 343 MU, the additional MVA requirement has been worked out with a system power factor of 0.90. The total estimated demand in MVA for DISTCOs is given in the table below.

Table - 22
Demand in MVA for 2008-09

DISTCOs	OERC APPROVAL for 2007-08	Proposal by DISTCO for 2008-09	Proposal by GRIDCO for 2008-09	Actual for Jan, 2008	Additional Load growth for HT & EHT consumer as estimated for 2008-09 (MU)	Additional load growth converted to MVA at a power factor 0.9	OERC Approval for 2008-09 (Actual for 1/08 + Additional load growth)
CESU	794.94	884.58	834.69	861.06	108.78	13.80	874.86
NESCO	687.71	724.00	724.00	710.25			710.25
WESCO	837.98	920.00	837.98	845.12	231.00	29.30	874.42
SOUTHCO	313.90	350.00	325.00	342.68	3.20	0.41	343.08
ALL ORISSA	2,634.53	2878.58	2721.67	2759.11	342.98	43.50	2802.61

Purchase of Power from Different Generating Stations

State Hydro

300. GRIDCO's proposal and Commission's approval for 2008-09 for various stations of OHPC are given in the table below, the details of which have been dealt in Case No.60/2007 for determination of tariff and revenue requirement of OHPC.

Table - 23
Drawal From State Hydro Stations (in MU)

Source of Generation	GRIDCO's Proposal (2008-09)	Commission's Approval (2008-09)
OHPC (Old stations)	3728.57	3676.86
Upper Indravati	1962.18	1942.38
Machkund	265.00	265.00
Total Hydro	5955.75	5884.24

Talcher Thermal Power Station (TTPS)

301. This 460 MW generating station is owned and operated by NTPC, but its generation is fully dedicated to the State. The generation plan has not been furnished by TTPS for 2008-09. GRIDCO stated that In the absence of receipt of generation plan from TTPS for FY 2008-09, the net energy availability from TTPS has projected at 3162.17 MU based on PLF of 87.68% (last year projection) and Auxiliary Consumption at 10.50% . On scrutiny it is observed that net drawal of GRIDCO from TTPS upto January,08 comes to 2531.16MU and prorating the same for FY 2007-08 it comes to 3037.4 MU. Since GRIDCO expected a higher drawal from TTPS, the Commission approves the net drawal of 3162.17 MU from TTPS for the year 2008-09.

IB Thermal Power Station of OPGC

302. Orissa Power Generation Corporation (OPGC) owns IB Thermal Power Station at Banharpalli in Dist. Jharsuguda with an installed capacity of 2x210 MW.
303. OPGC did not file its ARR with OERC for the year 2008-09 apparently under the plea that it was selling power not to any distribution company but to GRIDCO, which is now a trader. The sale of power by OPGC to GRIDCO is governed by a bilateral agreement (PPA) dated. 13.08.1996. This PPA was held to be invalid by the Hon'ble High Court of Orissa in their Judgement dated 22.02.2005 in OJC No.13338/2001 for want of consent of the Commission u/s 21(4) of the Orissa Electricity Reforms Act, 1995; and in the said Judgement the Hon'ble High Court directed that a fresh PPA filed by GRIDCO, vide Case No.13/02, should be disposed of by the Commission. OPGC went up in appeal against the aforesaid Order of the Hon'ble High Court and by Order dated. 29.04.2005 in SLP(C) Nos.6812-6813 of 2005, the Hon'ble Supreme Court stayed further proceedings before the Commission in respect of the said subsequent PPA. The question of Commission's power to set tariff for generating companies in respect of sale to distribution companies u/s.62 (1)(a) of the Act, has not been an issue in the aforesaid case before the High Court and the Supreme Court. In the Supreme Court, OPGC has taken the stand that the PPA dated 13.08.1996 subsists and the High Court has wrongly decided that the said PPA was void. In view of OPGC's own stand before the Supreme Court, the Commission has proceeded on the footing that till the issue of validity of PPA is settled, the sale of power by OPGC to GRIDCO would be governed by the provisions of the said PPA dated. 13.08.1996 and the matter rests on the bilateral contract between OPGC and GRIDCO including provisions relating to parameters of tariff calculation.
304. The Commission has to determine the power procurement price of DISTCOs, which in the situation of a Single-Buyer-Model prevailing in Orissa turns out to be the selling price of the single buyer i.e, GRIDCO under the subsisting BSAs with the DISTCOs. Moreover, because of the prevailing single buyer model created by the joint operation of the PPA of OPGC and GRIDCO and of the BSA's of GRIDCO with the DISTCOs of Orissa, GRIDCO is functioning as a mere conduit, and the only conduit, for supply of power from OPGC to DISTCOs of Orissa. The aforesaid PPA coupled with Bulk Supply Agreements of GRIDCO with DISTCOs has brought about a situation that in effect and substance amounts to supply of power by OPGC to

DISTCOs. Since u/s. 62(1)(a) of the Act, the Commission has a duty to determine tariff for supply of electricity by a generating company to a distribution licensee, the Commission can *apply* the tariff so determined to the sole trader whose trading is confined to buying all the power generated by OPGC and selling it only to DISTCOs of Orissa so long as their requirements remain unfulfilled, and DISTCOs have no option to buy power from any other source. The Commission, therefore, overrules OPGC's plea in its letter No. 1721 dated.08.07.2004, that the Commission cannot require it to furnish ARR u/s. 62(2) of the Act. OPGC ought to have filed its ARR as a matter of its statutory duty. Since it did not do so, the Commission has had to provisionally apply the parameters of tariff set forth in the aforesaid PPA dated.13.08.1996 and proceed on the information made available to it by the other contracting party namely GRIDCO for calculating its fixed cost, variable charges, FPA and Year-end Charges for fixing its tariff u/s. 62(1) (a) of the Act qua DISTCOs. The Commission further directs that the bulk purchase price, based on tariff now determined shall be applicable to sale of OPGC's power to GRIDCO under the single buyer model.

305. OPGC in its generation plan for 2008-09 had projected a target generation of 3255.824 MU. GRIDCO has projected net energy availability of 2946.76 MU at 88.5% PLF for FY 2008-09 after deducting auxiliary consumption of 9.5%. The Commission approves a net drawl of 2946.52 MU for FY 2008-09.

Captive Generating Plants (CGPs)

306. GRIDCO had submitted in its application that power purchased from the Captive Generating Plants was not firm in nature and was supplied to the system, as and when available and also not based on long term PPAs. Due to increase of demand of power, there was increasing pressure from CGPs to allow them Open Access for selling the surplus power to the deficit states at a lucrative price. In order to avail the surplus power of CGPs for meeting the demand of the State, the Board of Director of GRIDCO had approved a reasonably remunerative rate for procurement of power from CGPs pending finalisation of CGPs policy by GoO. In the meantime, four nos. of CGPs had entered into agreement with GRIDCO for sale of surplus power at the approved rate. The approved rates of procurement of power from CGP as approved by BOD, GRIDCO are under.

- Upto 8 MU per Month : 202 P/KWH
- 8 MU and above and below 32MU per Month : 230 P/KWH
- 32 MU and above per Month : 250 P/KWH

307. Further GRIDCO stated that the actual availability from the CGPs varied widely from the quantum approved by the Commission in the past years. The total drawl from CGPs as proposed by GRIDCO in their filing dt.30.11.2007 is 543 MU for 2008-09 and detailed are given below.

Table - 24
GRIDCO DRAWL FROM CGPs FOR FY 2008-09

(Figs. In MU)

	LGBR of SLDC for 2008-09	Actual Drawl upto Sept.07	GRIDCO's Proposal, 2008-09	Rate of Purchase P/U	Estimate drawl for 2008-09 for State use
NALCO	322	75.836	320.0	111.16	320.0
ICCL	36	1.962	4.0	93.76	4.0
INDAL	35	7.678	15.0	77	15.0
RSP	0	6.039	13.0	80.2	13.0
BHUSAN (S &P)	43	126.764	0		
BHUSAN (S & S)	0	3.067	0		
SHYAM DRI	0	2.413	11.0	202	
VEDANT	31	4.574	30.0	202	
JINDAL		0	150.0	230	
NBFA	350				
TOTAL	817	228.333	543.0		352.0

308. Further, GRIDCO in compliance to Commission's order dt31.12.2007 has enclosed the Load Generation Balance Report (LGBR) for the year 2008-09 prepared by SLDC and projected GRIDCO's drawl from CGPs at 817 MU. The LGBR submitted by GRIDCO had widely varied from the ARR proposal submitted by GRIDCO.
309. Further, it is observed that GRIDCO has purchased at different rates from different CGPs. Some of the CGPs cost around 230 P/U, which is at a higher side. The Commission feels that it will be appropriate to trade the high cost power by GRIDCO and allocated least cost power to the State consumers. Based on the same assumption, Commission only allows the drawl of power from NALCO, ICCL, HPCL and RSP for the State consumers for 2008-09. Based on the present trend of drawal and as proposed by GRIDCO as indicated above, the Commission approves drawal of power at 352 MU from CGPs for 2008-09.
310. However, the present approval shall not be a limiting factor for GRIDCO for drawl of power from CGPs to meet the demand of the State. However, GRIDCO shall inform the Commission for drawl in excess of the power now approved. For procurement of such power GRIDCO shall inform & get approved of the tariff of procurement. The cost of that power will be utilised at the time of truing up and also at the time of necessity.

Renewable Energy:

311. GRIDCO had submitted in its application that the Hon'ble Commission, in its order dtd. 20.08.2005 in Case No. 14 of 2005, had directed GRIDCO to procure power from non-conventional and renewable energy sources up to 3% of the total power purchase during the year 2007-08 FY and it should be increased at the rate of 0.5 % per annum for each subsequent years to reach a level of 5 % per annum by 2011-12 FY. GRIDCO was drawing power from M/s. NINL, M/s. ARATI Steel Ltd. & M/s. TATA Sponge Ltd and also expecting Samal Small Hydro Project and Minakshi

Small Hydro Project to commence their operation in the mid of 2008-09 FY. So, GRIDCO made a forecast of 375 MU of power from renewable sources which includes 30 MU and 45 MU of power respectively from the above two stations during 2008-09 FY.

312. Further in replies to the Commission's queries, GRIDCO stated that power procurement from NINL, Arati Steel and TATA Sponge has been taken under Renewable energy sources as the generation of power in these cases were considered as co-generation. The generation of power in these cases were obtained from waste heat recovery process and hence treated as Renewable energy.

Table - 25
GRIDCO DRAWL FROM RENEWABLE SOURCES FOR FY 2008-09

Generating Stations	Energy drawal from 4/07 to 1/08 of 2007-08 (MU)	Energy Proposed for FY 2008-09 (MU)	Rate of Purchase P/U	Estimate drawal for 2008-09 for State use (MU)
NINL	69.113	100	230.00	100
ARATI STEEL	70.465	80	202.00	80
TATA	92.776	120	230.00	120
Samal Small Hydro		30	202.00	30
Minakshi Small Hydro		45	202.00	45
TOTAL	232.35	375		375

313. It is observed that GRIDCO has purchased at different rates from different Renewable sources. Some of the Renewable sources cost around 230 P/U, which is at a higher side. The Commission vide order dated 23.04.2005 in Case No. 151 of 2004 had directed that the unit cost of Renewable Energy should not exceed the highest cost of thermal stations in the Eastern Region. Further the Commission vide order dated 20.08.2005 in Case No. 14 of 2005 directed that the procurement from Renewable sources should be 3.5% of purchases estimated for FY 2008-09 for the State consumers.
314. The Commission, therefore, allowed GRIDCO to purchase the total renewable power available in the state for consumption in the state to encourage the renewable sources. So, the commission approves the drawal of power from renewable sources at 375MU for 2008-09 based on GRIDCO's proposal in ARR as indicated above.

Power Purchase from Central Generating Stations

Transmission Loss in Central Transmission System

315. The constituents of power utilities of the Eastern Region share the losses occurring in the central transmission system. GRIDCO had considered the Central sector system loss at 3.62% in the ARR for 2008-09 based on average of the actual loss in the

Central Transmission System from April,07 to Oct,07. It is observed from the data circulated by ERLDC that the weekly system loss for ER system varied from 2.9% to 4.5% for the current year up to 2nd Week of February 2008. On examination of the proposal submitted by GRIDCO, the Commission observed that the average transmission loss in this regard worked out to 3.6% upto January 2008 of 2007-08 as per pool cost submitted by GRIDCO. The actual CTS loss for 2006-07 was at the rate of 3.29% only. The Commission had approved the central transmission loss of 3.28% for the year 2007-08. Higher loss in ER system has impact only on actual energy drawl of GRIDCO but not on total cost since cost is calculated on gross drawl. As ABT system is in operation and loss has been calculated by ERLDC on weekly basis, the Commission accepts the Central Sector loss of 3.6% for 2008-09 based on average of actual loss in Central Transmission System from April to January, 2008.

Central Generating Stations (CGSs)

316. Orissa has been allocated shares in all the NTPC stations located in the Eastern Region as well as from the Chukha and Tala Hydro Electric Project in Bhutan. The entitlement from these stations is based on share allocation made by the CEA from time to time. The energy accounting from these stations is done on a monthly basis as per the ABT based Regional Energy Account (REA) prepared by the Eastern Regional Power Committee. Since ABT has come into operation from 01.04.2003 in the Eastern Region, GRIDCO has proposed to draw the entire share from ER NTPC stations considering normative generation at 80% PLF and central sector transmission loss of 3.62%. Govt. of India, MoP vide its letter dt.7.07.2006 has revised the share allocation of power from CGSs in the Eastern Region and Chukka and Tala Hydro Electric Project. Further, GRIDCO has signed PPA on dt 20.01.2007 with NTPC towards 200MW (10% of installed capacity) power from TSTPS stage-II, Kaniha and MOP in its letter dt.21.02.2007 has allocated power from Kahalgaon Stage –II. GRIDCO had considered the same allocation made by MoP / PPA in the ARR filing for 2008-09.
317. The availability from the CGSs at 80% PLF would entitle CGS for recovery of full capacity charge as per CERC notification. That is why the energy drawl from the above central sector stations has been estimated taking 80% PLF for the ensuing year. The Commission considers the Central Sector transmission loss @ 3.6% for the above drawl as stated earlier.
318. Tariff of the C.G.S is determined by the CERC by virtue of the authority vested in them under Section 79 of the Electricity Act, 2003. The State takes note of the decision & determines the justification and correctness of the claim raised by GRIDCO based on the various orders of the GOI/MOP/ CEA & CERC and clarifications thereon provided by the applicant. With the above stipulation, the details of GRIDCO's drawl from Central Thermal Stations, as approved is given in Table below:

Table - 26
Drawal From Central Thermal Generating Stations (2008-09)

Central Thermal Stations	Installed Capacity (MW)	Aux. Cons. (%)	Availability considering 80% PLF (MU)	GRIDCO Share (%)	GRIDCO Share (MU)	Estimated Share Excluding Central Sector Transmission Loss of 3.6% (MU)	GRIDCO Proposal for 2008-09 (MU)
TSTPS –I	1000	7.50	6482.40	31.80	2061.40	1987.24	1986.78
TSTPS –II	2000	7.5	12964.80	10.00	1296.48	1249.83	1249.55
FSTPS	1600	7.56	10365.11	13.63	1412.76	1361.94	1361.12
KhSTPS –I	840	9.00	5356.92	10.08	539.84	520.55	564.83
KhSTPS – II	1500	7.5	9723.60	5.80	563.97	543.68	534.74
TOTAL	6940		44892.83		5874.59	5663.23	5697.02

319. **Chukha:** Orissa has been assigned share of 15.19% in 270 MW from Chukha Hydro Power Station, Bhutan. The Orissa quota on an average works out to 41 MW. Drawl from Chukha has been projected by GRIDCO at 234.90 MU for 2008-09 considering central sector loss of 3.62%.
320. The Commission scrutinized the proposal of GRIDCO and observed that the drawal of GRIDCO from Chukha during 2007-08 upto January, 2008 comes to 255.50 MU. After adding the drawal for Feb & March, 08 at the level of January 2008 drawal, the total for FY 2007-08 comes to 270.26 MU. So the Commission approves 270.26 MU in respect of drawl from Chukha hydro station for 2008-09 based on the trend of 2007-08.
321. **TALA:** Ministry of Power, Govt. of India vide letter dated 07.11.2006 have allocated 85% of Tala HEP to ER constituents out of which GRIDCO share accounts for 4.25%.
- a) GRIDCO has projected drawl of 195.44 MU from Tala HEP during 2008-09 considering central sector transmission loss of 3.62%.
 - b) The Commission accepts the proposal of GRIDCO and based on central sector transmission loss of 3.6% approved the drawl in Tala HEP in 2008-09 as 195.44 MU.

Summary of the proposal for purchase of power and approval by OERC

322. A summary of GRIDCO's proposal for purchase of power from different generating stations and the Commission's approved quantum of purchase for 2008-09 is given in the table below:

Table - 27

Quantum of Power Purchase from Various Sources for 2008-09

(Figures in MU)

Sources of Purchase	Commission's Approval for State Drawl for 2007-08	GRIDCO's Proposal for 2008-09	Estimated Availability for 2008-09	Commission's Approval for State Drawl for 2008-09
OHPC (OLD)	3676.86	3728.57	3676.86	3676.86
Machhkund	265.00	265.00	265.00	265.00
Indravati	1942.38	1962.18	1942.38	1942.38
HYDRO (Orissa)	5884.24	5955.75	5884.24	5884.24
TTPS	3144.51	3162.17	3162.17	3162.17
OPGC	2996.71	2946.76	2946.52	2946.52
CGP	413.45	543.00	352.00	352.00
Renewable Energy		375.00	375.00	375.00
TOTAL ORISSA	12438.90	12982.68	12719.93	12719.93
Chukha	235.73	234.90	270.26	270.26
TALA	162.83	195.44	195.44	195.44
HYDRO(Central)	398.56	430.34	465.70	465.70
TSTPS-I	1993.76	1986.78	1987.24	1987.24
TSTPS–Stage -II	1253.94	1249.55	1249.83	1249.83
KhSTPS–Stage -II		534.74	543.68	543.68
FSTPS	1366.40	1361.12	1361.94	1361.94
KHSTPS-I	87.92	564.83	520.55	131.95
OtherSources/				
Thermal (central)	4702.02	5697.02	5663.23	5274.63
TOTAL EREB	5100.57	6127.36	6128.93	5740.33
TOTAL GRIDCO PURCHASE	17539.47	19110.04	18848.86	18460.26

Power Procurement Cost

323. The cost of power is the highest component in the revenue requirement of GRIDCO. The Commission, for determination of the cost of power purchase, has exercised due diligence in arriving at the cost in respect of each of the power stations based on the relevant rules, regulations and documents available.
324. Section 86 of the Electricity Act, 2003, amongst other things, provides for determination of the generation tariff by the Commission. Further, under Section-61 of the Electricity Act, 2003, the OERC shall be guided by the principles and methodologies specified by the CERC for determination of tariff applicable to generating companies.
325. OHPC had submitted the application for approval of its Annual Revenue Requirement and Tariff of individual power stations of OHPC separately for the financial year 2008-09 in terms of Section-62, 64 and 86 of the Electricity Act, 2003

registered as Case No.60/2007. The tariff approved in the said order will be utilised as the input for the determination of cost of power purchase from all stations of OHPC.

326. Accordingly, the rate as approved in respect of each of the power stations of OHPC is given in the table below:

Table – 28
Schedule of Tariff for OHPC Stations for 2008-09

Name of the Power Station	Quantum of Power Purchase in 2008-09 (MU)	Primary Energy Charge (P/U)	Capacity charge (Rs. Cr.)	Secondary Energy Charge (P/U)	Average Energy Charge for 2008-09 (P/U)
Hirakud	1162.26	41.10	12.79	41.10	52.11
Balimela	1171.17	41.10	13.48	41.10	52.61
Rengali	519.75	41.10	4.32	41.10	49.40
Upper Kolab	823.68	25.82		25.82	25.82
Upper Indravati	1942.38	41.10	50.85	41.10	67.28
Total	5619.24				

Machhkund Hydro Electric Project

327. OHPC has requested for approval of a rate of 25.30 paise/unit for purchase of power of Machhkund Power Station for the year 2008-09 based on energy drawl of 262.50 MU. Orissa has to pay O & M charges for the energy drawl from Machakund upto 30% and beyond 30% and upto 50% @ 8 paise/ Unit With this principle, the cost of Machakund power comes to 25.30P/U considering energy drawl of 262.5 MU. The hike in the cost of Machakund power is due to increase in O & M expenditure.
328. The Commission has taken into consideration the net share payable by Orissa towards O&M expenses for the year 2006-07 (actual) which is to the tune of Rs.5.36 crore. Allowing an escalation of 4% per annum for the year 2007-08 and subsequently for 2008-09, O&M expenses come to Rs. 5.80 crore . Taking O & M cost of Rs 5.80Cr, the rate per unit of Machakund power comes to 25.09 paise for the year 2008-09 considering energy drawl of 265 MU. Accordingly, the procurement cost works out to Rs.6.65 crore for an approved energy drawl of 265 MU.

Talcher Thermal Power Station (TTPS)

329. Talcher Thermal Power Station is owned and operated by NTPC and determination of tariff for this generating station comes under the purview of Central Electricity Regulatory Commission (CERC).
330. **Fixed Cost:** The CERC has approved the TTPS tariff for the FY 2004-05 to 2008-09 vide order dtd. 23.03.2007. The annual fixed cost is taken at Rs. 183.92 crore for the year 2008-09. The Commission allows annual fixed cost of Rs. 183.92 crore as approved by CERC for 2008-09.
331. **Variable Charges:** CERC had approved 50.82 P/U as variable charge in the TTPS tariff for the years 2004-05 to 2008-09 and the same rate has been proposed by

GRIDCO for 2008-09. Further CERC has revised the Terms and Conditions of Tariff (Third Amendment) vide notification Dt.27.09.2007. Based on the same amendment, NTPC has recalculated the variable cost for TTPS station, which comes to 46.05P/U and billed to GRIDCO @ 46.05P/U from October 2007. The Commission accept the variable cost at the rate of 46.05P/U for the ensuing year.

332. **FPA:** GRIDCO proposes FPA of 22.99 P/U for FY 2008-09 considering 10% escalation over the average of the actual FPA for the first six months of 2007-08 which is 20.90 P/U. After detailed scrutiny of the bills submitted by GRIDCO and based on revised norm, the Commission approves FPA rate of 20.60P/U considering the average of last three months (November,07 to January,07) of 2007-08 and allowing 10% escalation as proposed by GRIDCO keeping in view the possibility of price rise of coal and oil.
333. **Year-end Charges:** GRIDCO has submitted that the year-end charges of TTPS include cess on water, water charges, electricity duty and income tax. GRIDCO has claimed Rs. 38.06 crore towards income tax, Rs. 7.42 Cr towards Electricity duty, Rs1.64Cr towards water charge and Rs 6.92 towards incentive for 2008-09 based on prorating the actual payable to NTPC for the first six months of 2007-08. The Commission on examination of the claims approves (i) Rs.42.772 crore towards income tax as per claim made by NTPC in January 2008 bill, (ii) Electricity duty of Rs.7.42 crore calculated @ 20 paise/unit on auxiliary consumption on the generation at 87.68% PLF, (iii) Incentive of Rs. 6.92 crore for excess generation over the normative PLF of 75% @ 25 P/U (iv) Water cess/Charge of Rs.0.17 crore by prorating the actual upto January, 08 i.e. Rs. 0.143cr. Thus, the year-end charges approved for 2008-09 come to Rs.57.29 crore. The year end charges approved by the Commission for the FY 2008-09 is shown in the table below:

Table – 29
Year End Charges of TTPS

ITEM	OERC approval for FY 2007-08	Projection for 2008-09	OERC approval for FY 2008-09
Income tax	21.34	38.06	42.77
Electricity duty@20P/U	7.77	7.42	7.42
Water Cess / Charge		1.64	0.17
Incentive:	11.37	6.92	6.92
Reimbursement of int.& AG exp. 2 nd Inst.	13.57	-	-
Total	54.05	54.04	57.29

Orissa Power Generation Corporation (OPGC)

334. OPGC did not file its ARR with OERC for the year 2008-09 under the same plea as it had maintained for the preceding years. The matter is sub-judice as the OPGC has gone on appeal against the orders of the Hon'ble High Court of Orissa passed in OJC

- No.13338 of 2001. However, till the issue is settled, the per unit rate for OPGC is provisionally estimated based on the parameters of subsisting PPA between GRIDCO and OPGC stations is accepted for the purpose of tariff calculation of 2008-09 subject to change in accordance with court orders or otherwise.
335. **Fixed Cost:** The fixed cost of OPGC for 2008-09 as proposed by GRIDCO was Rs. 223.04 crore. The Commission approves the estimate of fixed cost at Rs. 223.04 crore for the year 2008-09 as proposed by GRIDCO subject to para above.
336. **Variable Charges:** GRIDCO has proposed variable charges in respect of Ib Thermal Power Stations at 58.52 P/U for 2008-09. The Commission after detailed scrutiny accepts 58.52 P/U as variable charges.
337. **FPA:** GRIDCO has proposed the FPA rate for 2008-09 at 6.12 P/U by escalating 10% over 5.56P/U i.e. OERC approval for 2007-08. The Commission on scrutiny of the FPA bills submitted by OPGC, approves the estimate of FPA at 6.12 P/U for 2008-09 as proposed by GRIDCO.
338. **Year-end Charges:** GRIDCO had proposed year-end charges of Rs. 40.72 crore on account of land tax, water cess, electricity duty, income tax and incentive payable to OPGC. The Commission on examination of the claims approves (i). Rs.10.49 crore towards income tax payment for 2008-09, (ii) Electricity duty of Rs.6.19 crore @ 20 P/U on auxiliary consumption on the generation at 88.49% PLF, (iii) Incentive of Rs.22.26 crore allowed for generation over and above normative generation of 68.5% PLF for the year 2008-09. Thus, the estimated year-end charges approved for 2008-09 is Rs.38.94 crore which is shown in table below.

Table – 30
Year End Charges of OPGC

ITEM	OERC approval for 07-08	Proposed year end charges for 08-09	OERC approval for 2008-09
Water Cess & Water Ch.	0.00	0.00	0.00
Electricity duty@20P/U	6.29	6.29	6.19
Income Tax:	10.49	10.49	10.49
Incentive:	23.94	23.94	22.26
DPS Payable (upto 6/08)	9.84	0.00	0.00
Total	50.56	40.72	38.94

Captive Generating Plants (CGPs)

339. GRIDCO has stated that it has been procuring from CGPs at negotiated rates at present in absence of policy of procurement of surplus power from CGPs by State Govt. GRIDCO is purchasing power from different CGPs at different rates. In the mean time the Commission has approved the policy on CGP pricing & notified it on 14.03.2008. The impact of this policy due to procurement of power from CGP will be taken care in the truing up exercises if need arises.

340. The Commission scrutinised the application of GRIDCO and accepts the negotiated rates for NALCO, ICCL, RSP and HPCL as proposed by GRIDCO. Accordingly the cost of power purchased from aforesaid CGPs during FY 2008-09 approved by the Commission is given in table below:

Table - 31

Power Purchase from CGPs during 2008-09

	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	MU	Rate (P/U)	Cost (Rs.in Cr)	MU	Rate (P/U)	Cost (Rs.in Cr)
NALCO	320.00	111.16	35.57	320.00	111.16	35.57
ICCL	4.00	93.76	0.38	4.00	93.76	0.38
HPCL	15.00	77.00	1.16	15.00	77.00	1.16
RSP	13.00	80.20	1.04	13.00	80.20	1.04
Shyam DRI	11.00	202.00	2.22			
VEDANT	30.00	202.00	6.06			
JINDAL	150.00	230.00	34.50			
TOTAL	543.00	149.03	80.93	352.00	108.36	38.14

NB: Changes if any due to the CGP pricing policy notified on 14.03.2008 will be accounted for in the truing up exercise.

Power purchase from Renewable Sources:

341. GRIDCO has projected to procure power from Renewable sources at different negotiated rate from different Renewable sources. The Commission scrutinised the application of GRIDCO and to encourage the Renewable sources, accepts the negotiated rates as proposed by GRIDCO for procuring power from these sources. Accordingly the cost of power purchase from aforesaid Sources during FY 2008-09 as approved by the Commission as given in table below:

Table - 32

Power Purchase from Renewable Sources during 2008-09

	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	MU	Rate (P/U)	Cost (Rs.in Cr)	MU	Rate (P/U)	Cost (Rs.in Cr)
NINL	100.00	230.00	23.00	100.00	230.00	23.00
ARATI STEEL	80.00	202.00	16.16	80.00	202.00	16.16
TATA SPONGE	120.00	230.00	27.60	120.00	230.00	27.60
Samal Small Hydro	30.00	202.00	6.06	30.00	202.00	6.06
Minakshi Small Hydro	45.00	202.00	9.09	45.00	202.00	9.09
TOTAL	375.00	218.43	81.91	375.00	218.43	81.91

Central Generating Stations

342. **Chukha:** GRIDCO has stated that the procurement cost of power from Chukha for 2008-09 has been calculated based on the revised rate fixed by MOP/GOI, which is Rs.1.50/Unit for the full year effective from 01.01.2005 as per PTC India letter dt01.03.2005.
343. Further, handling charges @ 5 paise/unit has to be added to the above rates to be paid to PTC India as Nodal Agency. GRIDCO has also to bear the expenditure on account of the transmission charges and central transmission losses in the PGCIL network. GRIDCO has, therefore, proposed a rate of 183.17 paise/unit for 2008-09 based on Central Transmission Loss of 3.62%.
344. Based on the submission of GRIDCO, the average rate per unit of Chukka power has been worked out and approved by the Commission at 178.31 paise/unit inclusive of central transmission loss and applicable transmission charges for 2008-09.
345. **TALA:** GRIDCO has stated that the procurement cost of both primary and secondary energy from TALA for 2008-09 has been fixed at Rs.1.80/Unit calculated based on the agreement signed between MOP/GOI, and Royal Govt of Bhutan on dt28.07.2006.
346. Further, a transaction charge @ 4 paise/unit has to be added to the above rates to be paid to PTC India as Nodal Agency towards handling charges. GRIDCO has also to bear the expenditure on account of the transmission charges and central transmission losses in the PGCIL network. GRIDCO has therefore proposed a rate of 213.25 paise/unit for 2008-09 based on Central Transmission Loss of 3.62%.
347. Submission of GRIDCO was examined. The average rate per unit of TALA power has been worked out at 208.40 paise/unit inclusive of central transmission loss of 3.60% and applicable transmission charge for 2008-09.

Central Sector Thermal Power Stations

348. **Fixed Cost:** Tariff of Central Thermal Generating Stations is governed by CERC tariff notification valid from 1.4.04 to 31.03.2009 i.e for a period of 5 years. Based on the CERC notifications and the share allocation from CGSs by MOP, GRIDCO has claimed fixed cost for different Central Sector Thermal Power Stations. The approval of the Commission is shown in table below:

Table - 33
Fixed Cost of Central Thermal Stations for 2008-09

Name of Power Station	Fixed cost approved by CERC for 2008-09 (Rs. In Cr.)	GRIDCO share in %	GRIDCO's proposal for Fixed Cost (Rs. In Cr.)	GRIDCO's proposal (including Central Tr. Loss of 3.62%) P/U	Commission's approval for Fixed Cost (Rs. In Cr.)	Esimated energy Drawal (MU)	Commission's approval (including Central Tr. Loss of 3.60%) P/U
TSTPS -I	397.30	31.80	126.34	63.59	126.34	1987.24	63.58
TSTPS -II	990.73	10.00	99.07	79.29	99.07	1249.83	79.27
KHSTPS-II	252.98 (Unit-I)	5.80		61.20 (as per KhSTPS Stage-I rate)	14.67	543.68 (Considering 1500MW)	26.99 *
FSTPS	520.59	13.63	70.96	52.13	70.96	1361.94	52.10
KHSTPS- I	316.00	10.08	34.57	61.20	31.85	520.55	61.19

(*) *The CERC has approved the provisional tariff for KHSTPS Stage -II Unit-I on Dt.18.12.2007. The tariff for Unit-II & III OF KHSTPS has not yet notified by CERC. GRIDCO has proposed in the ARR for 2008-09 to consider the fixed cost for Stage-II equivalent to Stage -I i.e. 61.20P/U. After scrutiny the Commission allows the fixed cost of Rs. 14.67Cr for Unit-I only and directed GRIDCO to claim the fixed cost of Unit-II & III of KHSTPS as Pass through in subsequent year after CERC notification.*

349. **Variable Charges:** GRIDCO stated that variable charges based on the CERC's notification for 2008-09 has been accepted. The Commission has accepted the variable charges proposed by GRIDCO as those are in accordance with the notification. However, the cost in P/U changes as the Commission accepts a Central Transmission Loss of 3.60% and not 3.62% as proposed by GRIDCO. The proposed and approved variable charges are indicated in the table below.

Table - 34
Variable Charges of Central Thermal Power Stations

Stations	Variable Cost as per CERC order (excluding central transmission loss) (P/U)	GRIDCO's Proposal for 2008-09 (Including Central Tr. Loss of 3.62%) (P/U)	Variable Cost Approved by the Commission for 2008-09 (Including Central Tr. Loss of 3.60%) (P/U)
TSTPS -I	41.10	42.64	42.64
TSTPS -II	50.82	52.73	52.72
KHSTPS -II	120.81	112.58 (as per Stage-I)	125.32
FSTPS	98.57	102.27	102.25
KHSTPS -I	108.50	112.58	112.55

Fuel Price Adjustment (FPA)

350. GRIDCO in para 5.7.3.3 of ARR application had stated that the average FPAs of FSTPS, KhSTPS and TSTPS were increasing trend during the first six months of 2007-08. Therefore, GRIDCO proposed 10% escalation in FPA over the actual FPA bill served by NTPC for September, 07. Further Central Sector Transmission Loss @ 3.62% has been added over the escalated FPA.

351. Actual bills of NTPC are scrutinised and the Commission observes that the coal and oil prices had increased substantially. The details of coal and oil prices and FPA rates as produced by NTPC are given below.

Table – 35

Month	FSTPS			KSTPS			TSTPS-I			TSTPS-II		
	Cost of Oil (Rs./KL)	Cost of Coal (Rs./MT)	FPA P/U	Cost of Oil (Rs./KL)	Cost of Coal (Rs./MT)	FPA P/U	Cost of Oil (Rs./KL)	Cost of Coal (Rs./MT)	FPA P/U	Cost of Oil (Rs./KL)	Cost of Coal (Rs./MT)	FPA P/U
Apr-07	20,897.29	1,344.98	25.35	21,125.35	1,322.35	15.36	20,519.80	751.43	27.41	20,519.80	751.43	17.69
May-07	20,897.29	1,347.58	26.19	22,833.87	1,340.68	17.99	20,617.43	648.92	16.37	20,617.43	648.92	6.65
Jun-07	21,765.81	1,170.17	11.86	22,121.40	1,206.64	9.48	20,378.31	720.05	21.98	20,378.31	720.05	12.26
Jul-07	21,605.35	1,242.30	16.69	22,121.40	1,335.49	23.54	20,208.43	797.85	28.79	20,208.43	797.85	19.07
Aug-07	22,841.53	1,393.99	34.28	22,121.40	1,461.54	28.26	20,249.55	696.51	22.61	20,249.55	696.51	12.89
Sep-07	22,914.82	1,206.06	24.98	22,121.40	1,482.45	28.96	21,328.34	788.28	32.91	21,328.34	788.28	23.19
Oct-07	23,552.88	1,259.34	28.81	22,121.40	1,436.13	30.54	22,422.48	727.51	26.23	22,422.48	727.51	16.51
Nov-07	24,117.14	1,226.24	18.93	25,158.90	1,351.10	27.00	22,710.25	688.50	22.18	22,710.25	688.50	12.46
Dec-07	29,026.79	1,297.12	24.86	27,983.78	1,400.57	22.92	22,619.06	789.88	27.54	22,619.06	789.88	17.82
Jan-08	29,026.79	1,573.73	48.51	27,983.78	1,591.93	35.34	25,388.38	925.24	40.21			
Avg from 4/07 to 1/08	23,664.57	1,306.15	26.04	23,569.27	1,392.89	24.00	21,644.20	753.42	26.60	19,105.37	660.89	15.34

Coal & Oil Prices and FPA Rates of CGSs

352. Considering the above, the Commission estimated the FPA rates based on the average price and GCV of coal and oil for the last three months (from November'07 to January'08) with 5.5% escalation over average FPA to meet the changes in WPI as

against an escalation of 10% proposed by GRIDCO. The data for KHSTPS Stage-II has not been available, so the commission does not allow FPA for the said power station for 2008-09. If NTPC bills the FPA during the year 2008-09 the same may be allowed as pass through in the next year ARR.

Table - 36
Fuel Price Adjustment Charges of CGSs for 2008-09

Stations	GRIDCO's proposal (including central Tr. Loss of 3.62%)	Avg FPA for the Last Three Months (from 11/07 to 1/08)	Figs in Paise/Unit	
			Approval of the Commission with an escalation of 5.5%	Approval of the Commission including central Tr. Loss of 3.60%
TSTPS -I	37.56	28.92	31.46	32.64
TSTPS -II	26.47	15.21	16.04	16.64
FSTPS	28.51	30.87	32.57	33.78
KHSTPS - I	33.05	28.52	30.09	31.22

353. **Year-end Charges:** GRIDCO has proposed the year-end charges for 2008-09 including Central Sector loss based on the Commission's approval of the year-end charges for 2007-08.
354. The Commission has scrutinised the proposal and adopted the following principles for the purpose of calculation of the year-end charges for the year 2008-09.
355. Income tax constitutes a major segment of the year-end charges. On scrutiny, it is observed that NTPC has raised bill towards income Tax for 2007-08 to GRIDCO in the monthly bill of January, 2008. The Commission provisionally accepts the same amount claimed by NTPC for 2008-09.
356. Electricity duty for TSTPS Stage-I and Stage-II has been calculated @ 20 paise/unit based on the auxiliary consumption for 2008-09.
357. The Commission has considered generation at normative PLF of 80% for 2008-09 for which no payment towards incentive has been taken into account at present for CGSs.
358. NTPC has raised water cess bills for CGSs for the period from April to January, 2007. The Commission approves the water cess payments for FY 2008-09 by prorating for the whole financial year based on NTPC bills.
359. Since no data is available for KHSTPS Stage-II, the Commission does not allow any year end charges for said station for 2008-09
360. Accordingly, the year-end charges approved by the Commission including central transmission loss, are given in the table below.

Table – 37
Approved Year-end Charges (2008-09) (Paise/unit)

Central Thermal Stations	GRIDCO's Proposal Including Central Sector Loss @ 3.62%	Commission's Approval Including Central Sector Loss @ 3.60%
TSTPS -I	2.21	1.70
TSTPS -II	0.94	1.72
FSTPS	4.47	4.52
KHSTPS - I	0.02	0.03

Transmission Charge for PGCIL System

361. The tariff for central transmission system is fixed by the principles and norms laid down by the CERC from time to time. Based on CERC notification and share allocation by CEA, PGCIL claims transmission charge for use of central transmission system by the eastern regional customers. The weighted average of percentage share allocation of the fixed cost towards PGCIL transmission charge has also been reflected in ABT based Regional Energy Accounts. As per CEA's share allocation on 12.04.2007, GRIDCO has to pay a weighted average of 17.139% share of the fixed cost towards regional transmission system & 25.836% for inter-regional transmission system as PGCIL transmission charges.
362. In the ARR application, GRIDCO has stated that the annual fixed charges of Rs.563.51 crore for PGCIL transmission system, consisting of both regional and inter-regional transmission systems based on claims made by PGCIL for September 2007 for all the users of the PGCIL system. GRIDCO share for the same comes to Rs. 75.02 Crore and 40.48 Crore for regional Transmission Charges and intra-regional Transmission Charges respectively.
363. In addition to these, GRIDCO has stated that CERC vide its Order dtd 27.11.06 has allowed provisional charges for Unified Load despatch & Communication Scheme (ULDC) for both Central and State Sectors. Accordingly, GRIDCO has to pay to PGCIL an amount of Rs. 14.13 crore towards ULDC charges both for State and Central sector.
364. Further GRIDCO has stated that the Open Access Charges collected from short term customers of Rs. 11.00 Crore and year-end charges of Rs. 6.34 Crore, the net transmission charge aggregate to Rs 124.97 crore. Considering the above, the Transmission charges for PGCIL transmission system works out to 22.34 P/U at a energy drawal of 5592.62MU excluding KhSTPS Stage-II as submitted by GRIDCO.
365. The Commission examined the monthly bill for January, 2008 produced by PGCIL and found that it has claimed Rs.534.49 crore as annual fixed cost towards transmission charges for both regional and inter-regional transmission systems for the whole region after adjusting amount payable by short-term customers which was duly accepted by GRIDCO. Therefore, the Commission considers a sum of Rs.534.49 crore as fixed cost towards PGCIL transmission charges for 2008-09 comprising

- Rs.428.62 crore towards regional transmission system and Rs.105.87 crore towards inter-regional transmission system duly deducting the apportionment to other regions.
366. Further, GRIDCO has stated that a sum of Rs.6.34 crore as year-end adjustment charges, which comprises of income tax of Rs.3.05 crore, incentive of Rs.2.28 crore, AMC for special meter of Rs.0.01 crore and FERV of Rs.1.00 cr.
367. PGCIL is eligible for incentive for availability of transmission system above 98% as per CERC notification. GRIDCO had considered Rs.2.28 crore towards incentive for 2008-09 based on amount paid to PGCIL for the year 2006-07. The Commission accepted the proposal of GRIDCO and approved an amount of Rs.2.28 cr as incentive for FY 2008-09.
368. The Commission observes that the amount of income tax for the ensuing year has been based on the actual amount claimed by PGCIL to GRIDCO for 2006-07 i.e. Rs.3.05 crore. The Commission approves this amount of Rs.3.05 crore.
369. The Commission approves an amount of Rs.1.00 lakh for maintenance of the special type of energy meters for 2008-09.
370. The supporting document for payment of FERV has not been made available to the Commission, so the Commission does not allow any amount toward FERV as against GRIDCO proposal of Rs. 1.00 Crore.
371. The details of GRIDCO's proposal and Commission's approval towards year-end adjustment charges for 2008-09 are given in the table below:

Table - 38
Year-end Adjustment Charges (2008-09)
(Rs. Crore)

Description	GRIDCO's Proposal	Commission's Approval
Incentive	2.28	2.28
Income Tax	3.05	3.05
AMC for Special meters	0.01	0.01
FERV	1.00	0.00
Total	6.34	5.34

372. GRIDCO has implemented unified load despatch and communication scheme as a part of ULDC programme for the Eastern Region. On scrutiny of PGCIL bill for the month of January, 2008 by the Commission, it is observed that PGCIL has claimed an amount of Rs.0.698 crore towards state sector ULD and communication charges and an amount of Rs.0.4614 crore towards central sector ULD and communication charges totalling to Rs.1.159 crore/month. The Commission provisionally accepts the aforesaid claim of PGCIL and allows pass through tariff for FY 2008-09 for Rs.13.913 crore. An expenditure of Rs.13.913 crore/ annum is a substantial amount from which commensurate advantage should accrue to the users of the system. It goes without saying that the ULDC is a requirement mandated by the Act but at the same time it imposes burden that the system should be utilised to the fullest extent by

utilization for efficient Commercial transaction, so that it turns out to be a source of earning and saving of expenditure for the power users in Orissa.

373. It is further observed from PGCIL bills that an amount of Rs.9.47 crore has been credited to GRIDCO account towards short-term open access charges for the period from April, 2007 to December, 2007. The Commission after prorating the same for the whole year has deducted an amount of Rs.12.63 crore from PGCIL transmission charges.
374. While calculating the cost of PGCIL transmission charge GRIDCO has not considered the power available from Kahalgaon Stage-II power station. The reason of such deletion of power has not submitted by GRIDCO. Since the power is available from KHSTPs Stage –II, the commission provisionally considered the projected drawal from this stations for calculating the PGCIL Transmission charge. Any addition of fixed cost approved by CERC due to addition of new line and sub station by PGCIL during the year 2008-09 over the cost approved by OERC will be allowed as pass through.
375. The total cost towards PGCIL transmission charges is indicated in the table below:

Table-39
PGCIL Transmission Charges for 2008-09

	GRIDCO's Proposal	Commission's Approval
Regional Transmission System (Rs. crore)	408.59	428.62
Inter-Regional Transmission system chargeable to Eastern Region (Rs. crore)	154.91	105.87
TOTAL FIXED COST	563.51	534.49
GRIDCO's Share form Regional Tr. System (Rs. crore) (17.139 %)	75.02	73.46
GRIDCO's Share form Inter-Regional Tr. System (Rs. crore) (25.836 %)	40.48	27.35
Sub-Total	115.50	100.81
GRIDCO's Share for Year end charge (Rs. crore)	6.34	5.34
ULD and communication charges	14.13	13.91
Total annual Transmission Charge Payable by GRIDCO for Central Transmission System (Rs. crore)	135.97	120.066
Less: Transmission Charges Received from Short term customers	11.00	12.633
Net amount payable by GRIDCO towards Tr. Charge (Rs. crore)	124.97	107.443
Energy Drawl by GRIDCO (MU)	5592.62 (Excl. Loss & KHSTPS Stage –II Power)	6357.67
PGCIL Tr. Charge (P/U)		16.90
PGCIL Tr. Charge Including Central Loss of 3.60% (P/U)	22.34	17.53

376. GRIDCO's proposal for the cost of power purchase from various generating stations and the Commission's approval based on least cost power purchase are given in the table below:

Table - 40
GRIDCO PROPOSAL FOR 2008-09

Generators	Energy	F.C	V.C	F.P.A.	Yr. E. Charges	Tr. Charge	Total Rate	Total cost
	MU	P/U	P/U	P/U	P/U	P/U	P/U	Rs. in Cr.
HYDRO (O)	3,728.57		45.15				45.15	168.35
Indravati	1,962.18		66.49				66.49	130.46
Machakund	265.00		25.06				25.06	6.64
Total	5,955.75		51.29				51.29	305.45
OPGC	2,946.76	75.69	58.52	6.12	13.82	-	154.15	454.24
TTPS	3,162.17	58.16	50.82	22.99	17.09	-	149.06	471.36
Total CGPs	543.00		149.03				149.03	80.93
Total Renewable	375.00		218.43				218.43	81.91
StateTotal	12,982.69						107.36	1,393.88
CHUKHA	234.90		160.83			22.34	183.17	43.03
TSTPS St-I	1,986.78	63.59	42.65	37.56	2.21	22.34	168.35	334.48
TSTPS St-II	1,249.55	79.29	52.73	26.47	0.94	22.34	181.76	227.12
FSTPS	1,361.12	52.13	102.27	28.51	4.47	22.34	209.73	285.46
KhTPS St-I	564.83	61.20	112.58	33.05	0.02	22.34	229.20	129.46
KhTPS St-II	534.74	61.20	112.58	33.05	0.02	22.34	229.19	122.56
Tala HPS	195.44		190.91			22.34	213.25	41.68
Total EREB	6,127.36						193.20	1,183.78
TOTAL	19,110.05						134.89	2,577.66
Note :	Central transmission loss of 3.62% for central stations included							

Table - 41
COMMISSION'S APPROVAL FOR 2008-09

Generators	Energy	F.C	V.C	F.P.A.	Yr.E. Charges	Tr. Charge	Total Rate	Total cost
	MU	P/U	P/U	P/U	P/U	P/U	P/U	Rs.in Cr.
TOTAL HYDRO (O)	3,676.86						46.00	169.14
Indravati	1,942.38						67.28	130.68
Machakund	265.00						25.09	6.65
Total	5,884.24						52.08	306.47
OPGC	2,946.52	75.70	58.52	6.12	13.22	-	153.55	452.44
TTPS	3,162.17	58.16	46.05	20.60	18.12	-	142.93	451.96
Total CGPs	352.00		108.36				108.36	38.14
Total Renewable	375.00		218.43				218.43	81.91
StateTotal	12,719.93						104.63	1,330.92
CHUKHA	270.26		160.78			17.53	178.31	48.19
Tala HPS	195.44		190.87			17.53	208.40	40.73
TSTPS St-I	1,987.24	63.58	42.64	32.64	1.70	17.53	158.08	314.15
TSTPS St-II	1,249.83	79.27	52.72	16.64	1.72	17.53	167.88	209.82
KhTTPS St-II	543.68	26.99	125.32	-	-	17.53	169.83	92.34
FSTPS	1,361.94	52.10	102.25	33.78	4.52	17.53	210.18	286.26
KhTTPS St-I	131.95	61.19	112.55	31.22	0.03	17.53	222.51	29.36
Total EREB	5,740.33						177.84	1,020.84
TOTAL	18,460.26						127.40	2,351.75
Note :	Central transmission loss of 3.60% for central stations included							

Rebate for Prompt Payment from the Generators

377. The PPA between the generators and GRIDCO provides for a rebate of 2% on the gross power bill, if payment is made through Letter of Credit. 1% rebate on the billed amount is allowed when payment is made within 30 days. In case of payment beyond the due date, delayed payment surcharge @ 2% per month on the billed amount is payable by GRIDCO to the generators.
378. For the purpose of calculation of revenue requirement, the cost of power should be calculated at its gross value, as the rebate available from the generator is likely to offset the rebate that will be allowed to the DISTCOs for payment through L.C.

GRIDCO Finance

379. **Employees Cost:** GRIDCO during financial year 2008-09 has projected Rs.3.89 crore of expenditure towards "Employees Cost". The Commission had allowed Rs.2.03 crores under this head for the financial year 2007-08. As revealed from the latest audited account, the expenditure towards employee cost is Rs.1.76 crore for 2006-07

where in the component of basic pay is Rs. 1.30 crore. The Commission allows escalation @ 3% on basic pay towards normal annual increment on year to year basis.

- (i) As regards D.A, the Commission allows an annual average rate of 50% over basic pay; which is allowed to OPTCL and DISTCOs.
- (ii) In respect of Medical allowance, the Commission allows 5% on approved basic pay. The house rent allowance is allowed @ 16% over basic pay.
- (iii) For the year 2008-09 GRIDCO has claimed an amount of Rs. 0.48 crores towards terminal benefits, which is allowed by the Commission.
- (iv) The summary of employees cost proposed by GRIDCO and approved by the Commission is shown in the table:

Table – 42

(Rs. in crore)

	Proposed	Approval
Basic Pay	1.38	1.38
DA	0.73	0.69
HRA	0.28	0.22
Medical reimbursement	0.11	0.07
Others	0.89	0.49
Terminal Benefit	0.48	0.48
Total	3.87	3.33

- 380. **Repair and Maintenance Cost:** GRIDCO during 2008-09 has proposed Rs.0.35 crore towards repair and maintenance of vehicles, furniture and office equipment. The audited balance sheet as on 31.03.2007 of GRIDCO, do not show any amount under the head fixed asset. As such no amount is due towards repair and maintenance, hence disallowed by the Commission.
- 381. **Administrative and General Expenses:** GRIDCO has projected an amount of Rs. 2.41 crores towards administrative and general expenses for the FY 2008-09 as against this approved amount of Rs. 1.74 crores for 2007-08. The audited figure for the year 2006-07 is Rs. 1.91 crores. The Commission approves an amount of Rs. 2.41 crore for the financial year 2008-09.
- 382. **ERLDC Charges:** GRIDCO has projected Rs. 1.32 crores towards ERLDC fees for the financial year 2008-09. The Commission approves the same and allows Rs. 1.32 crores to be passed on to annual revenue requirement for 2008-09.
- 383. **Interest on Loan:** GRIDCO during financial year 2008-09 has projected an amount of Rs. 169.69 crore towards interest on loan.

Source wise interest repayment of principal, loan balance are shown in the table below:

Table – 43

(Rs. in crore)

	Rate of Interest	Principal					Interest due for the year	
		O/B as on 01.04.06	O/B as on 01.04.07	O/B as on 01.04.08	Repayment during 08-09	CB as on 31-3-09		
A	Govt. Loans							
	State Govt. Loan (OPGC Adj.)	10.50%	42.54	42.54	42.54	23.47	19.07	4.47
	State Govt. Loan (Working Capital)	13.00%	120.00	120.00	120.00	70.00	50.00	15.60
	NTPC-III (GoO Bonds)	8.50%	1102.88	1047.73	937.44	110.29	827.16	77.44
	Sub Total		1265.42	1210.27	1099.98	203.76	896.23	97.51
B	Institutional Loans							
	REC Loan	10.61%	154.77	93.07	24.51	24.51	-	0.54
	REC WCLoan	8.00%	275.00	125.00	-	-	-	-
	OPTCL Ltd.		-	26.00	-	-	-	-
	Sub Total		429.77	244.07	24.51	24.51	-	0.54
C	Secured Loan							
	Union Bank of India-I	8.25%	62.41	45.74	29.07	16.67	12.40	1.77
	Union Bank of India-III	10.00%	-	91.67	77.37	14.29	63.09	7.62
	Union Bank of India-IV	12.00%	-	100.00	100.00	14.29	85.71	11.92
	Allahabad Bank-I	8.25%	17.84	14.27	10.69	3.57	7.12	0.77
	Allahabad Bank-II	8.25%	71.43	60.71	49.99	10.72	39.27	3.72
	Allahabad Bank-III	8.25%	47.62	40.48	33.33	7.14	26.19	2.48
	Dena Bank-I	8.25%	91.65	71.61	51.57	20.04	31.53	3.42
	Dena Bank-II	8.25%	80.00	77.12	65.60	11.52	54.08	4.97
	Andhra Bank	10.25%	50.00	42.85	35.71	7.14	28.57	3.32
	Syndicate Bank	8.25%	50.00	50.00	40.00	10.00	30.00	2.92
	Syndicate Bank-STL	7.25%	100.00	-	-	-	-	-
	Karnataka Bank	8.75%	22.73	18.18	13.63	4.55	9.09	1.11
	Sub Total		593.67	612.60	506.97	119.92	387.05	44.01
D	GRIDCO Bonds							
	OHPC-(Rs.50 Cr.)	8.50%	50.00	35.00	20.00	20.00	-	1.70
	NTPC (Rs.342.85 Cr.)	10.00%	243.07	105.10	64.72	40.39	24.33	5.46
	Pension Trust Bond	9.00%	271.91	271.91	271.91	73.30	198.61	20.56
	Sub Total		564.98	412.01	356.63	133.69	222.94	27.73
	Grand Total		2853.83	2478.95	1988.09	481.87	1506.22	169.79

From the above table it is found that the loan balance as on 31.03.2006 was Rs.2853.83 crores. On all the above loans, the Commission allowed interest in earlier year's except the loan from State Govt. During 2006-07 and 2007-08, GRIDCO has shown an addition of new loan to the tune of Rs. 226 crore and Rs. 44 crore respectively. The new loan of Rs. 270 crore (Rs. 226 + 40) crore as revealed from their submission has been utilized in the following manner.

384. Rs. 100 crore of loan availed from Union Bank-III was utilized to swap and old short-term loan of Syndicate Bank.
385. Balance Rs. 170 crore of loan availed from Union Bank-IV (Rs. 100 crore) and OPTCL (Rs. 70 crore) was utilized for one time settlement of NTPC Bond value of Rs. 400 crore issued by GRIDCO to WESCO, NESCO and SOUTHCO.

The Commission approves the new loan availed by GRIDCO during 2006-07 and 2007-08 and allows the interest of the same to be passed on to tariff.

The repayment of principal is shown at Rs. 600.88 crore, Rs. 534.87 crore and Rs. 481.87 crore for the year 2006-07, 2007-08 and 2008-09 respectively.

Considering the receipt, repayment of loan, the balance as 31.03.2009 as submitted by the licensee works out to Rs. 1506.22 crore. The abstract of loan balance is given below.

Loan as on 31.03.2006	Rs. 2853.83 crore
Addition of New loan during 2006-07 and 2007-08	Rs. 270.00 crore
Less repayment of loan from 2006-07 to 2008-09 (600.88+534.87 +481.87) crore	Rs. 1617.62 crore
	Rs. 1506.62 crore

Loan wise analysis and impact of interest on bulk supply price is depicted in the subsequent paragraph.

386. **GRIDCO Bond:** The Commission in the Tariff Order for FY 2007-08 (Para 5.34.4) has analyzed in details the Original value of Bond rate of interest and swapping of Bonds with low cost loans. The position of the Bond value from 31.03.2005 (Date of separation of GRIDCO to OPTCL) to 31.03.2009 is depicted in table below:

Table – 44
Details of Bond approved by Commission

(Rs. Crore)						
Source	Original	31.03.2005	31.03.2006	31.03.2007	31.03.2008	31.03.2009
NPPC-III (Govt. of Orissa Bond)	1102.88	1102.88	1102.88	1047.73	937.44	827.16
NTPC-IV	342.85	342.85	243.07	105.10	62.72	24.33
OHPC Bond	50.00	50.00	50.00	35.00	20.00	NIL
NALCO-I	50.00	Swapped fully				
NALCO-II	150.00	Swapped fully				
OPGC-I	60.00	Swapped fully				
Power Bond-I	104.48	Swapped fully				
Power Bond-II	198.08	46.65	Swapped fully			
Total	2063.80	1542.38	1395.95	1187.83	1022.16	851.49

In the last tariff Order, the Commission had allowed recovery of interest on these Bonds in ARR; after considering swapping of loans utilized for reduction of Bonds. The Commission now accepts the same principle and allows the interest on the remaining bonds and secured loans utilized for swapping of the bond to be passed on to ARR for 2008-09.

387. **State Govt. Loans:** GRIDCO in its ARR had considered an amount of Rs. 162.54 crore of loan from State Govt. as on 31.03.2006. The interest impact of the above loan as claimed in the ARR of the year 2008-09 is Rs. 20.07 crore. The debt service of the above loan was kept in abeyance as per Govt. of Orissa Notification dated 29.01.2003 till 2005-06 or the sector turns around whichever is earlier. The Commission does not consider the impact of loan to be passed on to ARR during 2008-09 as this was also done for 2006-07 and 2007-08 with a request to State Govt. to extend this facility as the sector is yet to turn around.
388. **REC Loan:** The term loan from REC as well as working capital loan from REC are the approved loans on which the Commission was allowing interest impact in the ARR for the past years. Both the loans were proposed to be redeemed fully by 31.03.2009. GRIDCO has claimed an amount of Rs. 0.54 cr towards interest on the above loan for the FY 2008-09. Commission accept the same and allows it to be passed on to the ARR.
389. **New loan obtained during 2006-07 and 2007-08:** As mentioned in the above Para 385 GRIDCO availed Rs. 70 crore of loan from OPTCL and Rs. 100 crore loans from Union Bank of India to redeemed the Bond value of Rs. 400 crore issued by WESCO, NESCO and SOUTHCO to NTPC through GRIDCO; under One-Time Settlement Scheme. The issue regarding settlement of the Bond has been addressed in RST Order. GRIDCO during 2008-09 claimed no interest on OPTCL loan, but it has claimed Rs. 11.92 crore on loans availed from Union Bank of India (Loan- IV). After

scrutiny the Commission allows an amount of Rs.11.22 crore towards interest for the FY 2008-09.

390. **Pension Trust Bond:** GRIDCO had proposed an amount of Rs. 20.56 crore on the Bond value of Rs.271.91 crore issued by GRIDCO to Pension Trust Fund. The Commission had allowed interest on the bond value in past years on provisional basis, pending finalization of actuarial valuation of Terminal liabilities by independent actuary. Now that the Commission has decided to accept the valuation of the actuary, and addressed the issue of funding the unfunded liability of the trust fund in OPTCL order, the Commission do not consider the interest impact to be passed on to the ARR for 2008-09. Based on the above consideration, the interest liability of GRIDCO for the year 2008-09 has been calculated and an amount of Rs. 127.72 crore is allowed by the Commission to be passed on to ARR for 2008-09.

Table – 45
Interest liability of GRIDCO 2008-09

(Rs. in crore)

Sl. No.	Source	2006-07 approved	2007-08 approved	2008-09	
				Proposed	Approved
A.	<u>Govt. Loan</u>				
1.	State Govt. Loan (WCL)	0	0	15.60	0
2.	State Govt. OPGC adjustment	0	0	4.47	0
3.	NTPC-III (Govt.)	89.05	79.68	77.44	77.44
	Sub-total	89.05	79.68	97.51	77.44
B.	<u>Institution Loan</u>				
1.	REC- Term loan	15.06	70.14	0.54	0.54
2.	REC- Short term	15.00	4.69	0	0
3.	OPTCL Loan	-	-	0	0
	Sub-Total	30.06	11.83	0.54	0.54
C.	<u>Secured Loans</u>				
1.	UBI-I	4046	3.09	1.77	1.77
2.	UBI-III	-	6.97	7.62	7.62
3.	UBI-IV	-	-	11.92	11.22
4.	Allahbad Bank-I, II & III	10.51	8.64	6.97	6.97
5.	Dena Bank-I Dena Bank-II	13.21	10.97	8.39	8.39
6.	Andhra Bank	3.60	3.04	3.32	3.32
7.	Syndicate Bank	3.87	3.49	2.92	2.92
8.	Karnataka Bank	1.59	1.23	1.11	1.11
	Sub-Total	37.24	37.24	44.02	43.32
D.	<u>GRIDCO Bond</u>				
1.	OHPC	6.38	2.34	1.70	1.50
2.	NTPC	21.54	7.74	5.46	5.46
3.	Pension Trust	20.07	19.09	20.56	NIL
E.	<u>Finance Charges</u>				
F.	<u>Grand Total (A to E)</u>				
		204.34	158.12	169.79	127.72

Pass Through of uncovered expenses of Rs. 50.93 crore of 2007-08

391. GRIDCO has applied pass through of uncovered expenses of Rs. 50.93 crore for the FY 2007-08 under following heading.

Table - 46

		(Rs. in crore)
Sl No.		Amount
(i)	Difference in interest liability proposed by GRIDCO and allowed by OERC	Rs. 35.28
(ii)	Additional interest liability now claimed towards loan of Rs. 170 crore.	Rs. 15.65
Total		Rs. 50.93

The Commission directs that as the financial year 2007-08 is not yet over, this can be addressed as a part of truing up exercise after finalization of accounts for which the same is disallowed by the Commission.

Pass Through of Past losses towards repayment of Principal

392. GRIDCO has projected total repayment liability of Rs. 481.87 cr during FY 2008-09 to be passed on to the ARR. With the transfer of transmission and load dispatch function to OPTCL, all fixed assets have been transferred to OPTCL leaving no fixed asset for GRIDCO. As such no depreciation available in the hand of GRIDCO for repayment of principal due. As stated by GRIDCO during the period 2006-07 and 2007-08, the Commission though allowed repayment of principal as a pass through in ARR under special appropriation head still leaves almost equal amount as regulatory gap to be met from trading and UI revenue. It is relevant to mention here that there will be some surplus power available in the hand of GRIDCO, after meeting the requirement of the State during 2008-09.
393. GRIDCO has further stated that as per the direction of the Commission, the recovery of receivables of DISTCOs was to be utilized to bridge the gap of revenue requirement which was synonymous with the repayment of principal liability. But the real picture is that as against the approved amount of Rs.153.33 crore of receivable, DISTCOs has only paid Rs.22.87 crore from their Escrow account.
394. GRIDCO apprehends that because of non-repayment of loan, it may face regulation of power from NTPC and invocation of Govt. Guarantee by financial institutions.
395. In view of the above the GRIDCO submits to the Commission to allow principal amount of Rs. 481.87 crore in the ARR of 2008-09.
396. An analysis of the repayment liability of Rs. 481.87 crore proposed by GRIDCO was done. The details of repayment proposed by GRIDCO is given in the table below:

Table - 47

(Rs. in Crore)

Particulars	Repayment
State Govt. loan	93.47
NTPC-III (Govt. Bond)	110.29
REC loan	24.51
Second Bank loans utilized for swapping of high cost Bonds.	119.92
OHPC Bond	20.00
NTPC –IV (GRIDCO power Bond)	40.39
Pension Trust Bond	73.30
Total	481.88

397. The Commission vide order dated 20.06.2006 in case No. 115 has approved the repayment schedule of GRIDCO considering only power purchase liability. The loan repayment liability does not include the liabilities towards Pension Trust Bond and loan from State Govt.
398. From the above table the liability towards State Govt. loan and Pension Trust Bond are to be excluded. The term loan on power purchase after excluding the State Govt. loan and Pension Trust Bond, works out the Rs. 315.12 crore.
399. The Commission recognizes an amount of Rs. 315.12 crore as repayment liability for 2008-09. As regards treatment of the same, the Commission expects that the above amount should be met to the extent possible out of the earning from export, UI charges and receivables from DISTCOs and outside states. Though the Commission accepts the repayment liability of GRIDCO but decides to exclude the same as a part of revenue requirement for the purpose of fixation of BSP.

Truing Up for GRIDCO

400. Truing up exercise of GRIDCO has been extensively dealt in the previous tariff order. In para 5.35.11.2 of the BSP order 2007-08 it was mentioned as under:-
- “Apart from the requirement of truing-up calculated by the Commission as detailed in the table above, the Commission has also accepted GRIDCO’s securitization of its past liabilities (including for power purchase liabilities) to the tune of Rs. 2,063 crores in parts from the year FY 2001-02 onwards, and has been allowing the servicing of this securitization as part of the GRIDCO’s ARR. The Commission, having recognized the need for truing-up for GRIDCO, would like to leave this for finalization after a joint stakeholder consultation with GRIDCO, OPTCL and the DISTCOs during the course of the next financial year FY 2007-08, and would finalize the quantum for truing-up as part of the next ARR/ tariff determination exercise.”*
401. Further, in para 7.24.5 of the RST order for FY 2007-08, the Commission directed the following:
- “We have already stated that the truing up figures of GRIDCO and DISTCOs are provisional subject to finalization after discussion with all the stakeholders. DISTCOs, GRIDCO, OPTCL are directed to file their comments within 15th May 08 regarding the figures indicated in the order about truing up figures. The Commission*

will review the submission of the licensees before finally freezing the figures. If required their could be an amendment to the existing tariff structure without any further public hearing after taking into consideration the truing up figures.”

402. In accordance with the Commission’s earlier orders and based on the submission received from DISTCOs and GRIDCO, the Commission heard the matter on 24.07.2007 and directed both DISTCOs and respondent GRIDCO to carry out the following direction:
- a. DISTCOs should come up with element wise analysis of figures justifying the claim.
 - b. written submission by the DISTCOs to be submitted separately to the Commission narrating the reason for disagreement with the principle set out the Commission in truing up exercise.
 - c. The Commission directed both DISTCOs and GRIDCO to submit their respective claim for arriving at a mutually acceptable figure on opening balance. The Commission further directed that the written submission of GRIDCO and DISTCOs through affidavit should reach the Commission within two weeks from the date of hearing.
 - d. On 15.12.2007, the Commission after hearing both GRIDCO and DISTCOs, based on the filing made by them directed the following:
 - e. Delayed payment Surcharge on outstanding BST amount calculated in line with the orders of the Commission was to be submitted before 31.12.2007.
 - f. Joint reconciliation statement by GRIDCO and DISTCOs of the arrear on BST dues was to be submitted on or before 31.12.2007.
 - g. Audit of receivables of DISTCOs as directed by the Commission should have been completed before 28.02.2008.
 - h. The direction given by the Commission has not been complied with by DISTCOs and GRIDCO in toto. Only WESCO and NESCO submitted the receivable audit report in complete shape to the Commission. The Commission has viewed seriously over the non-compliance of the orders of the Commission by the licensees. Hence, the Commission decides to pass the final order on truing up after both GRIDCO and DISTCOs filed their compliance as per the direction of the Commission.

Return on Equity

403. GRIDCO had projected an amount of Rs.60.62 crore towards Return on Equity @ 14% on equity capital of Rs.432.98 crore for the FY 2008-09.
404. At the time of vesting of the transmission & distribution business with GRIDCO by the State Govt. on 01.04.1996, the Equity Share Capital was Rs.327.00 Crore. During the subsequent years upto FY 2004-05, there were additional infusion of equity capital of Rs.165.98 crore by the State Govt. raising the total equity of GRIDCO to Rs.492.98 crore. At the time of de-merger of GRIDCO effective from 01.04.2005, the equity share capital of OPTCL was stated at Rs.60 crore, leaving the balance equity share capital with GRIDCO. The equity share capital issued to Govt. of Orissa was both in consideration of cash & other than cash. Therefore, the licensee claimed ROE

@14% on the equity share capital of Rs.432.98 crore. The commission in earlier orders referred to the GoO Notification of 29.1.2003, wherein it has been stated that GRIDCO & OHPC shall not be entitled to any return in equity till the sector becomes viable or FY 2005-06 whichever is earlier. Further, in a partial modification earlier notification the Govt. of Orissa in its letter no. 5302 dtd. 6.5.2003 stated the following "GRIDCO and OHPC shall not be entitled to any Return on Equity (ROE) except in respect of the new projects commissioned after 01.04.2006 till the sector become viable or and of 2005-06 whichever is earlier." The Commission would like to clarify that letters have been written to Govt. of Orissa to clarify the status of the letter dtd. 29.1.2003, as it has great impact on Tariff. But the Govt. of Orissa has not responded yet. As regards infusion of capital for the new project, the Commission verified audited accounts of GRIDCO upto 2004-05. It is found that the addition of share capital shown in the balance sheet after 96-97 is only the grants received from DFID towards R&M expenditure and rehabilitation assistance. As per Project Memorandum signed between Govt. of India and Govt of Orissa and DFID, the above amount has been shown under share deposit account pending allotment of shares for non-receipt of approval from GoO.

405. Keeping in view of the above fact, the Commission does not consider it proper to allow return on equity to GRIDCO for the Year 2008-09.

Miscellaneous Receipts

406. The GRIDCO had proposed 10 MU as emergency sale to CGP for the FY 2008-09 and the corresponding revenue receipt proposed under this head comes to Rs.3.30 crore. The Commission approves the same.
407. **Revenue from Export Power:** GRIDCO in its filing for 2008-09 has stated that no surplus energy is expected to be available in the Financial Year 2008-09. It has got no scope to make good the past losses out of sale of surplus power and UI charges, as there will be no surplus power available in the hand of GRIDCO after meeting the requirement of the State during 2008-09.
408. While finalizing the expected aggregate revenue for 2008-09, the revenue earning by GRIDCO from export power has not been taken in to account on the ground that trading of surplus power involved certain risk and uncertainty which should not be transmitted to consumer in term of tariff burden. Therefore, the Commission has not considered the power to be purchased and revenue to be earned from trading of surplus power to outside states. The Commission feels that the GRIDCO is free to purchase additional power from any source and sell it in open market. The extra revenue earned due to trading of power shall bridge the gap to some extent in its revenue requirement for 2008-09 and also shall reduce the burden of consumer of the states by way of liquidating the past liabilities.
409. **Revenue from UI charges:** UI charges are dependant on several unknown risk factors like behaviour of grid, demand (peak and off peak) of the State, hydrology condition, line availability etc. for which GRIDCO has not considered the revenue from UI charges for FY 2008-09. The Commission directs that any revenue earning by GRIDCO on account of UI charges during 2008-09 should be adjusted against the revenue gap for 2008-09 and clearance of past liabilities.

410. **Receivables from DISTCOs:** The receivable position of GRIDCO from the DISTCOs excluding DPS are depicted in table below:

Table – 48

Total Receivables from the DISTCOs excluding DPS if any as on March 31, 2005

(Rs. in Crore)

Loan Balance	WESCO	NESCO	SOUTHCO	CESU	TOTAL
Principal	138.46	94.94	134.36	307.61	675.07
Interest	60.31	41.05	58.43	162.86	322.65
Total	198.77	135.69	192.79	470.47	997.72
Outstanding BSP dues	169.59	277.89	126.31	718.30	1292.09
Total Receivables from DISTCOs	368.36	413.58	319.10	1188.77	2289.81

411. Regarding delayed payment surcharge the matter has been heard by the Commission in which direction has been issued by Commission both to the GRIDCO and DISTCOs to furnish a joint reconciliation statement of the DPS, computed in line with the orders of the Commission. The information is yet to be received.
412. Pending final order on the DPS, the Commission considers the figures of receivable without DPS.
413. The serving of liabilities of GRIDCO shall have to be carried out in accordance with the direction mentioned in order dated 20.07.2007 in Case No. 115 of 2004.
414. The Commission directs that an amount equal to 10% of the arrear may be realized from WESCO, NESCO and CESU. SOUTHCO is allowed a moratorium on payment of this arrear for the year 2008-09, but it has to access the open access industrial consumers to improve its financial viability and should try to pay up the outstanding dues. The Commission in RST order is allowing Rs.65 crore to NESCO and Rs.118 crore to CESU as a part of ARR towards amortization of Regulatory Asset. Similarly, in case of WESCO there is a cash surplus of Rs.37.79 crore as expected in its cash flow statement.
415. As such, the Commission directs WESCO, NESCO and CESU to pay Rs.36.83 Cr, Rs.65.00 Cr and Rs.118.00 Cr to GRIDCO for liquidation of arrear BST dues and loan along with outstanding interest. SOUTHCO's BSP was lowered to match its Revenue Requirement. It shows a cash surplus as on January 2008. It may pay up Rs.9.00 crore it owes to WESCO and shall pay through GRIDCO who shall adjust it against the outflow dues of WESCO.
416. **Receivable from other States:** GRIDCO in its written submission stated that pursuant to settlement made with ASEB, GRIDCO was to receive Rs. 47.52 crores from ASEB as on 01.04.2007. During financial year 2007-08, GRIDCO has received a total amount of Rs. 42.24 crores which includes principal amount of Rs. 31.68 crore

and interest of Rs. 10.58 crore upto 14th April 2008. This leaves an outstanding principal amount of Rs. 15.84 crore which will be payable by ASEB on 15th July 2008 along with interest @ 10% per annum from 15.04.2008 to 15.07.2008. The total amount expected to be received from ASEB is Rs. 16.24 crore (Principal Rs. 15.84 crore + interest Rs. 0.40 crore).

417. Besides above, GRIDCO during 2007-08 has received Rs. 1.98 crore from Bihar State Electricity Board forwards full and final settlement of their dues, as such no amount is receivable during 2008-09 on this account.
418. The receivables from MP and APTransco amounting to Rs. 71.78 crore and Rs. 32.28 crore are sub-judice before CERC. As such, GRIDCO does not expect to receive any amount during 2008-09.
419. Therefore, the Commission recognizes an amount of Rs.16.24 crore to be received during the year 2008-09 towards receivable from other states.

Revenue Requirement for FY 2008-09

420. In the light of the above, the Commission approves the revenue requirement of GRIDCO for FY 2008-09 as given in the table below:

Table – 49
Revenue Requirement of GRIDCO for FY 2008-09
(Rs. in Crore)

		2007-08	2008-09	
A	Expenditure	Approved	Proposed	Approved
	Cost of Power Purchase	2103.11	2577.68	2351.75
	Employee costs	2.03	3.87	3.33
	Repair & Maintenance	-	0.35	-
	Administrative and General Expenses	1.74	2.41	2.41
	Other expenses (ERLDC Charges)	1.32	1.32	1.32
	Interest Chargeable to Revenue	158.12	169.79	127.72
	Sub-Total	2266.32	2755.42	2486.53
	Less: Expenses capitalized	-	-	-
	Total expenses	2266.32	2755.42	2486.53
B	Special appropriation			
	Carry forward of Previous Losses	644.38	50.93	-
	Repayment of principal		481.87	-
	Total	644.38	532.80	-
C	Return on Equity	-	60.62	-
	TOTAL (A+B+C)	2910.70	3348.84	2486.53
D	Less Miscellaneous Receipt	3.30	3.30	3.30
E	Less receivable from DISTCOs	153.33	-	219.83
F	Less receivable from outside States	30.00	-	16.24
G	Total Revenue Requirement	2724.07	3345.54	2247.16
H	Expected Revenue (Full year) from DISTCOs	2259.21	2439.22	2152.23
I	GAP (+/-)	(-)464.86	(-)906.32	(-)94.93

421. From the above table, it is found that GRIDCO after meeting all expenses will still have a gap of Rs.94.93 crore. The Commission expects that the same gap along with Rs.315.12 crore of repayment liability shall be bridged through export earning, UI charges and recovery of receivable of DISTCOs.
422. It is very much imperative that the back to back arrangement between DISTCOs and GRIDCO should be scrupulously followed so that GRIDCO is in a position to recover at least of Rs.219.83 crore (Rs.36.83 crore from WESCO + Rs.65.00 crore NESCO + Rs.118.00 crore from CESU). It is directed that GRIDCO may recover these through the existing escrow arrangement and adjust it towards the outstanding dues of the companies.
423. The Commission would like to clarify that the recoveries now directed are over and above the amount which these companies are required to pay as per various subsisting agreements with them.

Design for Bulk Supply Pricing Philosophy

424. A significant issue in the power sector in Orissa today is the changing nature of the consumer mix in the four distribution companies and its impact on power tariff. When power reform was effected in 1996, the consumer profile was very different. The HT consumers were at the top of the power pyramid in terms of consumption but their numbers were very few. The consumer profile was bottom heavy with a large percentage of LT consumers. At that time, it was envisaged that the load growth would continue in that sector. However, the rapid pace of industrialization has overturned the equation.
425. While the four Distribution Companies in Orissa were carved out of different areas of the State with varying consumer mix, electricity consumers through out the State are being charged an uniform rate for supply of power. The changing consumer scenario has however created regional imbalances as far as the revenues and financial health of the DISTCOs are concerned. The load growth in Orissa has been phenomenal in the last decade. Due to liberalization and open door policy coupled with rich mineral wealth, industrial houses have invested heavily in the State. Industrialization has come to Orissa to stay.
426. However, this high load growth is mostly restricted to Western and North-Eastern/Central Orissa, largely due to exploitation of iron ore for production of steel. On the other hand, the Southern part of the State is not witnessing growth of HT and EHT load due to absence of requisite resources. Most of the Aluminum/Charge Chrome industries located in South Orissa are old and have their own captive power plants. Therefore while HT/EHT sale in WESCO & NESCO is 70.8% & 66.1% respectively, that of CESU & SOUTHCO is 43.0% & 33.2% respectively.
427. South Orissa is also disadvantaged from the point of view of the nature of electricity consumption. As a tribal dominated region with low-income population, it has poor economic capacity for utilization of electricity. Therefore, SOUTHCO is entirely dependent on low voltage consumers, mostly domestic, for its revenues.
428. Today the industrial scenario is very different from the 90's with substantial growth of large and heavy industry in Western, North-Eastern and Central Orissa. This has

- naturally fuelled demand for power. For the last few years, consumers of Orissa have benefited from being a power surplus State. Low cost hydro power has been utilised within the state and higher cost thermal power has been exported by GRIDCO and the gains thus accrued have been passed on to consumers. In the coming years because of higher growth of HT and EHT most of the power produced will be consumed within the State. There will be no or little power available for export outside the State.
429. In other words, more and higher cost power will be utilized within the State for use by the consumers. Purchase of power from high cost sources is raising the per unit of cost of supply. As an example, in 07-08 the approved weighted average cost of power purchase was 119.91 paise per unit which has gone up to 127.40 paise per unit in 08-09.
430. Utilities in Orissa are entering a dynamic phase with introduction of open access from 1.4.2008. It is difficult to make a prediction at this point of time about the quantum of movement of energy between utilities or, otherwise, for which the expected revenue earning from EHT and HT group of consumers of capacity 1 MW and above may undergo a change affecting the overall finance of DISTCOs. The Bulk Supply Price now being determined is essentially being designed with the expected earning of revenue by the DISTCOs to meet the power purchase liabilities of GRIDCO and Transmission charges of OPTCL. Hence the impact on overall revenue from HT & EHT category of consumers will continue to be monitored by the Commission and if required, the BSP now determined may be amended without resorting to any further public hearing. For this purpose, the DISTCOs are hereby directed to make available the copy of the bills served to all HT & EHT consumers to the Commission on monthly basis for our reference and monitoring.
431. Moreover, distribution companies with higher sale at EHT/HT have been found to be totally inefficient in reducing LT losses. They try to manage with revenue earned from EHT/HT consumers from the margin available to them between BSP & consumer tariff. The difference between purchase price and the revenue is the margin of the companies. Essentially this margin should be used for cross subsidy among companies.
432. OERC has been following a uniform retail tariff policy. The consumers of Orissa should not feel discriminated by levy of a differential retail tariff because of functioning of separate distribution licensees in their respective areas. Thus considerations of public interest for consumers of the entire State warrants uniform retail tariff policy, and retail tariff for each distribution licensee based solely on its ARR and its expected revenue ought not to be considered in isolation. The law requires the Commission to take into consideration not only the annual revenue requirement and the expected revenue of the distribution licensee but also such policy inputs for safeguarding consumers interest one of which is a uniform retail tariff for the whole State, vide Section 61(d) of the Electricity Act, 2003. Moreover, uniformity of retail tariff for the whole State is in line with the National Tariff Policy, vide Para 8.4(2) thereof. Only when distribution licensees show appreciable rise in their respective levels of efficiency by reducing T&D losses, both technical and commercial, a question of rewarding efficiency by a differential retail tariff may arise. This is not the case now. Besides, the benefit of differential Bulk Supply Price has been an accepted practice, as the State transmission network serves the whole State as

- a single backbone system and the consumers of Orissa have been paying for the cost of this transmission system uniformly. The distribution companies have little contribution towards the growth and development of the EHT industries and yet a distribution licensee would reap a substantial higher revenue than another distribution licensee by virtue of mere concentration of EHT industries in its area. It is just and proper that differential Bulk Supply Price should be more for the former than for the latter distribution licensee. Therefore, with differential Bulk Supply Price there is no necessity of shifting away from the uniform retail tariff prevailing in the state of Orissa.
433. Until we move away from the uniform RST structure, the higher bulk pricing mechanism should give a signal to the utility having higher HT concentration that improved performance at LT through higher LT sale would enable that utility to get power at a lower rate. That is to say, such utility should endeavour to convert lost units to billing units at LT resulting in reduction of commercial loss, which needs to be encouraged.
434. Tariff is essentially intended to balance the conflicting interest of various stakeholders like the distribution licensees and various groups of consumers, as well as the generators. Even though the pricing of the generating stations are determined following a uniform procedure prescribed in the regulations, the prices could be different. Like wise some amount of judgment is to be exercised while determining the bulk supply price for distribution utilities. The process has to be fair, transparent, with sound logic, so that the revenue earned by the utilities are adequate to service all their expenditures like the cost of employees, servicing the interest burden, meet return on equity in addition to meeting the cost of power purchase which constitute a substantial part of their revenue requirement.
435. At this point, we are taking into consideration the extent of revenue that a distribution utility is likely to earn for sale of power to HT & EHT groups of consumers. Besides, the volume of sale at LT is an important criterion where the loss level is high and the expected revenue realisation is low. Thus, the Bulk Supply Price (BSP) is fixed in a manner that makes *all* the distribution utilities more or less financially viable.
436. The consumer mix at EHT, HT and LT varies widely among the four distribution utilities of the State. While all the utilities are served by the State Transmission Utility, the distribution networks within the jurisdiction of the DISTCOs give power supply to LT & HT groups of consumers. As explained earlier there are some utilities who are very conveniently placed and have the advantage of large base of EHT and HT consumers like WESCO and NESCO whereas utilities like CESU and SOUTHCO are primarily utilities covering a very large number of LT consumer base. This is reflected in financial terms while determining the expected revenue that these utilities are likely to earn during the year 2008-09. As we have stated earlier a uniform retail supply tariff is followed in the State. Accepting a normative level of efficiency in terms of approved distribution loss and collection efficiency, their expected revenue is calculated.
437. GRIDCO should be assured of the earning from bulk supply price, so that at the end of the financial year not only it should be able to meet its legal obligation but should suffer no problem of liquidity due to the fixation of Bulk Supply Price from 1st April, 2008 onwards. GRIDCO should be in a position to pay to the generators regularly so

that there is no threat of load reduction by any of the generators, besides maintaining the established standards of 100% payment to the generators as has been practice in the past. The BSP has been designed with a clear conception that DISTCOs are to collect the extent of revenue projected by them. There shall be no difficulty on their part to meet the bulk supply price and transmission charges payable to GRIDCO and OPTCL respectively.

Determination of Demand and Energy Charges

438. Demand charge is levied in consonance with the philosophy of realization of a part cost of the fixed charges in proportionate to the capacity utilization by the licensee. The energy consumption is recovered in proportion to the actual quantum of energy consumed by the utilities.
439. Questions have been raised by the licensees that there are chances of over recovery or under recovery through demand charges if there is a difference between the approved SMD and actual SMD in a particular year. Over recovery through demand charges by GRIDCO could mean additional recovery of revenue if the distribution companies draw power at the permitted level.
440. A case was made out that fixation of higher SMD by the Commission could reduce the energy charge per unit, the total revenue requirement remaining fixed. But if there is under drawl by the DISTCOs due to reduced energy charges, GRIDCO will not be able to receive the full revenue requirement due to it. On the other hand, if the permitted SMD is not attained GRIDCO also stands to lose the revenue. To obviate this difficulty the Commission decides that the entire revenue recovery of GRIDCO could be effected through energy charges only by combining the demand charges and energy charges. The SMD fixation of a composite energy charges will however not take away the concept of SMD. However, this has also to take care of the permitted maximum demand for any utility so that the utility does not resort to unbridled maximum demand drawl of power and jeopardize the system's stability.
441. Some of the objectors are vehement in their approach that like HT and EHT class of consumer, there should be a two-part tariff for Bulk Supply by GRIDCO to DISTCOs. It needs to be emphasized that the Bulk Supply Price by GRIDCO to DISTCOs is essentially a two-part tariff with a demand charge of Rs.200/- per KVA + the Energy charges. However, there shall not be any levy of separate maximum demand charges upto the permitted SMD for the distribution companies for the FY 08-09. Permitted SMD would mean monthly SMD recorded upto maximum of 10% over the approved SMD in the current tariff order to take care of monthly variations. Any excess drawl over the permitted SMD will have to be paid @Rs.200 per KVA per month. This is again subject to the condition that the annual average SMD shall be limited to the SMD permitted in the order. This is necessary to maintain the planning of load and system's stability. Any drawl over and above the annual average SMD will be payable @Rs.200 per KVA per month, notwithstanding the fact that a utility might have paid the SMD charges for exceeding the permitted SMD in any month.

Determination of Bulk Supply Price

442. GRIDCO had proposed energy charge @ 184.39 P/U to be levied on the DISTCOs towards their purchase of power. The Commission determines the Bulk Supply price such that with the expected estimated revenue at the disposal of the utilities, they shall be in a position to pay the power bills, the transmission charge bills and meet their statutory obligations including meeting the expenses towards establishment, maintenance and other allied expenses. In the process, the tariff so determined is a mirror reflection of the pattern of consumption of various consumer groups in the utility. The details of Bulk Supply Price as well as the quantum of energy approved by the Commission for each DISTCO are presented in a table below:

Table - 50

Bulk Supply Price and Quantum of Energy for 2008-09

Name of the DISTCO	Quantum of Energy (MU)	Bulk Supply Price (P/U)	Revenue from Bulk Supply Price (Rs. Crore)
CESU	5300.00	101.50	537.95
NESCO	4660.00	125.00	582.50
WESCO	5680.00	157.25	893.18
SOUTHCO	1980.00	70.00	138.60
Total	17620.00	122.15	2152.23

443. As against GRIDCO's total revenue requirement of Rs 2247.16 crore, it will recover Rs. 2152.23 crore through energy charge for the year 2008-09 from DISTCOs and will leave a total gap of Rs.(-)94.93 crore. The treatment of this gap has already been discussed above.
444. Determination of BSP for SOUTHCO possess a difficult task considering that the total consumption base is very small even though the cost of distribution is high. This necessitates a condition where the BSP for SOUTHCO has to be kept at level much lower than other utility such that there is a breakeven of revenue for the current financial year. The Commission faces these complaints from year to year for which we would advise SOUTHCO that they should take advantage of the Open Access charges now approved by the Commission and attract as many as EHT and HT industries to their fold so that there is a quick financial turn around. The owners of the utility may consider merger of SOUTHCO and WESCO if legally & administratively it does not pose any problem so that it can lead to beneficial advantages of the consumers of these utilities. Possibly the easier option is to get the benefit of Open Access now made available within the state.

Charges for Overdrawl of Energy

445. GRIDCO in its application proposes that any excess drawl of energy by a Distribution and Retail Supply licensee over and above the approved drawl would be payable at a cost of imported power on monthly basis.
446. The Availability Based Tariff has been implemented in the Eastern Region with effect from 1st April 2003. The principle of ABT aims at enforcing grid discipline with an objective to maintain stability in frequency excursion and efficient use of available energy resources. The Commission has already framed suitable guidelines/regulations for intra-state ABT, which will be binding on all the users of the system. Any excess drawl of energy by a Distribution and Retail Supply Licensee would be payable at the actual cost of power purchase plus transmission charges and transmission loss subject to necessary changes on account of UI charges if any.

Rebate

447. For payment of bills through a letter of credit on presentation/upfront by cash within two working days, a rebate of 2% shall be allowed. If the payments are made by a mode other than through a letter of credit but within a period of one month of presentation of bills, by the Distribution Licensee, a rebate of 1% shall be allowed.

Late Payment Surcharge

448. In case payment of bills by the licensees is delayed beyond a period of 1 month from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied by GRIDCO.

Duty and Taxes

449. The Commission approves that statutory levy/duty/tax/cess/toll imposed under any law from time to time shall be charged over and above the price fixed by the Commission.
450. Around 31.8% of the state's internal requirement is met out of low cost hydro generation, which has made the power sector revenue very vulnerable to the vagaries of nature. Hydro power no doubt provides stability to system operation but at the same time failure of monsoon can play havoc on the state's utilities. The Commission has considered revenue requirement of the current year based on the assumption of a normal rainfall.
451. The current power scenario of the State is in a state of transition due to rise in demand on account of rapid industrialization and massive rural electrification envisaged under Rajeev Gandhi Grameen Vidyut Yojana (RGGVY). The surplus scenario is fast diminishing. Unless effective steps are taken at the level of the government for creation of new capacity about which the Commission has already advised the Govt and hopes that follow-up action shall be taken at the appropriate level so that the current surplus situation continues in spite of the rising industrial demand for power in the state. The Commission may be kept apprised of the developments in this regard by the concerned quarters.
452. Orissa has always encouraged installation of Captive Generation due to which NALCO, RSP, ICCL, HINDALCO, IFFCO etc have established Captive Power Plants of the order of 960 MW at Angul, 248 MW at Rourkela, 367.50 MW at

- Hirakud and 110 MW at Paradeep respectively. The installed capacity of CGPs connected to State Grid has gone upto 2031.688 MW. A number of electro-metallurgical industries have signed MoUs with the State Government and are coming up with CGPs of their own. The Commission would prefer harnessing of surplus power from the existing and upcoming CGPs of the State. For this purpose, the Commission has already notified a policy for pricing of surplus power from Captive Generating Plants.
453. The issue of global warming, burning of fossil fuels and emission of Green House Gases has certain environmental impact on the planet and upon society at large. Renewable Energy therefore assumes extreme importance in meeting the cascading growth of power needs of the State. Orissa possess a vast coast, has large number of sunny days, a good number of streams, rivulets and canal falls. Yet the State has not been in a position to harness these renewable sources. The Commission would like to encourage these sources. A consultative paper on the long term strategy for harnessing of renewable sources of energy is proposed to be issued shortly.
454. The Commission further directs the licensees to implement the Bulk Supply Price as determined by the Commission in this order to become effective after expiry of seven days of the publication under section 57 of the OERC (Conduct of Business) Regulation, 2004.
455. The Bulk Supply Price in respect of GRIDCO will become effective from 1st April 2008 and shall continue until further orders.
456. The application of GRIDCO in Case No.61/2007 is disposed off accordingly.

(K. C. BADU)
MEMBER

(S.K. JENA)
MEMBER

(B. K. DAS)
CHAIRPERSON