

**ORISSA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN,
UNIT – VIII, BHUBANESWAR – 751 012**

*** **

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

CASE NO. 62/2008

DATE OF HEARING : **03.02.2009**

DATE OF ORDER : **20.03.2009**

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 applicable provisions of the Electricity Act, 2003 read with OERC (Conduct of Business) Regulations, 2004 for the year 2009-10.

ORDER

Section 86(1)(b) of the Electricity Act, 2003 requires the Commission to determine the procurement price structure for distribution companies operating in the state of Orissa. Under the existing Bulk Supply Agreements with GRIDCO, the DISCOMs are under obligation to purchase power solely from GRIDCO. In determining the procurement price, the Commission has to hear not only the buyers (DISCOMs) 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 a deemed trading licensee under the 5th Proviso to the Section 14 of the Electricity Act, 2003 (hereinafter referred to as the Act) is outside the purview of Section 62 of the Act. The prices at which GRIDCO supplies power to the DISCOMs coincides with the procurement price hereby fixed. If GRIDCO supplies its surplus power to any other person anywhere after satisfying the requirements of DISCOMs 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 on the Commission's website (www.oriarc.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 16 nos. of objections/ suggestions from the following persons/ associations/ institutions/ licensees: -

(1) State Public Interest Protection Council, Cuttack, (2) Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur, (3) Confederation of Indian Industry(CII), 8, Forest Park, Bhubaneswar, (4) M/s. UCCI, N/6, IRC Village, Nayapalli, Bhubaneswar, (5) M/s Indian Metal & Ferro Alloys Ltd., Bomikhal, Rasulgarh, Bhubaneswar, (6) M/s. Confederation of Captive Power Plants, IMFA Building, Bomikhal, Rasulgarh, Bhubaneswar-10, (7) FACOR, Chandrasekharapur, Bhubaneswar, (8) M/s. Power Tech Consultants, 1-A/6, Surya Vihar, Link Road, Cuttack-12, (9) M/s. Orissa Electrical Consumers' Association, Sibasakti Medicine Complex, BK Road, Cuttack, (10) M/s. Jayashree Chemicals Ltd., Po: Jayashree, Ganjam, (11) Mr. Jayadev Mishra, N-4/98, Nayapalli, Bhubaneswar, (12) Mr. Ramesh Ch. Satpathy, 302(B), Beherasahi, Nayapalli, Bhubaneswar, (13) WESCO, Burla, Sambalpur, (14) Mr. R.P. Mohapatra, 775, Jayadev Vihar, Bhubaneswar,(15) SOUTHCO, Courtpeta, Berhampur, (16) NESCO, Januganj, Balasore.

All the above named objectors were present during the tariff hearing except objector Nos.1, 8 & 9 but their written submission which were filed before the Commission were taken into record and considered by the Commission.

3. The date for hearing was fixed as 03.02.2009 and it was duly notified in the leading newspapers mentioning the list of the objectors. The Commission also issued notice to the Government of Orissa through the Department of Energy informing them about the date of hearing and requesting to send the Government's authorised representative to take part in the proceedings.
4. In exercise of the power conferred 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, Chandrasekharapur, 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. The Commission had also appointed PRAYAS, Energy Group, Amrita Clinic, Athawale Corner, Crave Road, Pune-411004, India, a consumer organization as Consumer Counsel apart from Nabakrushna Choudhury Centre for Development Studies,

Bhubaneswar, but it was neither present during the tariff hearing nor filed its objections/suggestions before the Commission regarding the above matter.

5. In its consultative process, the Commission conducted a public hearing at its premises on 03.02.2009 and heard the applicant, Objectors, Consumer Counsel and the representative of Govt. of Orissa.
6. The Commission convened the State Advisory Committee (SAC) meeting on 12.02.2009 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 PROPOSAL ON THE ANNUAL REVENUE REQUIREMENT (ARR) FOR FY 2009-10 (Para 7 – 33)

7. GRIDCO Ltd. (Formerly Grid Corporation of Orissa Limited) (hereinafter called GRIDCO) is a Deemed Trading Licensee under the 5th Proviso to Section 14 of the Electricity Act, 2003 and is carrying out the business of bulk supply of electricity to the four Electricity Supply Companies by utilizing the transmission network of OPTCL. GRIDCO continues to procure all forms of power from different generators on behalf of the DISCOMs and supply the same to them. GRIDCO also provides ancillary services to Captive Generating plants (CGPs) and trading the surplus power available, if any, from time to time. Under the existing Bulk Supply Agreements between the DISCOMs and GRIDCO, the DISCOMs are obliged to purchase power from GRIDCO at a price to be determined by the Commission. This Price incidentally happens to be the Bulk Supply Price at which GRIDCO supplies power to the DISCOMs. Further, as provided in the OERC (Conduct of Business) Regulations, 2004, OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004 and other related Regulations and as per Section 86 (1) (b) and other applicable provisions of the Electricity Act, 2003, GRIDCO is required to submit its Annual Revenue Requirement (ARR) before 30th November of each year for the ensuing year.
8. As a statutory requirement GRIDCO filed an application for Annual Revenue Requirement and revision of Bulk Supply Price (BSP) for the FY 2009-10 to enable it to carry out its functions of bulk supply to DISCOMs and emergency supply to CGPs.

Projection of Demand and Energy for DISCOMs

9. The Simultaneous Maximum Demand (SMD) of DISCOMs for the FY 2009-10 has been projected at 3089.62 MVA for 2009-10 based on the actual SMD for the month of September'08. GRIDCO revised the average SMD for the month of Sept,08 at 3024.906 MVA in place of 3089.62 MVA in its filing to the reply to Commission's queries. The average actual SMD for 2007-08, the actual SMD for first six months of 2008-09, actual for September'08 and projection for 2009-10 as submitted by GRIDCO in the BSP and ARR application and subsequent replies, are given in Table-1.

Table – 1
Simultaneous Maximum Demand Projection for 2009-10

(Figures in MVA)

Name of the Companies	FY 07-08 (Actual)	OERC approval for 2008-09	Avg. of actual for first six months of 2008-09	Actual for the month of Sept'08	Projection of SMD by GRIDCO for 2009-10
CESU	862.89	874.86	903.35	934.918	934.918
NESCO	661.14	710.25	708.27	674.855	674.855
WESCO	807.32	874.42	918.46	1055.566	1055.566
SOUTHCO	334.87	343.08	348.84	359.567	359.567
TOTAL	2,666.22	2,802.61	2,878.91	3024.906	3024.906

10. In the absence of any data pertaining to projection of Demand for FY 2009-10 by the DISCOMs, GRIDCO has allocated the targeted available energy of **18726.15 MU** amongst the DISCOMs on pro-rata basis based on the projected consumption of DISCOMs during FY 2008-09. Emergency Power Supply to Captive Generating Plants (CGPs) for FY 2009-10 is projected at 10 MU based on the approval of the Commission for FY 2008-09. The actual energy procured by DISCOMs for FY 2007-08, actuals for first six months of FY 2008-09, projection for FY 2008-09 on pro-rata basis and projection for FY 2009-10 as submitted by GRIDCO in its ARR filing, are indicated in Table-2.

Table - 2
Energy Projection for 2009-10

(Figures in MU)

Name of the Companies	FY 07-08 Actual	Actuals for first six months of 2008-09 (from 4/08 to 09/08)	Projection for FY 2008-09 on pro-rata basis	OERC approval for 2008-09	GRIDCO's Projection for FY 2009-10
1	2	3	4	5	6
CESU	5203.86	2828.16	5656.32	5300.00	5719.25
NESCO	4654.93	2272.81	4545.61	4660.00	4596.19
WESCO	5377.1	3085.01	6170.02	5680.00	6238.67
SOUTHCO	1975.28	1074.07	2148.14	1980.00	2172.04
TOTAL DISCOMs	17211.17	9260.05	18520.09	17620.00	18726.15
CGPs	87.45	127.15	137.72	10.00	10
TOTAL SALE	17298.62	9387.20	18657.81	17630.00	18736.15

Power Procurement Projected by GRIDCO

11. GRIDCO projected the total power availability of 19619.11 MU and considered transmission loss of 4.5% for 2009-10. In order to meet the demand of DISCOMs and CGPs and make necessary allowance for transmission loss, GRIDCO has proposed as under:

Table – 3
Demand and Energy Projection for FY 2009-10

Item	Projection for FY 2009-10
SMD for DISCOMs (MVA)	3024.906
Sale of Energy to DISCOMs (MU)	18726.15
Emergency Power to CGPs (MU)	10
Total Sale of Energy (MU)	18736.15
Transmission loss @ 4.5% (MU) in OPTCL system	882.86
Total Energy Requirement (MU)	19619.01
Total Energy Availability (MU)	19619.11

Revenue Requirement Projected for 2009-10

12. GRIDCO has projected to procure hydel power of 6184.44 MU from OHPC including power from Machkund, thermal power of 2955.66 MU from OPGC, 3085.07 MU from TTPS, 450 MU from State CGPs, 530 MU from Renewable Energy and 6413.95 MU Orissa share of power from Eastern Regional stations including Tala, Chukha and Teesta during FY 2009-10 totalling to 19619.11 MU.
13. The projected drawl of 530 MU from the Renewable sources during the year 2009-10 include 280 MU of co-generation from NINL, Arati Steel and Tata Sponge taken together. Generation of power in these cases is considered as co-generation as the same is stated to be from waste heat recovery. Further GRIDCO has projected procurement of 250 MU from new small hydro projects like Samal and Minakshi. The cost of energy from Renewable & Non-Conventional sources has been very prohibitive. However, keeping in line with the constraints, GRIDCO expects to procure about 530 MU of these power at an assumed rate of 264.15 paise per kWh at a cost of Rs.140 cr.
14. GRIDCO has assumed that the OERC approved rates of energy from different OHPC Stations for FY 2008-09 in its application for FY 2009-10 provisionally. Accordingly

GRIDCO has proposed to procure OHPC power of 6184.44 MU at a cost of Rs.320.18 cr. @ 51.77 P/U including Machhakund power.

15. The power purchase cost from OPGC for 2955.66 MU @ 194.04 P/U comes to Rs. 573.51 crore for FY 2009-10. The Power purchase cost proposed is based on the settlement approved by the Govt. of Orissa and the Board of Directors of GRIDCO, which is subject to the approval of the Commission.
16. The Pricing Policy for CGP Power has been notified by the Commission vide their Order dated 14.03.2008 in case No. 72/2007 which requires GRIDCO to procure power from CGPs through a Competitive bidding route u/s 63 of the Electricity Act, 2003. GRIDCO has already initiated action for procurement of power from CGPs in accordance with the Pricing Policy enunciated by OERC. The process of determining price of each interested CGPs to supply power will take time. The price will also vary from unit to unit. Under the present circumstances, where the availability of power has fallen short of demand and in a scenario where CGPs are pressing hard to get higher rates for their surplus power or else they would prefer to sell the power outside by availing Open Access, it is proposed to procure such surplus power from the CGPs in accordance with the Pricing Policy of OERC. The cost has been provisionally estimated at Rs.3.00 per kWh. The Commission may, however, consider the actual procurement price determined through the bidding route in the ARR for FY 2009-10 keeping in view the incentive to maximise the generation from the existing CGPs. Accordingly, GRIDCO has proposed to procure 450 MU at a cost of Rs.133.97 cr. @ 297.71 P/U for FY 2009-10.
17. Since the Final Tariff Regulations of CERC for the period 2009-14 was yet to be released by the time of GRIDCO's ARR application, GRIDCO considered it prudent to take the Fixed Cost as approved by the CERC for the respective Central Sector Stations for FY 2008-09 in the tariff proposal for FY 2009-10.
18. The detailed cost of power purchase as furnished by GRIDCO for 2009-10 is reproduced hereunder in Table-4.

Table – 4
Projected Power Procurement by GRIDCO for 2009-10

Sources	Energy (MU)	Rate (P/U)	Total cost (Rs.Cr.)
Hirakud	1,132.79	53.46	60.56
Rengali	1,171.17	52.61	61.62
Balimela	817.74	46.38	37.93
Upper Kolab	826.65	25.81	21.34
Total	3,948.35	45.95	181.44
Indravati	1,971.09	66.90	131.86
Machhakund	265.00	25.92	6.87
Total	6,184.44	51.77	320.18
OPGC	2,955.66	194.04	573.51
TTPS	3,085.07	155.46	479.61
CGPs	450.00	297.71	133.97
Renewable Energy Source	530.00	264.15	140.00
State Total	13,205.16	124.74	1647.26
TSTPS Stage-I	1981.42	169.14	335.14
TSTPS Stage-II	1246.18	172.85	215.40
Farakka	1357.95	215.43	292.54
Kahalgaon-I	784.62	214.03	167.93
Kahalgaon-II	114.79	228.31	26.21
Total CS Thermal Stations	5484.95	189.10	1037.22
Chukha	265.00	186.56	49.44
TALA	174.00	211.52	36.81
Teesta-V	490.00	188.64	92.43
Total ER Stations	6413.95	189.57	1215.89
TOTAL	19619.11	145.94	2863.15

Pass Through of other Expenses

19. GRIDCO has proposed a sum of Rs.866.32 crore to be recovered through tariff of the FY 2009-10 on account of past losses and uncovered expenses during 2008-09 as detailed in Table-5.

Table – 5
Pass through of Previous Loss & Uncovered Expenses

Sl. No.	Item	GRIDCO's Proposal for 2009-10
1	Special Appropriation for repayment of Principal Loan due to very less amount of depreciation	394.09
2	Recovery of revenue gap due to procurement of costly power during FY 2008-09	399.66
3	Arrear power purchase dues of OPGC	72.57
	Total	866.32

Interest and Financing & Establishment charges

20. GRIDCO has projected an amount of Rs.6.8 crore towards employees cost during FY 2009-10 including arrears by factoring reasonable increases under different sub-components. Based on the actual expenses under this head of Rs.2.00 crore during FY 2007-08 & approval of Rs.3.33 crore for FY 2008-09 and keeping in line with the 6th Pay Commission Recommendation for revision of Pay Scales, GRIDCO has considered an amount of Rs.6.8 crore towards Employees Cost. The interest & financing charges including establishment cost etc. as proposed by GRIDCO is presented in Table-6.

Table – 6
Interest, Financing & Establishment Charges for 2009-10
(Rs. Crore)

	GRIDCO's Proposal for 2009-10
1. Interest Cost	128.49
2. Other Costs:	
a. Employee Cost	6.80
b. A&G Cost	5.14
c. ERLDC, NLDC fees and SLDC scheduling Charges	1.32
d. Repair & Maintenance expenses	0.50
Sub-Total – Other Costs:	13.76
Total (1+2)	142.25

Return on Equity:

21. GRIDCO has proposed RoE of Rs.60.62 Cr @ 14% on its equity capital of Rs. 432.98 Cr.

Other Income / Miscellaneous Receipts:

22. GRIDCO expects to earn an amount of Rs. 3.30 crore from proposed sale of 10 MU emergency power to NALCO and ICCL.

Annual Revenue Requirement:

23. The proposal for Annual Revenue Requirement of GRIDCO for FY 2009-10 is summarised in Table-7.

Table - 7
Annual Revenue Requirement of GRIDCO for 2009-10

(Rs. Crore)			
	Item	OERC approval for 2008-09	GRIDCO's Proposal for 2009-10
a)	Power Purchase Cost	2351.75	2863.15
b)	Previous Loss including repayment of principal	-	866.32
c)	Interest, Finance & Establishment Charges	134.78	142.25
d)	Return on Equity	-	60.62
e)	Revenue Requirement (a+b+c+d)	2486.53	3932.34
f)	(-) Misc. Receipts	239.37	3.30
g)	Net Revenue Requirement (f-g)	2247.16	3929.04

Proposed Revenue Earning at Existing BSP Rates:

24. GRIDCO proposes to earn revenue of Rs.2288.10 crore during 2009-10 from the anticipated sale of 18726.15 MU to DISCOMs at the existing BSP rates for 2008-09.
25. A summary of the proposal of GRIDCO's expected revenue earning during 2009-10 is furnished in Table-8.

Table – 8
Expected Revenue for 2009-10 with anticipated sale to DISCOMs
at Existing BSP Rates

	CESU	NESCO	WESCO	SOUTHCO	TOTAL
Energy in MU	5719.25	4596.19	6238.67	2172.04	18726.15
Existing Rate P/U	101.50	125.00	157.25	70.00	122.15
Gross Revenue from Energy Charges (in Rs. crores)	580.50	574.52	981.03	152.04	2288.10

Excess or Deficit in the ARR for 2009-10:

26. With the present tariff structure, GRIDCO cannot meet its net Revenue Requirement estimated at Rs.3929.04 crore. The estimated revenue to be earned by GRIDCO during the year 2009-10 is Rs.2288.10 at the existing BSP rates. As a result there accrues a deficit of Rs.1640.94 crore as shown in Table-9.

Table - 9
Excess or Deficit on Revenue Requirement for 2009-10

		(Rs. Crore)
	Item	GRIDCO's Proposal for 2009-10
a)	Total Revenue Requirement	3932.34
b)	Less: Misc. Receipts	3.30
c)	Net Revenue Requirement	3929.04
d)	Net Receipt from sale of power to DISCOMs	2288.10 (at existing tariff)
e)	Excess(+) or Deficit(-)	(-) 1640.94

Recovery of Cost in the ARR during 2009-10:

27. In order to meet this estimated deficit of Rs. 1640.94 crore, GRIDCO submitted the application before the Commission requesting for revision of bulk supply price for 2009-10. The licensee proposes to recover the Net Revenue Requirement of Rs.3929.04 crore from the Distribution Licensees through rise in BSP from the existing average energy charge of 122.15 P/U to 209.82 P/U during 2009-10 indicating a hike of 71.77 % over the previous year.

Demand Charge:

28. GRIDCO has proposed that the Demand Charges may be levied @ Rs.200/KVA/Month from DISCOMs when the actual SMDs of DISCOMs exceed the permitted SMDs approved by the Commission during the FY 2009-10 in line with the approval by the Commission for the FY 2008-09.

Over Drawl Charges

29. 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

30. GRIDCO proposes that on payment of the monthly bill, the DISCOMs 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

31. GRIDCO has proposed that the monthly charges 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 the amount remaining unpaid (excluding arrears on account of delayed payment surcharge).

Duty and Taxes

32. 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 the Bulk Supply Price.

Summary of Tariff Filing for 2009-10

33. GRIDCO prays that the Commission may approve the following for FY 2009-10 and make the same effective from 1st April, 2009.
 - i) Energy charges @ 209.82 paise/unit on energy supplied.
 - ii) Charges for over drawl of 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 @ 2% / 1% as proposed above.
 - v) Duty and Taxes as proposed.

VIEWS OF THE OBJECTORS ON BULK SUPPLY PRICE PROPOSAL FOR 2009-10 (Para 34 to 149)

34. During the hearing, the Licensee was allowed at the outset to give a power point presentation regarding its ARR and BSP application for the FY 2009-10. The representative of Nabakrushna Choudhury Centre for Development Studies,

Bhubaneswar appointed as consumer counsel put up certain queries and objections regarding ARR and price filing of GRIDCO. The objectors also made a number of comments/observations regarding the submission of the licensee. Director (Tariff) then raised certain queries and sought clarification on the licensee's filing.

35. 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 2009-10. Based on their nature and type, these objections have been categorized broadly as indicated below:

Nabakrushna Choudhury Centre for Development Studies (NCCDS)

36. 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/feedbacks on the tariff matters in the interest of different sections of consumers. The representative of NCCDS had analyzed the application of the licensee and some of the important observations are as follows:

Revenue Gap

37. GRIDCO has projected a revenue gap of Rs 1640.94 crore for the FY 2009-10 with a net revenue requirement of Rs 3929.04 crore and revenue receipts of Rs 2288.10 crore at existing BSP. However, in the revenue requirement it has included a proposal of Rs 866.32 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 2009-10. It has proposed to increase the energy charge by 71.77 per cent from the existing charge of 122.15 P/U during 2008-09 to 209.82 P/U during 2009-10. 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 2009-10 is presented in the following.

Table – 10
Revenue Gap Projected by GRIDCO for the FY 2009-10
(Rs in crore)

A	Expenditure	
	Cost of power purchase	2863.15
	Employee costs	6.80
	A&G expenses	5.14
	R&M expenses	0.50
	ERLDC & NLDC charges	1.32
	Interest and financial charges	128.49
	Total expenses	3005.40
B	Special appropriation	
	Carry forward of previous losses	399.66
	Repayment of loan	394.09
	Arrear payment to OPGC	72.57
	Total	866.32
C	Return on Equity	60.62
	Gross Revenue Requirement (A+B+C)	3932.34
D	Less Misc. Receipts	3.30
E	Net Revenue Requirement	3929.04
F	Revenue expected from sale of power to DISCOMs at the existing BSP	2288.10
G	Revenue Gap during FY 2009-10	1640.94

38. The gap arises as a result of the proposal for increase in ARR during FY 2009-10 on account of accumulated past losses and rise in employee cost and other expenses.

Pass Through of Past Losses

39. The proposal for ‘pass-through’ of past losses and past payments to the extent of Rs 866.32 crore, if approved, would pose burden on the general consumers of the state. This, therefore, should not be considered.

Employee, R & M, and A&G Expenses

40. Employees’ cost during 2008-09 was approved at Rs3.33 crore. GRIDCO projects Rs.6.80 crore for the FY 2009-10, which is an increase of 104.20 per cent from the approved figure for FY 2008-09. This seems to be very high. The employees’ cost on the basis of revised pay and pension may not exceed Rs.4.00 crore.

41. GRIDCO has proposed 113.28 per cent increase in A&G expenses from Rs 2.41 crore approved for FY 2008-09 to Rs 5.14 crore for the FY 2009-10. This increase also seems to be very high. Even with 15% hike the A&G expenditure should not exceed Rs.2.80 crore.
42. GRIDCO has proposed Rs 0.50 crore for R&M expenses during FY 2009-10. The Commission had not approved any R&M cost proposed by GRIDCO during 2008-09.

Power Procurement Costs

43. GRIDCO is proposing to purchase less than one-third of the 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. If the availability of power from hydro-based stations 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 for the FY 2009-10

Generators	Energy (MU)	Rate (P/U)	Total Cost (Rs. Cr.)
State Hydro	6184.44	51.77	320.18
State Thermal	7020.73	189.02	1327.09
Total State	13205.16	124.74	1647.26
Central sector	6413.95	189.57	1215.89
Total	19619.11	145.94	2863.15

Transmission Loss

44. GRIDCO has proposed a transmission loss of 4.5%, the rate that was approved by OERC for FY 2008-09. But OERC had approved transmission loss of 4% during 2006-07. Kanungo Committee had recommended for a stepwise reduction of transmission loss so that the same is brought to a level at par with that of the CTU by 2007. However, the trend seems to be in the reverse direction. Therefore, in conformity with the power sector reform, the transmission loss may be reduced and fixed at 3% for the FY 2009-10. This would increase the revenue for power sale to the DISCOMs and CPPs during 2009-10.

Projection of Demand

45. GRIDCO has projected only 1.11 per cent increase in sale of energy to DISCOMs during the FY 2009-10 over FY 2008-09 as compared to 7.61 per cent increase in 2008-09 (prorated projection) over 2007-08. GRIDCO has, therefore, underestimated sale of power to all the DISCOMs during FY 2009-10. The projection of demand made by GRIDCO is an underestimated one and not based on proper scientific method. The Licensee has estimated the energy projection during FY 2009-10 considering the projection during 2008-09 prorating first sixth months of actual demand by the DISCOMs. However, there is a need to examine how far the projection based on first six month shall be justified.

Table - 12

Energy Sale to DISCOMs (MU)

Agency	2007-08 Actual	Projection for 2008-09 prorating 1 st six months' actual	% Change over 2007-08	GRIDCO projection for FY 09-10	% Change over 2008-09
CESU	5203.86	5656.32	8.69	5719.25	1.11
NESCO	4654.93	4545.61	-2.35	4596.19	1.11
WESCO	5377.10	6170.02	14.75	6238.67	1.11
SOUTHCO	1975.28	2148.14	8.75	2172.04	1.10
Total DISCOMs	17211.17	18520.09	7.61	18726.15	1.11

Profit from sale of power

46. 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

47. 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 roadmap envisaged under power sector reform and needs to be reduced gradually and significantly.

Legal Issues:

48. GRIDCO is neither a generator nor distributor but merely a trader and the application filed by GRIDCO is not bonafide and tenable under law, as such the same is liable to be rejected.
49. The application so filed by GRIDCO for determination of tariff is not tenable as the Commission has no authority under law and particularly under Section 62 of Electricity Act, 2003 to determine tariff on the application of a trader.
50. The notice so published inviting objection does not conform to the requirements of law and does not disclose for what purpose such revenue requirements are asked for without giving details of its calculations.
51. GRIDCO's accounts have not been audited for the financial year 2006-07 and 2007-08 as such its yearly audited accounts are not available. This application is to be rejected outright which is based on incorrect and manipulated statement of facts/materials/accounts.
52. In accordance with Section 14 of the Electricity Act, 2003 GRIDCO is a Deemed Trading 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 an Electricity Trader for Intra-State trading of power.
53. In the OERC (Terms and Conditions for Determination of Tariff) Regulation, 2004 there is provision for filing 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.
54. Functioning of GRIDCO as company is unnecessary to act as middle man between the generators and distribution licensees.
55. GRIDCO is an intra-state trader and entitled only to a margin and the approval of ARR is not as per law. The present application of GRIDCO as such is not maintainable and should be rejected and in accordance with the provisions of National Electricity Policy, the PPA should be allocated to the DISCOMs.
56. GRIDCO has sought determination of ARR & BST for the FY 2009-10 under Sec. 86(1) (b) of the Electricity Act, 2003. This Section only enables the Commission to regulate the electricity charges and procurement process of the Distribution Licensees. It is no where stated that the ARR has to be determined for a Trader like GRIDCO.

57. Clause 53(1) and 61(2) of the OERC (Conduct of Business) Regulations, 2004 provides for filing of application for determination of Tariff in respect of Transmission & Distribution Licensees and Generating Companies respectively.
58. As envisaged in Section-131(2) of the Electricity Act, 2003 the past liabilities cannot be transferred to GRIDCO because it is neither a Generating Company nor a Transmission Licensee nor a Distribution Licensees. Similarly no past losses can be recovered by GRIDCO, the deemed Trading Licensee.
59. The Commission may examine whether GRIDCO has compiled with the directions, conditions of licensee etc. issued by the Commission.
60. CERC in its order dated 1st May 2006 held that GRIDCO is an intra-state trader and was entitled only to a margin.

Simultaneous Maximum Demand, Contract Demand and Billing Demand

61. In the absence of any communication from the DISCOMs, GRIDCO has considered the energy demand on its own on the basis of a particular month's consumption, which varies from the demand projected by DISCOMs. The Commission should set up a high level Committee of their own to assess the actual power demand of the state.
62. The SMD is much higher than the present availability. GRIDCO should take appropriate action to meet the demand.
63. Some objectors have estimated SMD to be 2900 MVA as against 3089.62 MVA estimated by GRIDCO due to global financial melt down.
64. 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:

65. The quantum of energy estimated by GRIDCO for sale to DISCOMs might not be considered as the DISCOMs had submitted their requirement in their respective ARR. The drawl of energy submitted by the DISCOMs may be considered.

66. Higher availability from Central Thermal Stations at about 90% PLF during off peak hours be purchased to create a surplus by regulating/restricting Hydro generation.
67. The Commission should scrutinize the projection given by GRIDCO regarding the power availability from the generation stations, CGPs and procurement proposed by GRIDCO for the year 2009-10, by applying the distribution losses and transmission losses as approved by the OERC in earlier orders/projections for the year 2009-10.
68. The projections given by State Generating Stations like 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.
69. In absence of any communication from the DISCOMs 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. GRIDCO has taken no steps to approach the Commission to direct the DISCOMs to submit their filing relating to requirement of energy and SMD for 2009-10.

OHPC:

70. GRIDCO has not independently assessed the availability of hydro power but has merely accepted the data submitted by the OHPC, based on Design Energy. GRIDCO should schedule for higher energy availability from OHPC through suitable incentives in PPAs.
71. The availability of power from state hydro stations would be around 7680 MU in FY 2009-10 as against the GRIDCO proposal of 6184 MU.
72. 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 stations.

State Thermal Power

73. The availability of power from state thermal plants will be more in line with the performance trends of past years. The PLF for OPGC and TTPS would be 90% and 88.12% respectively for FY 2009-10.

CPPs:

74. CPPs may be encouraged with higher charges for their surplus power injected to the system beyond the quantity as estimated by GRIDCO. The total energy availability could go up, if additional energy is procured from CPPs, which of course depends on the remunerative price offered by GRIDCO.
75. The efforts to procure CGP surplus power was long delayed and action was taken only in January, 2009 whereas the Commission had passed order in March, 2008.

76. The objectors do not agree with the projections made by GRIDCO in terms of energy drawl from the CPPs. They submitted that the availability from CPPs might be considered as 716 MU instead of 543 MU projected by GRIDCO.

Generation from Renewable Energy

77. Proposed receipt of power from NINL, Arati Steel and Tata Sponge as renewable source of energy is incorrect as these plants are not co-generation plants.
78. GRIDCO has not stated whether in accordance with the orders of the Commission, it has finalized an agreement with PTC India Ltd for sourcing of power from the small Hydro stations like Samal and Minakshi as proposed in its application.

Total Power Availability:

79. Some objectors do not agree with the projected availability of power of 19619 MU as proposed by GRIDCO and estimated that the total availability of power would be 22266 MU during FY 2009-10.
80. 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.
81. The Commission may pass orders as to whether permission for power supply to new industries can be refused in case there is shortage of power supply requiring statutory load shedding. Presently GRIDCO is not releasing in full the demand of power required by the industry.
82. Total additional thermal capacity from the state generating sources has been taken as 6490 MU & renewable energy 530 MU. If additional energy is procured from CPPs, along with off peak energy & infirm energy from thermal stations to the extent of 1000 MU, the total energy availability could substantially go up.
83. GRIDCO should make necessary arrangement for procurement of long term power from different IPPs in various states to meet its demand. The long term power is a cheaper power and can be easily sourced as lot of power stations are coming.

Transmission Loss

84. A transmission loss of less than 4% on the OPTCL transmission line should be allowed.
85. The Transmission Loss @4.5% projected by GRIDCO should not be taken into consideration as this is a Grid line for intra-state transmission. The inter-state transmission loss is 3% only as per CERC approval.
86. GRIDCO may take up a network study both for peak and off-peak hours in high hydro & high thermal conditions to know not only the theoretical loss but also conditions of overloaded lines for high loss sections. If GRIDCO has undertaken such studies, the result may be informed.

Power Procurement Cost

87. 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.
88. All the expenses should be limited to 4 P/U as in case of Power Trading Company, which comes to Rs. 70.80 crore for GRIDCO.
89. 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 four Distribution Companies based on the principle that the retail supply tariff shall be common all over the State.
90. 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.
91. The cost of power projected by OHPC should not be taken into account.

OPGC:

92. 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 each year. 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 each year.
93. The Fixed Cost to OPGC may be estimated for 2009-10 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.
94. The revised PPA with OPGC should be approved only through a public hearing. It is well settled that only OERC and not the Govt. of Orissa can stipulate the terms and conditions for determination of tariff for a Generating Station.
95. GRIDCO being a Govt. Company and the Govt. is a major share holder of OPGC, the cost of power of OPGC should not be 194.04 P/U.
96. GRIDCO being a party to the PPA with OPGC, it should be directed to take adequate steps to expedite the case with the Supreme Court so that the tariff for purchase of power from OPGC shall be in accordance with the Regulations for determination of tariff for Generating Companies enunciated by CERC/OERC under Electricity Act, 2003.

TTPS

97. Some objectors do not agree with the submissions made by GRIDCO estimating the Annual Fixed Charge to be Rs. 197.82 crore. They have considered the fixed costs of RS

183.92 crore by taking into account the CERC Notification regarding the approval of tariff in respect of TTPS.

CPPs

98. CPPs may be encouraged to fully utilize their installed capacity by paying higher charges for their surplus power injected to the system beyond quantity provided in previous year.
99. The proposed price Rs 3.00/kwh for CPP power has no basis. GRIDCO should make necessary arrangement for procurement of power through competitive bidding.
100. GRIDCO to submit all the PPAs signed with all the CPPs for Commission approval along with technical and financial figures.
101. GRIDCO may procure the entire power from CPP and trade the same giving a lucrative rate of 5.30/unit or 90% of the trading value received from such trade of power in a more transparent manner while retaining 10% of such revenue for its own to make good any regulatory assets that it accumulates.
102. GRIDCO has barred IMFA to get the revised rates as applicable to other CPPs on the ground that IMFA and NALCO have subsisting agreement and therefore IMFA is not eligible for any revised rates. The Commission may direct GRIDCO to allow uniformity in rates as applicable to other CPPs for any surplus injection to GRIDCO by IMFA under the said MOU as the MOU merely guarantees wheeling of a specified quantum of power but not the rate valid for perpetuity.

CGSs:

103. The fixed cost for Central Generating Stations may be considered as approved by CERC for the respective stations.

FPA:

104. Escalation of 4% should be included instead of 10%.
105. The objectors 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.
106. According to the PPA, GRIDCO can verify the data submitted by the Generators. It should confirm whether the fuel cost and the FPA have been verified in relation to at least TTPS, TSTPS and OPGC.

PGCIL Charges:

107. GRIDCO may furnish evidential documents for estimating the cost of Regional Transmission System. In the absence of supporting documents, the claim of PGCIL to the tune of Rs. 3.21 crore for FERV should not be allowed.

108. The estimates of Transmission charges received from Open Access Customers is on a lower side and the Commission may direct GRIDCO/OPTCL to submit details of such charges received for FY 2008-09 till date and for the ensuring year 2009-10.

Establishment & Financing Cost

Employee Cost and A&G Expenses

109. The employee cost projected for FY 2009-10 at Rs.6.80 crore is on the higher side considering the much reduced staff available under GRIDCO. In absence of any detailed computation of pay fixation or arrear dues, it needs a detailed scrutiny by the Commission.
110. The A&G expenses of Rs 5.14 crore include the licensee fees of Rs 1 crore and legal fees of Rs 3 crore. This appears to be higher than normal expenses.
111. Allowing 5.5% increase over the approved amount of Rs.2.41 crore for FY 2008-09, the A&G cost should be limited to Rs.2.54 crore for 2009-10.
112. No amount should be allowed under the head R&M cost.

Interest on Long Term Liabilities

113. GRIDCO had asked for an amount of Rs.128 crore for the year 2009-10 towards long term loan liabilities. The consumers had already paid this cost for the energy purchased from generating companies to the DISCOMs and it was the duty of GRIDCO to collect the amount from DISCOMs.
114. Some objectors have estimated interest cost of GRIDCO at Rs.106 crore as against GRIDCO's proposal of Rs.128 crore.
115. Loans were taken by GRIDCO from Syndicate Bank for one time settlement of Rs 400 crore bond for payment of arrears of WESCO, SOUTHCO and NESCO's dues to NTPC. This was a default of GRIDCO. Consumers have already paid their energy charges. Burdening the consumers again with interest liability of these loans is a penalty on the consumers for which they are not responsible.
116. This principle also applies to other bonds purchase for securitization of old arrears and the interests are allowed to be passed on to consumers, which is unjustified and against the interest of the consumers.
117. Repayment of principal is a part of cash management of GRIDCO and not a part of ARR. The repayment is to be met from the collection from the outstanding dues of DISCOMs and outside states.

Past Losses:

118. GRIDCO proposes for pass through of a substantial amount of past losses, which are mostly on account of its inefficient operation and failure to collect its dues and are

therefore not payable. The proposal of pass through needs to be justified on consideration of prudence after going through the process of public hearing. Some objectors oppose 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. GRIDCO is, therefore, not entitled for consideration of past losses, securitization of arrears and other cost indicated in its application. Even though GRIDCO is entitled to receive 50% of the arrear amount collected by the DISCOMs out of the amount of more than Rs.400 crore written off on 01.04.1999, GRIDCO has made no effort, what so ever, to recover this amount. There is no filing by GRIDCO in this regard.

Truing Up:

119. The fixed cost for Central Generating Stations (TSTPS, FSTPS, KhSTPS) approved by CERC and allowed by OERC in respective FY 2001-02 to 2007-08 may be trued up.
120. FPA allowed earlier in excess of actual in case of Central Generating Stations (TSTPS, FSTPS, KhSTPS) in respective FYs 2001-02 to 2007-08 may be trued up.
121. The performance of all the licensees including GRIDCO should be trued up for the year 1999-00 to 2007-08.
122. The losses for the period prior to privatization of DISCOMs should be taken over by State Government as has been done in other States such as Delhi, Gujarat etc. Such losses have however been adjusted from the revenue earned by GRIDCO after the privatization.
123. Surpluses earned on account of trading/UI should be treated as a resource for all entities which should be ploughed back into the sector for improvement of efficiency through investments.
124. The revenue earned/realized by GRIDCO in the last four years is more than Rs.2000 Cr. through UI charges, export trading and by substantial increase in Bulk supply tariff on WESCO & NESCO. Therefore, it is essential that before passing the ARR orders for the FY 2009-10, the Truing up exercise of GRIDCO should be carried out.
125. To give equitable justice to DISCOMs and GRIDCO, it is logical that the back to back liabilities distributed through the Transfer Scheme to DISCOMs are adjusted with the sectoral truing up so that the balance sheets of all the licensees are cleaned up.

Export of Power & UI

126. The UI charges have not been considered as Misc. receipts. GRIDCO may indicate the amount collected under this head during the year 2006-07, 2007-08 and from April 2008 to September 2008.
127. 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 DISCOMs. Any variation in the estimate should be adjusted in the next year's price determination.

Revenue Requirement

128. GRIDCO is entitled to 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 DISCOMs for 2009-10.
129. GRIDCO should submit a proposal for bulk supply price consisting of Demand Charges and energy Charges as two-part tariff.

Return on Equity:

130. 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.

Levy of Over Drawl Charge

131. Only the incremental cost for additional generation may be approved for billing. In case there is over drawl by any DISCOM over and above the quantum fixed by OERC, additional cost on this account to be recovered from DISCOMs.

Rebate

132. To approve the rebate of 2% to the DISCOMs for prompt payment of BST bills within three working days excluding Sunday and holidays.

RLDC/NLDC Fees:

133. The Commission may allow the amount of Rs. 1.32 crore for 2009-10 as proposed by GRIDCO.

Other Issues:

134. GRIDCO should have gone for competitive bidding, to be assured of definite power supply within 2 to 3 years instead of depending on the huge number of MOUs signed by the Govt. of Orissa.
135. Functioning of GRIDCO as a company is unnecessary in absence of competition.
136. GRIDCO has filed this application in question to confuse the consumer/public without disclosing the purpose for such filing.
137. The procedure/method so adopted by Commission be made simple and inexpensive to enable the public to file purposeful objection effectively.
138. It is not known as to whether GRIDCO has complied with the directions issued in the earlier orders of the Commission.
139. 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 license.

140. Benefits of the progressive laws are not reaching to the honest prudent consumers at the grass root, hilly tract, and agriculture field.
141. Now GRIDCO has been bifurcated to OPTCL and GRIDCO. Further OPTCL is being bifurcated to SLDC, but proper co-ordination with the generating and trading agencies is still lacking.
142. Power generators have earned substantially and the fund thereof needs to be well utilized for upgrading and repairing the existing generating stations.
143. GRIDCO should submit a proposal for bulk supply price consisting of Demand Charges and Energy Charges.
144. There are number of meters recording input to the system from generators including central generators and output for sale to the DISCOMs and export to other states. OERC may like to test check few of the meters by independent inspectors.
145. GRIDCO has proposed steep increase in BST in spite of the large increase in previous years.
146. The Commission has considered substantial increase in Bulk Supply Price in the previous years allowing most of the claims of the GRIDCO ignoring the salient objections of the consumers of the state and DISCOMs.
147. The Commission may reduce the Bulk Supply Price and pass on the benefit of the reforms to the consumers by reduction of RST.
148. Any increase in BST will have direct bearing on RST and in the past the burden of BST increase was loaded on HT & EHT consumers availing load factor incentive.
149. Some objectors requested OERC to issue directives for allocation of PPAs among DISCOMs in accordance with the National Tariff Policy.

GRIDCO's RESPONSE TO THE OBJECTORS (Para 150 to 223)

150. In response to the views of the objectors on GRIDCO's application for approval of the Annual Revenue Requirement and Bulk Supply Price for 2009-10, 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

151. GRIDCO's status is very much consistent with the Law and its filing of ARR & BSP Application for approval before the Commission is also equally tenable because of the following reasons:
152. GRIDCO happens to be a Deemed Trading Licensee under 5th provision of Section-14 of the Electricity Act, 2003. Before the enactment of The Electricity Act, 2003, GRIDCO was "Transmission & Bulk Supply Licensee" under the Orissa Electricity Reform Act,

1995. As such GRIDCO has entered into Long Term Power Purchase Agreements (PPAs) with the Generating Companies and also Bulk Supply Agreements (BSAs) with the DISCOMs. Under the said agreements, GRIDCO is obliged to sell power on priority basis to DISCOMs up to their full requirement and the DISCOMs are obliged to buy power from GRIDCO only. This arrangement is called as single Buyer Model of power procurement for DISCOMs in Orissa that prevails in the State as a matter of Historical Legacy.
153. After hiving off the Transmission function from GRIDCO to OPTCL by virtue of the Govt. of Orissa Transfer Notification No. 6892 dated 09.06.2005, only the bulk purchase of electricity for sale to DISCOMs in Orissa remained with GRIDCO. This satisfies the definition of Trading under Sec 2(71) of the Electricity Act, 2003. Besides, Bulk Supply activity by a Trader is not repugnant to any provisions under the Electricity Act, 2003. Such activity is tenable in Law.
 154. Above all Govt. of Orissa vide Notification No. 7948 dated 17.08.2006 have notified GRIDCO as the State Designated Entity for execution of Power Purchase Agreements with Developers generating energy like Hydro Power, Wind Power, Power from Agricultural wastes etc. along with thermal power. Therefore, the Legal Status of GRIDCO which is a State Govt. Undertaking can not be questioned.
 155. With regard to the question of filing of ARR & BSP Application of GRIDCO before the OERC, it is to clarify that the Commission is empowered under Sec 86 1(b) of the Act to regulate the price for procurement of power by the DISCOMs. Thus, this provision enables the Commission to fix the regulated price for procurement of power by the DISCOMs under the existing Bulk Supply Agreement with GRIDCO. Incidentally the approval of regulated price of power purchase for DISCOMs happens to be the Bulk Supply Price of GRIDCO under the present arrangement and as such the Commission is empowered to approve the ARR & BSP of GRIDCO. Hence, GRIDCO's submission of its ARR & BSP application before the OERC for approval is quite consistent and very much tenable under the law.
 156. The Annual Account of GRIDCO has been audited till FY 2007-08 and the same has been submitted to the Commission in the compliance to the OERC's Queries dated 06.01.2009.
 157. Public Notice to this effect is published in widely circulated English and Oriya Dailies in Orissa. Besides, follow up publications are taken up in Newspapers in order to keep the consumers informed in the process of determination and approval of ARR & BSP of GRIDCO through Public Hearing.
 158. The Application is quite detailed and voluminous consisting of two volumes. Volume-I contains the ARR Application along with filed in Commission prescribed formats

substantiating the detailed calculation and the vol-II contains Evidential Documents supporting every expenditure. So, GRIDCO has never tried to hide any information.

159. The issues relating to ARR & BSP for FY 2006-07 is pending before the Supreme Court of India in C.A. No.417/2004 & that for FY 2007-08 is pending before the Appellate Tribunal for Electricity in Appeal Nos. 55, 56 & 57 of 2007. In the Appeal before the Supreme Court of India, there has been an Interim Order directing OERC not to proceed further. Therefore, it can not be said that the Distribution Companies (DISCOMs) have stalled the Bulk Supply Price fixed by the OERC. The recent Supreme Court Judgment referred to relates to trading matter & is not related to BSP Order of the OERC.

Simultaneous Maximum Demand and Energy Demand

160. There has been recessionary trend in Industries due to global meltdown. However due to implementation of Rural Electrification Programmes in Orissa under RGGVY & BGJY Schemes, the demand for energy is also increasing. Thus, by taking a balanced & realistic view, the SMD for Septemehr'08 of the current year (FY 2008-09) was taken as the basis for projection of SMD for the ensuing year i.e. 2009-10.
161. The Simultaneous Maximum Demand (SMD) of 3089.623 MVA applied for in the ARR & BSP Application dated 01.12.2008 now stands revised to 3024.906 MVA due to revision of the Energy Bills for Septemehr'08 which was taken as the projection of SMD for FY 2009-10.

Energy Availability and Procurement

162. GRIDCO has projected the availability of energy during FY 2009-10 based on the generation plan submitted by different generators and assuming 80% PLF for Central Generating Stations as per the CERC Norms.
163. The suggestion of the objector to consider a projection of 7680 MU from OHPC stations during FY 2009-10 is too unrealistic and may not be accepted at all.
164. The estimation of the projected availability of energy of 19619.11 MU (Net availability of 18736.15 MU for DISCOMs and CGPs) by GRIDCO during FY 2009-10 may be considered as realistic.
165. Any additional availability is welcome, if the same could be marketed at remunerative price and also the cost of the same is passed in the ARR & BSP of GRIDCO.
166. GRIDCO has proposed the estimated availability of power at 19619 MU during FY 2009-10 based on the generation plan furnished by the State Generators including CGPs and considering GRIDCO's share from Central Generating Stations of Eastern Region at 80% PLF. After considering 4.5 % towards Transmission Loss (882.86 MU), the net availability of energy (18736.15 MU) is for supply to the DISCOMs & CGPs. Thus, the assumption that 883 MU is to be traded, is factually wrong.

167. In the absence of any data pertaining to projection of the energy requirement for FY 2009-10 by the DISCOMs, GRIDCO has allocated the availability of net energy of 18726.15 MU amongst the four DISCOMs on pro-rata basis based on the projected consumption of DISCOMs during FY 2008-09.
168. With regard to the energy availability of 22262 MU and consequent net energy availability of 19052 MU consisting of 19042 MU for sale to DISCOMs and 10MU for sale to CGPs as projected by the objector may be considered as an over-estimation of energy availability to GRIDCO.

Hydro: (OHPC)

169. The Design Energy of OHPC Old Stations in a year of normal hydrology is 3676.86 MU. In last two years of ARR, the OERC had considered the design energy as the availability of power from OHPC stations. During the FY 2008-09 due to scanty rainfall, the Balimela reservoir and Upper Kolab reservoir have been filled upto 40% and 50-55% respectively. During this year, there is less possibility of achieving the targeted drawal of 5884 MU from OHPC Stations. However, based on the projection of OHPC Stations for the year 2009-10 and after deducting 5MW allocation to Chhatisgarh and 1% towards Transformation Loss and Auxiliary Consumption, GRIDCO has accordingly projected 5919.44 MU from OHPC Stations which is more than the Design Energy. Monsoon is always uncertain and acceptance of a such a high figure (7700 MU) as suggested by the objector would mean reduced drawal from high cost energy sources which in turn would affect power purchase cost in case of reduced generation from hydro stations.
170. Monsoon is always uncertain and acceptance of a high availability of 7700 MU from hydro power as suggested by the objector would mean reduced drawl from high cost energy sources which in turn would affect power purchase cost in case of reduced generation from hydro stations.
171. The availability of power from Hydel Stations is directly proportional to the reservoir levels which are dependent on the quantum of rainfall. Scanty rainfall during FY 2008-09 has resulted in lower reservoir levels leading to less generation of hydro power & consequently comparatively less drawal from Hydro Stations in relation to the corresponding period in FY 2006-07 & FY 2007-08. It may be noted that as per Provisional Pool Cost for the month of December'08, the drawal of energy during the first 9 months (April'08 to December'08) from all OHPC Stations including Upper Indravati and Machhkund, has been 4546.427 MU approximately and the projected availability for January'09 to March'09 is 1153 MU and the total availability comes to 5700 MU which is less than the target of 5884 MU approved in the ARR & BSP Order for FY 2008-09. A direct corollary of the low hydrology is that it will seriously jeopardize the finances of GRIDCO, as the shortfall of power caused due to low hydrology would require to be compensated by high cost thermal power

Thermal

172. GRIDCO has projected to procure 6040 MU of Thermal energy from State dedicated Stations like OPGC (2955.66 MU) & TTPS (3085.07 MU) in the ARR & BSP Application for FY 2009-10 based on their generation plan. With inclusion of 450 MU of infirm CGP power, it works out to 6490 MU. Any projection beyond what has been planned by Thermal Stations will be without any basis and may distort the entire projection for the Sector as a whole.
173. As suggested by the objector, any additional availability is welcome, if the same could be marketed at remunerative price and also the cost of the same is passed in the ARR & BSP of GRIDCO.
174. With regard to likelihood of commissioning of Power Generating Stations during FY 2009-10, it is submitted that CGPs like Aryan Ispat Ltd. (5MW), Rathi Steel & Power Ltd. (2.30 MU/Month) and Visa Steel Ltd. (2 MW) promising supply of power to GRIDCO have signed PPAs. Small Hydel Plants like Middle Kolab, Lower Kolab & Samal HEP having capacities of 25 MW, 12 MW & 20 MW, respectively are likely to be commissioned during FY 2009-10.
175. Similarly, two Units, each having capacity of 600 MW of the IPP of Sterilite (Vedant) are likely to go on stream during FY 2009-10.
176. **OPGC:** GRIDCO has relied upon the Generation Plan submitted by OPGC for FY 2009-10 in so far as the gross generation of energy is concerned. However, the ESO from OPGC is estimated as 2955.66 MU in the ARR & BSP Application for FY 2009-10 as GRIDCO has assumed 9.50% towards Auxiliary Consumption as per the PPA signed with OPGC whereas OPGC has taken 2939.251 MU by assuming 10% towards Auxiliary Consumption.
177. **TTPS:** The generation plan submitted by TTPS for FY 2009-10, the net energy availability to GRIDCO has been projected at 3447.00 MU at a computed PLF of 85.54%. With adjustment of Auxiliary Consumption of 10.50% (as per the Revised CERC Norms), the Ex-Bus availability from TTPS is projected at 3085.07 MU.
178. **CGPs:** GRIDCO has projected 450 MU of power to be procured from CGPs during FY 2009-10 whereas the objectors, in their submission, have scaled up such projection to 736 MU. In this regard, GRIDCO submits that any higher procurement from CGP sources is welcome provided the purchase and sale of CGP power to meet the State demand is remunerative to GRIDCO and the corresponding costs are allowed by OERC in the ARR and BSP of GRIDCO.
179. **CGSs:** With regard to higher PLF and procurement of energy in case of Central Sector Thermal Power Station for projection in the GRIDCO's ARR and BSP Application as suggested by objector, GRIDCO submits that any higher availability is always welcome provided the economics of purchase & sale of power proves to be remunerative and is with the approval of the Commission. Assumption of higher PLF achieved during

previous years, may not be the yardstick for projecting the same for the ensuing year rather it is realistic and proper to assume the CERC norms as the appropriate basis for such projection.

180. In view of the above, the estimation of the projected availability of energy of 19619.11 MU (Net availability of 18736.15 MU for DISCOMs and CGPs) by GRIDCO during FY 2009-10 may be considered as realistic and accordingly be accepted by the Commission instead of considering the over estimated energy projection of 22266 MU by the objectors.
181. GRIDCO tries and will continue its efforts to harness procurement of power from all sources in order to meet the State Demand through DISCOMs including the requirement of power under Rural Electrification Programme under RGGVY and BGJY.

Renewable Energy

182. The proposed power supply from NINL, Aarti Steel and Tata Sponge Ltd. is considered as Renewable Source of energy as the power generation in these cases is obtained from waste heat recovery process.

Transmission Loss:

183. 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.
184. The transmission loss for FY 2008-09 has been approved at 4.5% by the Commission based on the actual loss 4.56% (April-07 to January-08) in the OPTCL system as per the Gross Method prescribed by the Commission. The transmission loss which is technical in nature and depends upon several factors, is beyond the control of the Utility.
185. The transmission loss of GRIDCO / OPTCL System is one of the lowest in the country.
186. Unlike previous years, during FY 2008-09, the total power allocation from Central Sector Generating Stations is being utilized inside the state for State consumption instead of being utilized for trading/ UI. Due to increase in demand of power inside the State the same situation is expected to continue during the ensuing year FY 2009-10. Hence, the transmission loss will obviously rise during FY 2009-10 in comparison to previous years.
187. However, taking into account the OERC approval of transmission loss @4.50% for FY 2008-09, GRIDCO has projected a loss of 4.50% as projected by OPTCL in its ARR and transmission tariff application for FY 2009-10.

Sales Projection

188. In the absence of any data pertaining to projection of energy requirement for FY 2009-10 by the DISCOMs, GRIDCO has allocated the availability of net energy of 18726.15 MU

amongst the four DISCOMs on pro-rata basis based on the projected consumption of DISCOMs during FY 2008-09.

189. With regard to the energy availability of 22262 MU and consequent net energy availability of 19052 MU consisting of 19042 MU for sale to DISCOMs and 10 MU for sale to CGPs as projected by the objector this may be considered as an over-estimation of energy availability to GRIDCO.

Power Procurement Cost:

190. OHPC has submitted its Application before OERC for approval of its ARR and Generation Tariff of its Hydro Stations for FY 2009-10. Once approved, the OHPC tariff for FY 2009-10 would be reckoned by the Commission while approving the power purchase cost in the ARR & BSP of GRIDCO for FY 2009-10. As such, such costs will be binding on all the concerned entities / licensees.
191. The OERC is requested to consider and approve the Tariff for TTPS as per the Revised CERC Tariff Norms applicable for the period FY 2009 to 2014.
192. OPGC, in conformity with OERC Orders, should furnish its ARR & Tariff Application before the Commission for approval.
193. CERC has notified the Tariff Norms for the period 2009 to 2014 on 19.01.2009 based on which OERC is requested to approve the Tariff for the Central Sector Stations in order to arrive at the power purchase cost to be factored in the ARR & BSP of GRIDCO for FY 2009-10.
194. With regard to FPA, GRIDCO had submitted the same with an escalation factor of 10%; but the same is going to be much more because of stiff rise in coal prices in recent months. OERC is requested to kindly consider and approve the FPA based on the current coal (indigenous and imported) prices.
195. The cost of Coal during December'08 vis-a-vis the cost during November'08 of different NTPC Stations is furnished below for reference:

Table-13

NTPC Thermal Stations	Average Price of Coal during Novemembr'08 (Rs./MT)	Average Price of Coal during Decemebr'08 (Rs./MT)
TTPS	668.00	1335
FSTPS	1432	2291
TSTPS Stg.-I	875	1431
TSTPS Stg.-I	875	1431
KhSTPS Stg.-I	1099	2229

Computation of PGCIL Transmission Charges

196. The relevant Orders of CERC pertaining to tariff for different transmission lines of PGCIL have been furnished to the Commission. Therefore, the contention of the objector for non-admission of FERV to the tune of Rs.3.21 crore may not be considered. The same amount is claimed by GRIDCO towards PGCIL's additional expenditure on account of change / increase in interest rates on various relevant loans. Evidential Documents for Rs.3.21 crore have been already submitted by GRIDCO before the Commission.
197. The new Tariff Norms for the period 2009 to 2014 have been notified by CERC based on which OERC may approve the applicable PGCIL Transmission Charges for factoring the same in the ARR & BSP of GRIDCO for FY 2009-10.

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

198. The projection of Rs.6.80 crore by GRIDCO towards employee cost against the OERC approval of Rs. 3.33 crore for FY 2008-09 is due to the consideration of the impact on account of the likely pay revision as per the recommendations of the Sixth Pay Commission as adopted by the State Government. It may be noted that the Report of Sixth pay Commission has already been accepted by Govt. of Orissa with effect from 01.01.2006 and GRIDCO is likely to adopt the same.
199. The projection of Rs.5.14 crore towards A&G expenses has been based on the increasing Legal & other Expenses year after year while payment of Licence Fee of Rs. 1 crore is a statutory fees which has to be paid. Because of revision in the scale of pay and rise in expenditure on consumer awareness activities the license fee is likely to increase to Rs.2.00 crore.
200. GRIDCO has projected bare minimum and reasonable R & M expenses of Rs.0.50 crore towards Repair and Maintenance of vehicles, furniture and office equipments etc.

Interest on long term Liabilities:

201. GRIDCO has proposed Rs. 128.49 crore towards payment of Interest Charges during FY 2009-10 for the loans, which are incurred, or to be incurred exclusively for the purpose of power purchase and allied activities of GRIDCO but not for transmission or any other functions. The loan availed by GRIDCO prior to 01.04.2005 pertaining to transmission business has been transferred to OPTCL w.e.f. 01.04.2005.
202. GRIDCO has estimated interest payment of Rs.128.49 crore during FY 2009-10 while the objectors, based on their own assessment, state that the same should be scaled down to Rs.106 crore. GRIDCO requests the OERC to compute and allow interest cost based on actuals and the likely availing of loans in phased manner during 2009-10.
203. In so far as settlement of R.400 crore NTPC Bonds of DISCOMS (WESCO, NESCO & SOUTHCO) are concerned, GRIDCO has settled the dues of NTPC covered under the

Bonds transferred in its favour w.e.f. 31.03.2007 and this was done in order to avoid Power Regulation by NTPC to Orissa and with the approval of State Government.

204. The burden of the bonds have to be passed through tariff as the same has been incurred to avoid regulation of the power and is in the interest of the consumers of the State.

Return on Equity

205. Return on Equity is projected based on the 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, as it will affect the financial health of the entity. Hence, the objection may not be considered.

Past Losses

206. The past losses of GRIDCO have arisen mostly due to failure of the DISCOMs to pay the power purchase and loan dues to GRIDCO in full and in time.
207. GRIDCO has been the bearer of the financial brunt of the Orissa Power Sector Reforms all throughout and in such a situation, the suggestion of the objector that GRIDCO's past losses and the dues due to securitisation of arrears should not be considered in the ARR, may not be accepted as it will further cripple GRIDCO to carry out its normal business operations which is primarily limited to procuring power at reasonable rate for supply to the distribution companies so that the consumers of the state get power supply at affordable rate.
208. Due to increased shortage of hydropower in the supply front, the estimated deficit has been calculated as Rs.591.08 crore and the same has been filed before the Commission on 10.12.2008 for considering the same in the ARR & BSP Application for FY 2009-10.
209. The suggestion of the Objector not to consider the Special Appropriation towards Principal Repayment of Rs. 394.09 crore during FY 2009-10 and deficit of Rs. 399.66 crore for FY 2008-09 in the ARR for FY 2009-10 may not be accepted since these are genuine expenditures of GRIDCO to run the business of the bulk supply of power to the DISCOMs in order to meet the State Demand.

Export of Power & UI Income

210. In the earlier Orders, OERC had stated that the surplus, if any from U.I. earnings & sale of surplus power would be utilized to reduce the past losses of GRIDCO in order to lessen the burden on the consumers of the State.
211. The earning from UI Charges has reduced substantially due to drastic reduction of hydro power because of depleting reservoir levels at various Hydro Stations which was key to such operations. Further due to increased State Demand for Power, the surplus power scenario in the supply front has drastically changed. In fact, in some of the months during the current FY 2008-09, GRIDCO has overdrawn under UI mechanism. Therefore,

GRIDCO was pragmatic enough not to include any earnings from UI Charges in the ARR & BSP Application FY 2009-10.

212. Actual earnings from UI & Trading for FY 2007-08 and FY 2008-09 have been submitted to the Commission. This is Rs.1272.41 crore for 2007-08 and Rs.278.06 crore (provisional) for 2008-09 upto January, 2009.

Miscellaneous Receipts

213. The earnings from UI & Trading operations are being adjusted towards past losses of GRIDCO in consonance with the relevant orders of the Commission to this effect. Besides, it may be noted that while fixing Bulk Supply Price, the Commission is leaving huge revenue gap in the ARR and is directing GRIDCO to bridge the gap through earning of revenue from trading. With increase in demand, there is no Surplus Power available for trading. GRIDCO, therefore, has considered Rs. 3.30 crore as Misc. Receipts to be factored into the proposed ARR for FY 2009-10 from sale of emergency Power to CGPs like NALCO & IMFA.

Truing-up:

214. Truing up of all licensees is an exercise which is independent of tariff (BSP) fixation by the Commission. The Commission has already taken up truing up exercise of the licensees which is pending for disposal. The objectors should leave this exercise to the Commission instead of making a futile exercise of their own.

Overdrawal Charges

215. In a shortage scenario, any excess drawl over and above the approved drawl by any DISCOM will force GRIDCO to procure power from costly CGP sources / spot market at very high cost. Therefore, any excess drawl shall have to be billed at the highest cost.

Rebate

216. GRIDCO is entitled to 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 by OERC.

Miscellaneous

217. The metering system to record the procurement from the generation and sale to DISCOMs is fully in place with the acceptable level of accuracy. These meters are also being tested jointly for accuracy with DISCOMs & Generating Companies annually.

218. **NTPC BOND:** GRIDCO has settled the dues payable to NTPC covered under the Bonds of Rs.400 crore issued by the three DISCOMs namely WESCO, NESCO & SOUTHCO. GRIDCO is holding the Bonds as on date and the DISCOMs have defaulted to service these Bonds. GRIDCO has approached the Company Law Board, Eastern Region Bench, Kolkata under Section 117C of the Companies Act, 1956 for the default in payment of the Bond dues by the DISCOMs and the matter is sub-judice. The rebate earned by

GRIDCO in the issuance of Bond and the benefit availed in the settlement of the dues of NTPC cannot be directly passed on to the three DISCOMs. In any case the benefit which GRIDCO is getting is being passed on to the ultimate consumers through the distribution companies.

219. **Allocation of PPAs:** The matter relating to assignment and allocation of PPAs has been agitated by the objectors before the Commission in connection with the approval of the Business Plan of the DISCOMs for the next five-year period beginning from 2008-09. GRIDCO has already given its views on the same for consideration of the Commission.
220. **Escrow Mechanism:** The Escrow Mechanism as spelt out in the Escrow Agreement is a default escrow. The DISCOMs should take steps to rectify its default in payment of the arrear dues so that the DISCOMs will be free to utilize the revenue available in the Escrow account without any prior consent of GRIDCO so long as they do not commit any further default. GRIDCO does not agree to the proposal of restructuring of escrow mechanism as has been proposed by the objectors. However, GRIDCO has been allowing escrow relaxation to all the DISCOMs towards payment of employees cost and R&M expenses as per the approval of the Commission in the Tariff Order of 2008-09. Any arrear collection by the DISCOMs either in the normal course of business operation or consequent upon any settlement exercise has to come to the Escrow account and there cannot be any special escrow relaxation as claimed by the DISCOMs.

BST

221. GRIDCO has projected the estimated figures pertaining to energy procurement and other expenses in its Annual Revenue Requirement (ARR) & Bulk Supply Price (BSP) Application for FY 2009-10 and accordingly arrived at the proposed BSP of 209.82 P/U in order to recover the proposed ARR of Rs.3929.04 crore during the year. Unless the current average BSP of 122.15 P/U is revised upward, GRIDCO will be left with a deficit of Rs.1640.94 crore as has been shown in the ARR & BSP Application.
222. In fact, in the past years, the average BSP has decreased over years from FY 2001-02 to FY2007-08 while RST has almost remained unchanged. Therefore, It is not correct to say that in the past the burden of the BSP was loaded to HT & EHT consumers.

Two-Part Tariff

223. GRIDCO has in fact submitted a proposal for recovery for its ARR through 2-part Charges (Energy Charge & Demand Charge) during FY 2009-10. The Demand Charges @Rs.200/KVA/ Month has been proposed to be levied along with the Energy Charge when the actual SMDs of DISCOMs calculated on annual basis exceed the permitted SMD.

**GRIDCO'S RESPONSE TO QUERIES RAISED BY THE DIRECTOR (TARIFF)
IN THE PUBLIC HEARING (Para 224 to 250)**

Simultaneous Maximum Demand (SMD):

224. Before projecting the SMD figures of DISCOMs in the ARR & BSP Application, GRIDCO had requested all the four Distribution Companies vide its Office letters dated 12.09.08 and 17.10.08 to submit their requirement of energy in MU and demand in MVA for FY 2009-10. None of the DISCOMs except NESCO responded to GRIDCO's request. In absence of any response from DISCOMs, the projection of SMD figures of DISCOMs for FY 2009-10 have been considered at the level of the actual SMD for Sept'08 based upon the combined effect of the likely contraction of demand because of Global Meltdown and also due to the likely increase in the energy demand owing to the ongoing Rural Electrification Programmes under RGGVY and BGJY.
225. In the absence of any data pertaining to projection of Demand for FY 2009-10 by the DISCOMs, GRIDCO has allocated the estimated availability of energy of 18726.15 MU amongst the DISCOMs on pro-rata basis based on the projected consumption of DISCOMs during FY 2008-09.
226. GRIDCO is committed to harness power from all available sources in order to meet the State Demand including those of the up-coming Industries in the State subject to approval of the Commission regarding quantum and cost of power in the ARR & BSP of GRIDCO during FY 2009-10.

Drawl of Power and Costs:

227. GRIDCO has drawn the power of 14761.47 MU at the cost of Rs.2011.30 crores and average rate of 136 P/u for the period April'08 to December'08 against the OERC approval (prorated) of 13845.20 MU at the cost Rs.1763.82 crore and at the average rate of 127 P/u. For the month of Jan, 2009 GRIDCO has drawn 1686.367 MU (Provisional) at the total cost of Rs.281.16 crore with an average rate 166.73 P/u.
228. GRIDCO has already incurred additional power purchase cost of Rs.247.48 crore (provisional) during April'08 to December'08 as compared to the pro-rated approval of the Commission. It is apprehended that the additional cost on account of power purchase will increase in the coming months. In this context the Commission is requested to kindly consider the Petition of GRIDCO dated 10.12.2008 praying for factoring the additional cost of Rs.591.08 crore while approving the ARR & BSP of GRIDCO for FY 2009-10.

Impact of New CERC Tariff Regulation:

229. The tariff of Central Sector Stations and PGCIL transmission lines (50 Nos.) for the period 2009-14 would be decided by CERC based on their submission of Capital Cost and Additional Capital Expenditure incurred upto 31st March 2009. Since the said figures are not available with GRIDCO, it is very difficult to predict and estimate their tariff for

the year 2009-10 and the consequent impact on the ARR. Hence, GRIDCO has filed their tariff for FY 2009-10 based on annual tariff of FY 2008-09 which has been already determined by CERC. The new tariff would be determined by the CERC in due course.

230. In view of the above, GRIDCO respectfully submits that once the tariffs for respective Stations / Lines for the period FY 2009 to FY 2014 are decided by CERC, GRIDCO will be able to submit the same before the OERC specifying the impact of the revised tariff which may kindly be considered for pass through of the same appropriately in the ARR & BSP of GRIDCO.
231. Further, GRIDCO is analyzing the present CERC Regulations for State hydro stations. Its impact on OHPC tariff will be submitted shortly.

Amended ARR :

232. The submission of GRIDCO with regard to the developments during the intervening period from Dec'08 to date may kindly be considered as being very much normal and realistic. The following additional costs over & above the ARR of Rs.3929.04 Cr. already submitted on 01.12.2008, may kindly be taken into account.
233. As submitted by GRIDCO on 03.02.2009 during the hearing, the revised ARR of GRIDCO considering the deficit of Rs. 591.08 crore and the likely arrear payment of Rs. 79.29 crore to OPGC (till Nov'08), may be taken as Rs. 4127.18 crore to be recoverable through proposed BSP of 220.40 P/U. It is submitted that GRIDCO has only indicated its likely additional cost during FY 2009-10 for pass through in the ARR as the Commission did not consider the Petitions of GRIDCO dated 31.10.2008 and 10.12.2008 to revise the existing average BSP of 122.15 P/U during FY 2008-09 in order to recoup the current deficit because of additional power purchase cost in comparison to OERC approval,
234. GRIDCO also prays to consider the additional cost of Rs.73.45 crore towards TTPS due to revised Fixed Costs as per CERC Order dated 03.02.2009 in Petition No. 31/2008 filed by NTPC and also the additional impact towards PGCIL Transmission Charges filed by GRIDCO vide Petition Dated 28.01.2009 in Case No. 62 of 2008 before OERC.

Status of revised PPA of OPGC:

235. GRIDCO has stated that the incentive PLF of OPGC for all the three years (i.e. 2007-08, 2008-09 and 2009-10) in the TRT was taken as 80% and not 68.49%. So the differential amount need not be reflected again. The amended PPA has not been finalized yet and the same would be filed before Commission as soon as it gets finalized.

Variable Charges of OPGC:

236. GRIDCO has replied that coal price of Rs. 1285.10 per MT, has been arrived at by taking into consideration, the rate of blending coal (90% MCL Coal @ Rs. 650.11 per MT + 10% of imported Coal @ Rs. 7000 per MT).

237. When the FPA was proposed during the month of November 2008, there was no trend in rise of prices of coal and oil, so the FPA was projected to be zero. Although there has been a reduction in price of oil now-a-days, there is no reduction in the coal price. Rather the price of imported coal has gone up since then and as understood, the M/s. MCL may also raise the coal prices further during 2009-10. Thus, the fall in prices of oil has been more than counter balanced / neutralized by the rise in coal prices. So a reduction in the oil price only, shall not affect the tariff structure much. If we are going to revise the oil price, we shall also revise the price of imported coal and as such the variable charge may increase again, which seems to be high already, due to the coal-blending concept.

FPA Rates:

238. Wide variation in FPA Rates in recent times is due to the use of imported coal / high cost coal by NTPC for power generation of its Plants. The FPA rates for the month of January'09 for NTPC Thermal Stations are as follows:

FSTPS	=	93.39 P/U
KhSTPS (I)	=	78.22 P/U
KhSTPS (II)	=	51.98 P/U
TSTPS (I)	=	83.38 P/U
TSTPS (II)	=	65.75 P/U
TTPS (I &II)	=	72.26 P/U

TTPS:

239. GRIDCO has clarified that the cost of Rs. 13.90 crore is on account of the Additional Capital Expenditure at TTPS. Based on the Fixed Cost for FY 2008-09 as approved by CERC vide Order dated 23.03.2007 in Petition No. 91 of 2007, GRIDCO, in its ARR & BSP Application for FY 2009-10, proposed Fixed Cost of TTPS as Rs.197.82 crore (Rs.183.92 Cr. + Rs.13.90 Cr.) inclusive of Rs.13.90 crore towards Additional Capitalization. Now, in terms of the CERC Order dtd.03.02.2009, the Fixed Cost for FY 2008-09 has been revised to Rs.199.37 crore, i.e. there has been an additional cost of Rs.1.55 crore (Rs.199.37 Cr. - Rs.197.82 Cr.). Accordingly, GRIDCO prays the Commission to consider the proposed Fixed Cost of TTPS for FY 2009-10 as Rs.199.37 crore instead of Rs.197.82 crore projected earlier.

240. GRIDCO also prays the to consider the additional differential amount of Rs.71.90 crore towards fixed charge payable to NTPC by GRIDCO for the years 2004-05 to 2008-09 as approved by CERC vide Order dated 03.02.2009. Thus, the Total Additional Cost of Rs.73.45 crore (Rs.1.55 Cr. + Rs.71.90 Cr.) towards Fixed Cost of TTPS may kindly be factored and approved in the ARR & BSP for FY 2009-10.

CGPs:

241. The proposal of 300 P/U towards procurement of CGP Power was submitted in the ARR & BSP Application for FY 2009-10 keeping in mind, the tariff for Power Intensive Industries, i.e. 298 P/U for EHT Category and 308 P/U for HT Category of Consumers. Subject to approval by the Commission, GRIDCO may be able to procure such power to meet the State Demand, if required, provided the related costs are passed through in the ARR & BSP of GRIDCO.

PGCIL Transmission Charges:

242. The proposed enhancement of the PGCIL transmission charges for Regional transmission system is due to commercial operation of new assets of PGCIL i.e. Circuit-II of 400kV D/C Teesta (Stage-V)-Siliguri Transmission System associated with Teesta Stage-V Hydro Electric Project (ASSET-I) and that of ICT-II at Baripada Substation (ASSET-II), as per the relevant CERC Order dated 11.12.2008.
243. In view of the direction of CERC in the various tariff orders issued for the tariff block 2004-09 and also due to the change in interest rate of loans carrying floating rate, PGCIL claimed the Weighted Average interest rate applicable for various Domestic and Foreign borrowings during Financial Years 2004-05, 2005-06, 2006-07 for which total of Rs 3.21 crore has been paid by GRIDCO towards its share of allocation for the above periods. Due to rising trend of Interest rate during 2007-08 & 2008-09 which is around 11%, the differential bill towards interest is expected to be served by PGCIL during FY 2009-10. Hence GRIDCO have included Rs.3.21 crore in the year-end charges bill for payment of the differential interest amount pertaining to the years 2007-08 & 2008-09, which GRIDCO feels, as being justified.

Arrear BSP Dues

244. Against the Commission's approval for collection of Rs.219.83 crore from DISCOMs towards Arrear BSP Dues, the dues recovered for the FY 2008-09 (up to 10.02.2009) are given as under:

a. WESCO	-	Nil
b. NESCO	-	Rs. 80.72 crore
c. SOUTHCO	-	Rs. 5.38 crore
d. CESU	-	<u>Rs. 30.06 crore</u>
Total:	-	Rs.116.16 crore

UI & Trading:

245. GRIDCO has earned Rs. 953.85 crore (against 2038.87 MU) from UI and Rs. 318.56 crore (against 690.29 MU) from Trading of power during FY 2007-08. During the current year up to January'09, GRIDCO has provisionally received Rs. 253.62 crore (against 347.10 MU) from UI Charges and Rs. 24.44 crore (against 34.87 MU) from Trading of power. As per the Commission's Order the earnings from UI & Trading have been

utilized to replenish the revenue gap left by the Commission in the ARR and the losses sustained by GRIDCO during the previous years.

246. As per Audited Accounts of GRIDCO for FY 2007-08, the accumulated losses are Rs.199.39 crore after taking in to account the above earnings from U.I. & Trading of power. During FY 2008-09, GRIDCO may have deficit of Rs. 591.08 crore which has been already filed before the OERC vide Petition dated 10.12.2008 which is pending for disposal.

Miscellaneous Receipts:

247. Under any normal year, the emergency sale of power to NALCO & ICCL is quite minimal. However, the emergency sale to NALCO has been exceptionally more in the current year due to shutdown of its CGPs owing to supply disruption / non-availability of coal. The emergency sale to CGPs is made in emergency situations only and such sales can not be assumed in huge quantities, but has to be kept minimal. GRIDCO has consciously projected emergency sale to CGPs at 10 MU during FY 2009-10 as is being done in the previous years. Further, any receipts from sale of emergency power are being accounted for on actual basis in the Audited Accounts of GRIDCO, which are being submitted before the OERC from time to time.

Repayment of Principal:

248. GRIDCO has paid an amount of Rs. 344.59 crore towards repayment of Principal up to 31.01.2009 out of Rs.414.38 crore payable during FY 2008-09. Further GRIDCO has proposed to avail Term Loans from Nationalized Banks for an amount of Rs.300.00 crore by March'09 to meet the present cash deficit. The interest liability (Rs.30.00 crore) and Repayment Liability (Rs.60.00 crore) should be considered in ARR & BSP for FY 2009-10 for this Term Loan in addition to the amount submitted earlier.

Single-Part Vs Two- Part BSP:

249. In the ARR & BSP application, GRIDCO has proposed a Two-Part BSP in line with the approval of the Commission's ARR & BSP Order for FY 2008-09. In fact, it has been proposed that the Demand Charge would be levied in addition to the Energy charge only if the actual SMDs of DISCOMs would exceed the permitted SMD (110 % of the approved SMD) calculated on monthly basis subject to final adjustments annually at the end of the year.

PPA for OHPC Old power Stations:

250. PPA for Rengali Hydro Electric Project has already been vetted by the Commission with the observations to re-submit the same incorporating the views of the Commission along with the PPAs for other Stations in line with Rengali PPA. Consequent upon separation of OPTCL from GRIDCO, some changes were required to be incorporated in the PPA without affecting the commercial provisions.

VIEWS OF GOVERNMENT OF ORISSA

251. The representative of State Govt., while responding to the issues raised by the petitioner, stated that they would support GRIDCO in its endeavour to ensure power supply at affordable rate but the Govt. would continue its subsidy withdrawal policy.

OBSERVATIONS OF THE STATE ADVISORY COMMITTEE (SAC) (Para 252 to 255)

252. The State Advisory Committee (SAC) constituted under Section 87 of Electricity Act, 2003 met on 12, Feb 2009 to deliberate on the Annual revenue requirement and tariff application for the FY 2009-10 of utilities, namely OHPC, OPTCL, GRIDCO, SLDC, CESU, NESCO, SOUTHCO and WESCO.
253. The Director (Tariff) made a brief presentation on the ARR and tariff applications for FY 2009-10 of the above mentioned utilities. Members in general expressed their concern about the poor performance of the licensees particularly on distribution loss, poor consumer services and lack of investment etc.
254. Some members questioned the legal existence of GRIDCO and submitted that a trader should not be allowed to make an application for its revenue requirement. GRIDCO should be allowed to purchase energy as per the benchmark of transmission and distribution loss i.e. 3% transmission loss and 21% distribution loss without including EHT requirement for calculation of distribution loss.
255. The representative of all the DISCOMs, Generators and GRIDCO responded to the different observations of the members present. GRIDCO had stressed the importance of its existence due to historical reasons and present need of assured power supply. Further, GRIDCO had stated that the real loss at the beginning of reform was 50% but was fixed at 39% by the World Bank. No transitional support was, however, provided by the State Govt. Moreover the projected EHT load predicted in 1997-98 for turn around did not materialize and GRIDCO retained all losses. By efficiency of GRIDCO and OHPC, losses have now come down from Rs.2,500 crore to around Rs.1,400 crore. GRIDCO had played a key role in managing the power sector by trading surplus power after meeting the demand of the State and also purchasing high cost power during shortage period to meet demand of the consumers in the State. In the current year 2008-09 there has been no surplus power due to inadequate rainfall. Thus revenue gap is around Rs.500 crore. In order to make power available to all consumers, high cost power is being considered from CGPs. Further, GRIDCO may have to incur loan to purchase high cost power to meet the demand of the State. Hence servicing of loan should be allowed to GRIDCO for FY 2009-10. Since 2001, there is no increase in tariff and trading has helped to offset rising cost of power purchase. This has been possible because of the existence of GRIDCO which has absorbed the losses and ensured power supply at a reasonably cheaper rate.

COMMISSION'S OBSERVATIONS AND ANALYSIS OF LICENSEE'S PROPOSAL (Para 256 to 487)

Legal Status of GRIDCO Ltd. and Nature of its Application

256. Before enactment of the Electricity Act, 2003 (hereinafter referred to as the Act) GRIDCO was a "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 DISCOMs namely, NESCO, WESCO, CESU (previously CESCO) and SOUTHCO. Under the said agreements GRIDCO was obliged to sell power on priority basis to the aforesaid DISCOMs of Orissa up to their full requirement and the DISCOMs were obliged to buy power only from GRIDCO. This arrangement is known as the "Single-Buyer-Model" of power procurement for DISCOMs 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 & DISCOMs as of now and the Single-Buyer-Model still prevails in the state as a historical legacy.
257. 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 DISCOMs 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.
258. 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 DISCOMs 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 price proceeding, the Commission has to set price in the situation as it stands now and therefore it refrains from addressing this larger issue.
259. Under Sec.86(1)(b) of the Act, the Commission is entitled to regulate the price at which DISCOMs 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 DISCOMs 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.

260. 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 DISCOMs fixed under Sec. 86(1)(b) coincides with the selling price of GRIDCO as a trader for sale of power only to the present DISCOMs 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.
261. 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 DISCOMs in their tariff application vide Case Nos.66, 67, 68 & 69 of 2008 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 DISCOMs 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 DISCOMs 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 DISCOMs. 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.
262. On detailed scrutiny and examination of the Annual Revenue Requirement and Bulk Supply Price Application of GRIDCO for FY 2009-10, 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 2009-10

263. The Commission, for determination and approval of the ARR of GRIDCO for FY 2009-10 continues to follow the same principles as in the previous year. For the purpose of tariff setting for FY 2009-10, 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 as other statutory notifications and directives, while giving due considerations to the complexities of the Orissa Power Sector.
264. Tariff determination involves adoption of 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. The Commission has also accepted the concept of true-up in order to insulate the licensee from any eventuality. The Commission, as in the previous years, has continued to determine the ARR for the year FY 2009-10 using the following principles.
265. The submissions of the DISCOMs have been considered for the estimation of the energy to be procured by GRIDCO for supply to them. The SMD has been computed based on the actual demand for January, 2009 and additions to HT and EHT load projected by the DISCOMs for FY 2009-10 as well as likely increase in growth due to Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Biju Gram Jyoti Yojana (BGJY).
266. The cost of power purchase for GRIDCO, which constitutes more than 94% of the total cost structure of GRIDCO has been considered on a merit-order basis, with hydro generation cost being computed based on the generation plan submitted by the OHPC to GRIDCO, and the state thermal generation cost being considered as per norms of the PPA/CERC guidelines. Drawal from the CGPs have been maximised as well. Availability from the Eastern Region CGSs has been considered as per the allocation of shares in these stations and the applicable CERC Regulations.
267. All the liabilities of the DISCOMs 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 DISCOMs 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 DISCOMs 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.
268. 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

DISCOMs in 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 earnings from export of power which now stand highly limited, and any earnings from un-scheduled interchanges.

269. The Commission has scrutinised in detail the energy requirement proposed by the DISCOMs for FY 2009-10. The DISCOMs 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 drawal of power from all state-owned / share from Hydro and Thermal stations and drawal from renewable and captive sources, some surplus energy may be available after meeting the State demand for 2009-10. The surplus energy may not be available in case of poor hydrology and/or projected drawal from captive generating plants or central sector power not materialising as estimated.
270. GRIDCO has been burdened with huge past liabilities. The earning from UI Charges and trading had helped in the past to reduce these liabilities to a large extent. In the recent months the earnings of GRIDCO on account of trading and UI charges have reduced substantially due to drastic reduction of hydro power because of depleting reservoir levels at various Hydro Stations which was key to such operations. Further due to increased State Demand for Power, the situation of surplus power scenario in the supply front has practically vanished. In fact, in some of the months during the current FY 2008-09, GRIDCO has overdrawn under UI mechanism.
271. The energy consumption in the State has increased due to massive industrialization and rural electrification. The rise in state demand for power requires GRIDCO to purchase high cost power. To aggravate the problem, the price of coal has gone up substantially in recent months and required quantum of coal is not available to generators to generate additional power required for the state use. Therefore, the generators are compelled to use imported coal which is costly along with coal available in the domestic market. Although there has been a reduction in price of oil, there is no reduction in the coal price. Infact the price of imported coal has gone up and as is the situation stands now, it appears that M/s. MCL may also raise the coal prices further during 2009-10. Further, the fall in prices of oil has been much less as compared the rise in coal prices. Due to rise in coal the variable charges of the generators have increased manifold.
272. The Commission in its order dt.28.02.2009 on CGP pricing stated that in order to encourage the CGPs/Co-generating plants and to fully utilize their bottled up capacity for generation of captive power/Co-generation power and to enable GRIDCO to access power from different sources including CGPs/Co-generating plants for meeting the

demands in the State and making available a good quantum of power for trading, GRIDCO should offer a remunerative price to the CGPs in respect of power used for trading. Keeping in view the prevailing rate in the power exchanges, UI rate and price quoted in the bidding it would be just and equitable for GRIDCO and the CGPs and Co-generating plants to have an indicative rate of Rs.3.50 per KWh for procuring surplus power meant for trading. This is merely an indicative price suggested by the Commission. However, individual CGPs/Co-generating plant and GRIDCO, if they so like, may enter into further negotiation for an agreed price above this indicative rate. However, the procurement price by GRIDCO from the Captive Generating Plants/Co-generating plants for the purpose of trading should not unduly vary from the indicative price of Rs.3.50 per KWh now being suggested by us as an interim measure. This is necessary for the benefit of the consumers of the State because the profit earned by GRIDCO from the trading will be taken as ‘other receipt’ to meet its revenue requirement and bridge the gap in the ARR. For supply of power by the CGPs/Co-generating plants to GRIDCO for sale to DISCOMs meant for consumption by the consumers in the State, the procurement price of firm power from the CGPs will be Rs.3.00/KWh with effect from 01.3.2009. However, to encourage co-generation as is mandated under the Electricity Act, 2003 the power generated by co-gen. plants e.g. sponge-iron plants such as NINL, Arati Steel, Tata Sponge, etc. may be given an incentive and shall be paid @ Rs.3.10 per/KWh with effect from 01.3.2009.

Quantum of Power Purchase

273. 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 and supplied to the DISCOMs. There are four Distribution Companies operating within the State. They purchase power in bulk from GRIDCO for supply to the consumers.
274. 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.

275. The Distribution Companies have furnished projections for 2009-10 for drawl of power from GRIDCO and GRIDCO has projected the total power purchase to be made from the Generators after taking into account the requirement of distribution companies and emergency requirement of CGPs owning industries and the energy loss in transmission system of OPTCL. Consumers' demand as worked out by DISCOMs and GRIDCO for 2009-10 separately are distinctly different in their respective filings.
276. The quantum of power to be purchased for the year 2009-10 in respect of the four distribution companies has been assessed and approved by the Commission while determining the Revenue Requirement and tariff for the DISCOMs in Case Nos. 66/2008 (CESU), 67/2008 (NESCO), 68/2008 (WESCO) & 69/2008 (SOUTHCO) by following the guidelines of the Regulation quoted above. The Commission approves the quantum of power to be purchased for the year 2009-10 relating to NESCO, WESCO, SOUTHCO and CESU as 4285 MU, 6430 MU, 2161 MU and 6045 MU respectively totalling to 18921 MU.
277. The Commission has approved 4% towards transmission loss in the OPTCL system for the year 2009-10 against 4.5% adopted for 2008-09. The details of calculations of transmission loss have been furnished in the tariff order for OPTCL for the year 2009-10 in Case no 63 of 2008.
278. 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 2009-10 between GRIDCO and OPTCL adopting the normative basis approved by the Commission. GRIDCO shall give credit to OPTCL for the units deemed to have been lost on account of export of power, if any, because the exporter will pay OPTCL only on actual power received.
279. After having determined the quantum of power purchase from the DISCOMs, the Commission has to estimate the quantum of energy lost on account of transmission at EHT within the State for delivery to the DISCOMs. The Commission has taken into account the sale to CGPs and approves the emergency drawal by CGPs at 10 MU for 2009-10, as projected by GRIDCO. The detailed requirement of power purchase for use within the State is projected in the table below:

Table – 14
Purchase of Power by GRIDCO for State Use for 2009-10

(Figures in MU)

Name of the DISCOMs	Commission's Approval 2008-09	GRIDCO's Proposal in ARR 2009-10	Commission's Approval 2009-10
CESU	5300.00	5719.25	6045.0
NESCO	4660.00	4596.19	4285.0
WESCO	5680.00	6238.67	6430.0
SOUTHCO	1980.00	2172.04	2161.0
TOTAL DISCOMs	17620.00	18726.15	18921.0
CGP	10.00	10.00	10.00
TOTAL SALE	17630.00	18736.15	18931.0
Transmission loss at EHT in MU (DISCOMs Purchase only)	830.26 @ (4.5% Transmission loss)	882.86 @ (4.5% Transmission loss)	788.38 @ (4.0% Transmission loss)
Total Purchase	18460.26	19619.01	19719.38

280. The Commission is approving the energy drawal for FY 2009-10 after considering the projections made by DISCOMs and hence there should not normally be any variations from the approved drawal. Though there is need for fixing monthly drawal limit for each licensee, the Commission is not doing so at present considering the realities of change of load pattern depending upon seasonal and other factors. The licensees should limit their drawal to the approved quantum of energy while not resorting to any type of load restriction on account of this limitation. The licensees must also try to stick to the annual energy drawal as approved by the Commission.

Determination of Simultaneous Maximum Demand (SMD) in MVA

281. 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 DISCOMs. The DISCOMs have projected a higher maximum demand keeping in view the up-coming load growth on account of rapid industrialization. The monthly drawl of DISCOMs for the period from April'08 to January'09 is furnished in a table as under:

Table - 15
Demand in MVA for 2008-09

	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Avg. (4/08 to 1/09)
CESU	913.28	901.61	858.46	904.42	908.30	934.92	933.69	895.59	855.87	912.06	901.82
NESCO	720.79	697.92	696.34	725.48	686.25	674.86	672.37	638.32	632.04	679.70	682.41
WESCO	884.15	882.49	897.06	900.74	900.66	1,055.57	985.11	983.18	992.79	1,001.74	948.35
SOUTHCO	348.54	346.14	345.61	341.11	352.06	359.57	368.31	367.10	349.35	360.29	353.81
ALL ORISSA	2,866.75	2,828.15	2,797.47	2,871.74	2,847.26	3,024.91	2,959.47	2,884.19	2,830.04	2,953.79	2,886.38

282. GRIDCO in its filing stated that there has been recessionary trend in the pace of industrialization in the State arising out of the Global Meltdown. In fact, the drawal of energy by the industries has started decreasing. It is expected that the recession in the economy is going to stay for some more time before any revival sets in. In view of the above, it is apprehended that the SMD experienced during the month of September'2008 may not be even achieved during FY 2009-10. However, since many industries have been set up and/or are planned to be set up in Orissa including industries having their own CGPs and also due to the implementation of Rural Electrification Programmes under Biju Gramya Jyoti Yojana (BGJY) and Rajiv Gandhi Gramin Viduyutikaran Yojana (RGVVY), GRIDCO stated that the SMD during 2009-10 might be close to the level of September'08.
283. It is observed from the above table that the summation of billing demand has fluctuated from months to months. The demand reached a peak of 3024.91 MVA during September, 08. The billing demand recorded in January, 2009 at 2953.79 MVA is even lower than the September, 2008 figure by about 71.12 MVA. The drawl during January, 2009 is expected to continue during the next two months of the current financial year as January is within the last quarter of the current financial year, when the industrial production activities are supposed to have picked up at a greater speed along with the irrigation and agricultural loads due to Rabi season.
284. 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 08-09 it was observed that due to industrialization, there might be an additional requirement of about 574.04 MU by the HT and EHT group only excluding NESCO, as NESCO is likely to register a negative growth in demand to the tune of 179.52 MU during 2009-10 due to non drawal /Less drawal of power by EHT and HT consumers on account of industrial slow down. 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 574.04 MU, the additional MVA requirement has been worked out with a system power factor of 0.90. The total estimated demand in MVA for DISCOMs is given in the table below.

Table - 16
Demand in MVA for 2009-10

DISCOMs	OERC APPROVAL for 2008-09	Proposal by DISCOM for 2009-10	Proposal by GRIDCO for 2009-10	Actual for Jan, 2009	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 2009-10 (Actual for 1/08 + Additional load growth)
CESU	874.86	1005.9	934.92	912.06	511.94	64.93	976.99
NESCO	710.25	710.0	674.86	679.70			679.70
WESCO	874.42	1000.0	1055.57	1001.74	46.74	5.93	1007.67
SOUTHCO	343.08	380.0	359.57	360.29	15.36	1.95	362.24
ALL ORISSA	2802.61	3095.9	3024.91	2953.79	574.04	72.81	3026.60

285. Taking into account the SMD in different months of 2008-09 and the additional load projected by the DISCOMs the SMD for 2009-10 has been fixed to within which the DISCOMs should operate subject to overdrawal of maximum 10%. There is no need to fix the monthly SMD as the maximum demand has been worked out for the year 2009-10. Already there is penal provision for drawal exceeding the prescribed demand limit (refer Para 469).

Purchase of Power from Different Generating Stations

State Hydro

286. GRIDCO's proposal and Commission's approval for 2009-10 for various stations of OHPC are given in the table below. The details of which have been dealt in Case No.64/2008 for determination of tariff and revenue requirement of OHPC.

Table - 17
Drawal from State Hydro Stations (in MU)

Source of Generation	2008-09	2009-10	
	Commission's Approval	GRIDCO's Proposal	Commission's Approval
OHPC (Old stations)	3676.86	3948.35	3948.35
Upper Indravati	1942.38	1971.09	1971.09
Machkund	265.00	265.00	265.00
Total Hydro	5884.24	6184.44	6184.44

Talcher Thermal Power Station (TTPS)

287. Talcher thermal power station having installed capacity of 460 MW is owned and operated by NTPC, but its generation is fully dedicated to the State. TTPS has furnished the generation plan to GRIDCO for 2009-10. As per the generation plan submitted by TTPS for FY 2009-10, the net energy availability to GRIDCO has been projected at 3447.00 MU at a computed PLF of 85.54%. With adjustment of Auxiliary Consumption of 10.50%, the Ex-Bus availability from TTPS is projected at 3085.07 MU. On scrutiny it is observed that net drawal of GRIDCO from TTPS upto January,09 comes to 2754.22 MU and prorating the same for FY 2008-09 it comes to 3305.06 MU. Expected higher drawal from TTPS may not be possible since TTPS submitted their generation plan for 2009-10 taking into account the maintenance schedule. Therefore, the Commission approves the net drawl of 3085.07 MU from TTPS for the year 2009-10.

IB Thermal Power Station of OPGC

288. Orissa Power Generation Corporation (OPGC) owns IB Thermal Power Station at Banharpalli in Dist. Jharsuguda with an installed capacity of 2x210 MW.
289. The Commission vide letter No.2384 dtd.05.11.2008 had directed OPGC to file the ARR in the specified tariff filing formats by 30.11.2008. OPGC vide its letter No.3531 dtd.27.11.2008 informed the Commission that there was no requirement in law to file ARR in respect of generation and determination of tariff for sale of power to GRIDCO.
290. OPGC did not file its ARR with the Commission for the year 2009-10 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 had 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 rest on the bilateral contract between OPGC and GRIDCO including provisions relating to parameters of tariff calculation.

291. In order to resolve the dispute between GRIDCO and OPGC regarding tariff for power purchase from Unit I&II, the Govt. of Orissa vide its Resolution No.3895 dated 07.05.2007 constituted a Task Force. The said Task Force had submitted its recommendations to the State Govt. and after considering the same the Deptt. of Energy, GoO vide its notification dated 21.06.2008 (published in Orissa Gazettee No.1280 dated 07.09.2008) has decided as follows:
- (a) OPGC shall withdraw the SLP filed before the Hon'ble Supreme Court of India against the judgment of Hon'ble Orissa High Court regarding the jurisdiction of OERC for approval of PPA for units I & II of ITPS.
 - (b) To avoid any ambiguity with regard to tariff norms and parameters for Units I & II, the provisions for calculation of incentives in the existing PPA shall stand amended to enhance the Plant Load Factor (PLF) from 68.49% to 80%.
 - (c) The amended PPA shall be filed before the OERC for consent/approval.
 - (d) The amended PPA shall be effective with effect from 1st April, 2007.
 - (e) OPGC shall take expeditious steps for commissioning of units 3 & 4 with installed capacity of 2x600 MW and shall make 50% of the power generated from these units available to GRIDCO.
 - (f) The PPA for power made available to the State/GRIDCO shall be subject to approval of OERC and the tariff norms and parameters shall be as per the tariff norms as may be notified by CERC from time to time.
292. OPGC vide its letter No.319 dated 02.02.2009 informed the Commission that after due consultation with Govt. of Orissa and GRIDCO it will bring suitable amendment to the PPA and tripartite agreement which shall be filed before the Commission after appropriate withdrawal of the pending case before the Hon'ble Supreme Court. But till today OPGC has not withdrawn the said SLP from the Hon'ble Supreme Court.
293. The Commission has to determine the power procurement price of DISCOMs, 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 DISCOMs. Moreover, because of the prevailing single buyer model created by the joint operation of the PPA of OPGC and GRIDCO and of the BSAs of GRIDCO with the DISCOMs of Orissa, GRIDCO is functioning as a mere conduit, and the only conduit, for supply of power from OPGC to DISCOMs of Orissa. The aforesaid PPA coupled with Bulk Supply Agreements of GRIDCO with DISCOMs has brought about a situation that in effect and substance amounts to supply of power by OPGC to DISCOMs. 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 DISCOMs of Orissa so long as their requirements remain

unfulfilled, and DISCOMs have no option to buy power from any other source. The Commission, therefore, overruled OPGC's plea in its letter No.3531 dated.27.11.2008, 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 & Orissa Gazette No.1280 dtd.07.09.2008 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 DISCOMs. 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.

294. OPGC in its generation plan for 2009-10 had projected a target generation of 3265.92 MU. As per the power purchase agreement signed between GRIDCO and OPGC the auxiliary consumption is taken as 9.50%. Accordingly, GRIDCO proposes net generation availability of 2955.66 MU from OPGC considering projected PLF of 88.77%. The Commission approves a net drawl of 2955.66 MU for FY 2009-10 considering 88.77% PLF and 9.50% auxiliary consumption

Captive Generating Plants (CGPs)

295. 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 in 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 Directors of GRIDCO had approved a reasonably remunerative rate for procurement of power from CGPs. GRIDCO is also taking steps to harness more power from CGPs in accordance with the CGP Pricing Policy approved by OERC in their Order dated 14.03.2008 in Case No. 72 of 2007.
296. Further GRIDCO had stated that the actual availability from the CGPs varied widely from the quantum approved by the Commission in the past years. GRIDCO in its filing dt.29.11.2008 has proposed the total drawl from CGPs at 450.642 MU for 2009-10 to meet the state demand.
297. The Commission scrutinized the proposal of GRIDCO and based on the requirement for the state to meet the demand of DISCOMs, the Commission approves drawal of power at 124.64 MU from CGPs for 2009-10 and of course this excludes purchase of surplus power from CGPs for trading purpose.

298. 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. GRIDCO shall inform the Commission for drawl in excess of the power now approved.

Renewable Energy:

299. GRIDCO had submitted in its application that the 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 and it should be increased at the rate of 0.5 % per annum for each subsequent year to reach a level of 5 % per annum by FY 2011-12. GRIDCO was drawing power from M/s. NINL, M/s. ARATI Steel Ltd. & M/s. TATA Sponge Ltd etc.and also expecting Samal Small Hydro Project and Minakshi Small Hydro Project to commence their operation in the beginning of FY 2009-10. So GRIDCO made a forecast of 530 MU of power from renewable sources which includes 100 MU and 150 MU of power respectively from the above two SHEP stations during FY 2009-10.
300. Further in replies to the Commission's queries, GRIDCO stated that power procurement from NINL, Arati Steel and TATA Sponge etc.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.
301. The Commission observes that energy from waste heat in Sponge Iron Units can be Green Power but not non-conventional or renewable. It is Green Power, because Green House Gas (GHG) emission is reduced. Since fossil fuel is used in the Kilns of the Sponge Iron Plants, it is not renewable energy. Co-generation is a process which simultaneously produces two or more outputs including electricity. Obviously this kind of generation is co-generation. Under Section 86(4)(e), the Commission is mandated to promote co-generation. However, since sponge iron plants also generate electricity and promote efficiency of energy usage they deserve all encouragement and should continue to be classified under co-generation, rather than under captive generation.
302. Further, GRIDCO stated that Samal Small Hydro Electric Project (Installed Capacity: 20 MW) and Minakshi Small Hydro Electric Project (Installed Capacity: 37 MW) shall commence their generation during FY 2009-10. With 60% PLF, it is expected that the generation of energy from these Plants will be about 105 MU and 194 MU respectively. It is therefore, felt reasonable to project procurement of at least 100 MU and 150 MU of energy from Samal and Minakshi Small Hydrel Electric Projects during FY 2009-10 on a conservative basis. The details of drawal from renewable sources are given in table below.

Table – 18
DRAWL FROM RENEWABLE SOURCES FOR FY 2009-10

Generating Stations	Approved for 2008-09	Energy drawl from 4/08 to 1/09 of 2008-09 (MU)	Energy Proposed for FY 2009-10 (MU)	Approved by the commission for 2009-10 (MU)
NINL	100	63.06	80.0	80.0
ARATI STEEL	80	101.13	80.0	80.0
TATA Sponge	120	107.35	120.0	120.0
Samal Small Hydro	30		100.0	100.0
Minakshi Small Hydro	45		150.0	150.0
TOTAL	375	271.54	530.0	530.0

303. The Commission allows GRIDCO to purchase the total renewable including co-generation 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 and co-generation sources at 530 MU for 2009-10 based on GRIDCO's proposal in ARR as indicated above against 375 MU approved for 2008-09.

Power Purchase from Central Generating Stations

Transmission Loss:

304. 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 3.88% in the ARR for 2009-10 based on average of the actual Weekly loss in the Central Transmission System from April,08 to Oct,08. 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 3rd Week of February 2009. On examination of the proposal submitted by GRIDCO and subsequent submission on 21.01.2009, the average central transmission loss worked out to 3.87% upto December, 2008 of the year 2008-09. The actual CTS loss for GRIDCO drawal from central sector power for 2007-08 was at the rate of 3.69% only. The Commission had approved the central transmission loss of 3.60% for the year 2008-09. 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 percentage loss varies from week to week ranging from 2.9% to 4.5% during the period from April, 08 to February,09. This kind of loss variation is on account of the nature and quantum of power flow in the system. So, the Commission accepts the Central Sector loss of 3.87% for 2009-10 based on average of actual loss in Central Transmission System from April to December, 2008.

Central Generating Stations (CGSs)

305. 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 Projects in Bhutan and Teesta Hydro Electric Project in Sikim. The entitlement from these stations is based on share allocation made by the CEA/MoP 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 as per CERC Tariff Regulation,2004 and central sector transmission loss of 3.88%.
306. Govt. of India, MoP has allocated the share of power from Central Thermal Generating Stations in the Eastern Region and Chukka and Tala Hydro Electric Project and also revised the same allocation from time to time based on the requirement of constituents and availability of power from these power stations. Govt. of India, MoP vide its letter dt.7.07.2006 & 18.07.2008 has revised the share allocation of power from CGSs in the Eastern Region and Chukka and Tala Hydro Electric Projects. Further MoP during Feb,2008 has allocated power from Teesta Hydro project in Sikim in favour of ER constituents. GRIDCO had considered the same allocation made by MoP in its ARR filing for 2009-10.
307. The Central Electricity Regulatory Commission(CERC) has notified the CERC (Terms and Conditions of Tariff) Regulations, 2009 on 19th January,2009.As per new CERC Tariff Regulation 2009, the availability from the CGSs at 85% PLF would entitle them for recovery of full capacity charge. That is why the energy drawl from the above central sector stations has been estimated taking 85% PLF for 2009-10. The Commission considers the Central Sector transmission loss @ 3.87% for the above drawl as stated earlier.
308. In reply to a query of the Director (Tariff) during hearing on the possible impact of New CERC Tariff Regulations on the tariff of Central Sector Generating Stations on GRIDCO, GRIDCO stated that the tariff of Central Sector Stations for the period 2009-14 would be decided by CERC based on Capital Cost and Additional Capital Expenditure incurred upto 31st March, 2009 as submitted by respective generators before CERC. Since the above said audited capital cost figures of the respective generators were not available with GRIDCO, it was not possible to estimate their tariff for the year 2009-10 and the consequent impact on GRIDCO's ARR.
309. Tariff of the CGSs is determined by the CERC by virtue of the authority vested under Section 79 of the Electricity Act, 2003. The Commission takes note of these decisions examining the justification and correctness of the claims raised by GRIDCO in respect of CGSs power, based on the various orders of the GOI/MOP/ CEA & CERC and clarifications thereon provided by the applicant. With the above stipulations, the details of GRIDCO's drawl from Central Thermal Stations, as approved is given in table below:

Table - 19

Drawal From Central Thermal Generating Stations for FY-2009-10

Central Thermal Stations	Installed Capacity (MW)	Aux. Cons. (%)	Availability considering 85% PLF (MU)	GRIDCO Share (%)	GRIDCO Share (MU)	Approved estimated Share excluding Central Sector Transmission Loss of 3.87% (MU)	GRIDCO proposal excluding Central Sector Transmission Loss of 3.88% (MU)
TSTPS –I	1000	7.50	6887.55	31.80	2190.24	2105.51	1981.42
TSTPS –II	2000	7.50	13775.10	10.00	1377.51	1324.22	1246.18
FSTPS	1600	7.56	11012.93	13.63	1501.06	1443.00	1357.95
KhSTPS –I	840	9.00	5691.72	15.24	867.42	883.86	784.62
KhSTPS – II	1500	7.50	10331.33	2.0*	206.63	198.63	114.79
TOTAL	6940				6142.86	5905.23	5484.96

(*) Note:- Orissa was allotted 43.35 MW of power from Tala HEP vide MOP, GOI Order dtd. 07.07.06. An equivalent quantum of thermal power was surrendered against this power from the allotment of KHSTPS-II. Orissa was allotted 74 MW of power from KHSTPS-II vide MOP, GoI letter dtd. 21.02.08. After commissioning of all Tala units, 43.35 MW was surrendered from KHSTPS-II. So, the net share of GRIDCO from KHSTPS-II comes to 30.65 MW i.e 2% of total install capacity of KHSTPS-II.

310. **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 265 MU for 2009-10 considering central sector loss of 3.88%.
311. The Commission scrutinized the proposal of GRIDCO and observed that the drawal of GRIDCO from Chukha during 2008-09 upto January, 2009 comes to 260.35 MU and 266.56 MU for the FY 2007-08. It was also known that the generation from Chukka during summer was very high and during winter it was generally very low. The Commission had approved a drawal of 270.26 MU from Chukka during 2008-09. So the Commission approves the drawl from Chukha hydro station at the same level i.e 270.26 MU for 2009-10.
312. **TALA:** Ministry of Power, Govt. of India vide letter dated 07.11.2006 has allocated 85% of Tala HEP to ER constituents out of which GRIDCO's share accounts for 4.25%.
- a) GRIDCO has projected drawl of 174 MU from Tala HEP during 2009-10 considering central sector transmission loss of 3.88%.
- b) The Commission accepts the proposal of GRIDCO and based on central sector transmission loss of 3.87% approves the drawl at 174.02 MU from Tala HEP for 2009-10.
313. **TEESTA:** Ministry of Power, Govt. of India vide letter February 2008 have allocated 85% of Teesta HEP to ER constituents out of which GRIDCO share accounts for 20.59%.

- a) GRIDCO has projected drawl of 490 MU from Teesta HEP during 2009-10 considering central sector transmission loss of 3.88%.
- b) The Commission accepts the proposal of GRIDCO and based on central sector transmission loss of 3.87% approves the drawl in Teesta HEP in 2009-10 as 490.06 MU.

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

314. A summary of GRIDCO's proposal for purchase of power from different generating stations and the Commission's approved quantum of purchase for FY 2009-10 is given in the table below:

Table - 20
Quantum of Power Purchase from Various Sources for FY 2009-10
(Figures in MU)

Sources of Purchase	Commission's Approval for State Drawl for 2008-09	GRIDCO's Proposal for 2009-10	Estimated Availability for 2009-10	Commission's Approval for State Drawl for 2009-10
OHPC (OLD)	3676.86	3948.35	3948.35	3948.35
Machhkund	265.00	265.00	265.00	265.00
Indravati	1942.38	1971.09	1971.09	1971.09
HYDRO (Orissa)	5884.24	6184.44	6184.44	6184.44
TTPS	3162.17	3085.07	3085.07	3085.07
OPGC	2946.52	2955.66	2955.66	2955.66
CGP	352.00	450.00	450.00 (As per GRIDCO)	124.64
Renewable Energy	375.00	530.00	530.00 (As per GRIDCO)	530.00
TOTAL ORISSA	12719.93	13205.17	13205.17	12879.81
Chukha	270.26	265.00	270.26	270.26
TALA	195.44	174.00	174.02	174.02
TEESTA		490.00	490.06	490.06
HYDRO(Central)	465.70	929.00	934.34	934.34
TSTPS-I	1987.24	1981.42	2105.52	2105.52
TSTPS-Stage -II	1249.83	1246.18	1324.22	1324.22
FSTPS	1361.94	1357.95	1443.00	1443.00
KHSTPS-I	131.95	784.62	833.86	833.86
KhSTPS-Stage -II	543.68	114.79	198.63	198.63
Thermal (central)	5274.63	5484.96	5905.23	5905.23
TOTAL EREB	5740.33	6413.96	6839.57	6839.57
TOTAL GRIDCO PURCHASE	18460.26	19619.13	20044.74	19719.38

Power Procurement Cost

315. 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.

316. 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.
317. OHPC had submitted the application for approval of its Annual Revenue Requirement and Tariff of its individual power stations separately for the financial year 2009-10 in terms of Section-62, 64 and 86 of the Electricity Act, 2003 registered as Case No.64/2008. 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.
318. Accordingly, the rate as approved in respect of each of the power stations of OHPC is given in the table below:

Table –21
Schedule of Tariff for OHPC Stations for 2009-10

Name of the Power Station	Quantum of Power Purchase in 2009-10 (MU)	Average Tariff for 2009-10 (P/U)	Cost Rs.in Cr.
Hirakud	1132.79	64.96	73.59
Balimela	1171.17	56.66	66.36
Rengali	817.74	58.22	47.61
Upper Kolab	826.65	25.19	20.82
Upper Indravati	1971.09	73.35	144.58
Total	5919.44	59.68	352.96

Machhkund Hydro Electric Project

319. OHPC had requested for approval of a rate of 13.90 paise/unit for purchase of power of Machhkund Power Station for the year 2009-10 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 13.90 P/U considering energy drawal of 262.5 MU.
320. The Commission has taken into consideration the net share payable by Orissa towards O&M expenses for the year 2007-08 (actual) which is of the order of Rs.2.60 crore. Allowing an escalation of 4% per annum for the year 2008-09 and 2009-10, O&M expenses come to Rs. 2.81 crore. Taking O&M cost of Rs 2.81 crore, the rate per unit of Machakund power comes to 13.90 paise for the year 2009-10 considering energy drawal of 262.50 MU. Accordingly, the procurement cost works out to Rs.3.68 crore for an approved energy drawl of 265 MU.

Talcher Thermal Power Station (TTPS)

321. 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).
322. **Fixed Cost:** The CERC had approved the TTPS tariff for the FY 2004-05 to 2008-09 vide order dtd. 23.03.2007. In the said order, CERC had fixed Annual Fixed Charges for TTPS from 01.04.2004 to 31.03.2009 at Rs. 183.92 crore. Subsequently, NTPC had filed a Petition before the CERC praying for Additional Capitalization of Rs. 85.83 crore of TTPS towards the R&M expenses spent during FY 2004-05 to FY 2006-07. The impact of this additional capitalization on annual fixed cost comes to Rs.13.90 crore for FY 2008-09 as calculated by NTPC. With inclusion of this Rs.13.90 crore ,the Fixed cost of TTPS works out to Rs.197.82 crore for 2008-09. Therefore , GRIDCO has proposed the fixed cost for TTPS at Rs.197.82 crore for FY 2009-10 based on the estimated Fixed Cost for FY 2008-09. In the mean time, CERC vide its Order dtd.03.02.2009 has revised the Fixed Cost of TTPS for FY 2008-09 considering the additional capitalization and accordingly the Fixed cost comes to Rs.199.37 crore for 2008-09. So, GRIDCO has prayed the Commission to consider the proposed Fixed Cost of TTPS for FY 2009-10 at Rs.199.37 crore instead of Rs.197.82 crore projected earlier a difference of Rs.1.55 crore.
323. Further, GRIDCO has submitted before the Commission to consider the differential amount of Rs.71.90 crore towards fixed charge payable to NTPC for the years 2004-05 to 2008-09 as approved by the CERC vide Order dated 03.02.2009. Thus, the total additional cost of Rs.73.45 crore (Rs.1.55 crore + Rs.71.90 crore) towards Fixed Cost of TTPS may be factored and approved in the ARR for FY 2009-10. The CERC has directed the beneficiary (in this case, GRIDCO) for repayment of the same (in this case, the above additional costs) in three equal monthly instalments.
324. Based on the above, the Commission approves the annual fixed cost of Rs. 199.37 crore for the year 2009-10 as approved by CERC as per its Order dtd.03.02.2009.
325. **Variable Charges:** Earlier CERC had approved 46.22 P/U as variable charge for TTPS. GRIDCO had proposed variable charges at 46.05 P/U for 2009-10. The Commission accepts the variable cost at the rate of 46.22 P/U for the FY 2009-10 considering certain changes in components of variable costs calculations.
326. **FPA:** GRIDCO proposes FPA of 32.40 P/U for FY 2009-10 considering 10% escalation over the actual FPA for September, 2008 i.e. on 29.45 P/U. From the evidential documents submitted by GRIDCO, it is observed that FPA claimed by NTPC is ranging from 22.26 P/U to 78.95 P/U for TTPS for the period from April to December, 2008. It is also observed that the FPA for the month of December'08 is abnormally high. GRIDCO in its reply has stated that the wide variation in FPA rate in recent months is due to the

use of imported coal/high cost coal by NTPC for power generation. The details of oil and coal prices from April, 2008 to December, 2008 are presented in table below:

Table - 22

FPA Rates for TTPS

Months	Price of Coal (Rs./MT)	Price of Oil (Rs./KL)	FPA Rate (p/kwh)
April	676.76	35274.04	25.26
May	665.15	37186.29	24.58
June	640.28	42,659.72	23.80
July	640.36	42,496.73	24.19
August	660.08	41,379.49	26.82
September	672.15	43,688.04	29.45
October	680.68	43,987.10	29.57
November	668.49	48,587.74	27.70
December	1335.21	27,625.35	78.95
Average FPA			32.62

327. Considering the above price of coal and oil, the average FPA rate comes to 32.62 P/U. But the Commission accepts FPA rate as proposed by GRIDCO at 32.40 P/U.
328. **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.18.92 crore towards income tax, Rs. 7.24 crore towards Electricity duty, Rs.0.124 crore towards water/pollution Cess charge and Rs 4.99 crore towards incentive @ 25 P/U for 2009-10 based on excess generation over and above the normative level of generation. Besides an amount of Rs.8.50 crore has been claimed towards UI overdrawl. Hence the total year-end-charges proposed by GRIDCO come to Rs. 39.78 crore for FY 2009.10. The Commission on examination of the claims approves (i) Rs.18.92 crore towards income tax (ii) Electricity duty of Rs.7.24 crore calculated @ 20 paise/unit on auxiliary consumption on the generation at 85.54% PLF, (iii) Incentive of Rs. 3.19 crore for excess generation over the normative PLF of 82% @ 25 P/U (iv) Water cess/Charge of Rs.0.124 crore. Thus, the year-end charges approved for 2009-10 come to Rs.29.47 crore. The claim for UI overdrawl is not being allowed in the tariff since the possibility of overdrawl or underdrawl is difficult to predict at this moment. The year-end charges proposed by GRIDCO and approved by the Commission for the FY 2009-10 is shown in the table below:

Table – 23
Year-End Charges of TTPS

ITEM	(Rs. in crore)		
	OERC approval for FY 2008-09	Projection for 2009-10	OERC approval for FY 2009-10
Income tax	42.77	18.92	18.92
Electricity duty@20P/U	7.42	7.24	7.24
Water Cess / Charge	0.17	0.12	0.12
Incentive:	6.92	4.99	3.19
UI overdrawl	-	8.50	0.00
Total	57.29	39.78	29.47

Orissa Power Generation Corporation (OPGC)

329. OPGC did not file its ARR with OERC for the year 2009-10 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 provisionally estimated based on the parameters of subsisting PPA between GRIDCO and OPGC stations is accepted for 2009-10 subject to change in accordance with court orders or otherwise.
330. **Fixed Cost:** The fixed cost of OPGC for 2009-10 as proposed by GRIDCO was Rs. 159.02 crore. The Commission approves the estimated fixed cost of Rs. 159.02 crore for the year 2009-10 as proposed by GRIDCO subject to para above.
331. **Variable Charges:** GRIDCO has proposed variable charges in respect of Ib Thermal Power Stations at 131.38 P/U for 2009-10. The Commission after detailed scrutiny accepts 131.38 P/U as variable charges of Ib Thermal Power Stations for FY 2009-10.
332. **Year-end Charges:** GRIDCO had proposed year-end charges of Rs. 26.17 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.9.20 crore towards income tax payment for 2009-10, (ii) Electricity duty of Rs.6.21 crore @ 20 P/U on auxiliary consumption on the generation at 88.77% PLF, (iii) Incentive of Rs.9.76 crore allowed for generation over and above normative generation of 80% PLF for the year 2009-10 in line with the notification dtd. 21.06.2008 of Govt. of Orissa regarding settlement of dispute of OPGC. Thus, the estimated year-end charges approved for 2009-10 is Rs.25.17 crore which is shown in table below.

Table – 24
Year-end Charges of OPGC

(Rs. in crore)

ITEM	OERC approval for 08-09	Proposed year end charges for 2009-10	OERC approval for 2009-10
Water Cess & Water Ch.	0.00	1.00	0.00
Electricity duty@20P/U	6.19	6.21	6.21
Income Tax:	10.49	9.20	9.20
Incentive:	22.26	9.76	9.76
DPS Payable (upto 6/08)	0.00	-	-
Total	38.94	26.17	25.17

Captive Generating Plants (CGPs)

333. GRIDCO has stated that it used to procure surplus power from CGPs at variable cost or at negotiated price very close to the variable cost. Following the promulgations of Inter-State Open Access Regulation, CGPs are increasingly interested to sell the surplus power outside the State at market-discovered price which is very much lucrative because of deficit power scenario in the country. In order to avail the surplus power of CGPs, GRIDCO has offered attractive slab rates to all the CGPs except NALCO (which has signed separate 5-Year Long Term Agreement with GRIDCO) and ICCL (as per MoU dtd. 15.11.1994) as below:
- For supply upto 8 MU in a month : Rs. 2.02 per kWh;
 - For supply above 8 MU to below 32MU in a month : Rs.2.30 per kWh and;
 - For supply above 32 MU in a month : Rs. 2.50 per kWh
334. GRIDCO has stated that the Pricing Policy for CGP Power has been notified by OERC vide its Order dated 14.03.2008 in case No. 72/2007 which required GRIDCO to procure power from CGPs through a Competitive bidding route u/s 63 of the Electricity Act, 2003. GRIDCO has already initiated action for procurement of power from CGPs in accordance with the Pricing Policy enunciated by OERC. The process of determining price of each interested CGPs to supply power will take time. The price will also vary from unit to unit.
335. Further, GRIDCO submitted that Under the present circumstances, where the availability of power has fallen short of demand and in a scenario where CGPs are pressing hard to get higher rates for their surplus power or else they would prefer to sell the power outside by availing Open Access, it is proposed to procure such surplus power from the CGPs in accordance with the Pricing Policy of OERC. The cost is estimated at Rs.3.00/kWh. The Commission may however consider the actual procurement price determined through the bidding route in the ARR for FY 2009-10. The total estimated procurement cost of CGP power on firm basis comes to Rs.133.97 crore for 450 MU @ 297.71 P/U.

336. Later, GRIDCO had filed 15 Nos. of applications separately before OERC for procurement of surplus power and approval of cost from Captive Generating Plants/Co-generation Plants. GRIDCO in all its applications has submitted the grounds of immediate harnessing of surplus power of about 300 MW from these sources to meet the State demand.
337. These applications were scrutinized and the Commission has passed interim order on 28.02.2009 vide Case Nos.6 to 20 of 2009. In the said order, the Commission directed that for supply of power by the CGPs/Co-generating plants to GRIDCO for sale to DISCOMs meant for consumption by the consumers in the State, the procurement price of firm power from the CGPs would be Rs.3.00/KWh with effect from 01.3.2009. However, to encourage co-generation as is mandated under the Electricity Act, 2003 the power generated by co-gen. plants e.g. sponge-iron plants such as NINL, Arati Steel, Tata Sponge, etc. may be given an incentive and shall be paid @ Rs.3.10 per/KWh with effect from 01.3.2009.
338. The rate of power for CGPs at Rs.3.00/Rs.3.10 per unit would also be applicable with effect from 01.3.2009 to those CGPs/Co-generating plants having subsisting contracts/agreements with GRIDCO. After 30.6.2009, the Commission would review this interim pricing arrangement.
339. However, the Commission scrutinised the application of GRIDCO for 2009-10 and accepts provisionally the negotiated rates of Rs.3.00 per unit of drawal from CGPs for the entire year 2009-10. Accordingly the cost of power purchased from CGPs during FY 2009-10 comes to Rs.37.39 crore for energy drawal of 124.64 MU for meeting the demand of State. Further, the Commission directs that changes, if any, due to the CGP pricing policy notified on 14.03.2008 and present interim pricing shall be accounted for in the truing up exercise, if need arises.

Power Purchase from Renewable Sources:

340. GRIDCO has projected to procure power at different negotiated rates from different Renewable sources. The Commission scrutinised the application of GRIDCO and to encourage the Renewable sources, provisionally accepts the negotiated rates as proposed by GRIDCO for procuring power from these sources. Further as per interim order dt 28.02.2009 the Commission has approved a provisional rate of Rs.3.10 for drawal of power from co-generation plants. The Commission provisionally approves the same rate for 2009-10 for Co-generating Plants. Accordingly the cost of power purchase from aforesaid sources during FY 2009-10 as approved by the Commission is given in table below:

Table - 25

Power Purchase from Renewable Sources during 2009-10

	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	MU	Rate (P/U)	Cost (Rs.in Cr)	MU	Rate (P/U)	Cost (Rs.in Cr)
NINL	80.00	300.0	24.0	80.00	310.0	24.80
ARATI STEEL	80.00	300.0	24.0	80.00	310.0	24.80
TATA SPONGE	120.00	300.0	36.0	120.00	310.0	37.20
Samal Small Hydro	100.00	230.0	23.0	100.00	230.0	23.00
Minakshi Small Hydro	150.00	220.0	33.0	150.00	220.0	33.00
TOTAL	530.00	264.15	140.0	530.00	269.43	142.80

Central Generating Stations

341. **Chukha:** GRIDCO has stated that the procurement cost of power from Chukha for 2009-10 has been calculated based on the revised rate fixed by MOP/GOI, which is Rs.1.55/Unit for the full year effective from 01.04.2008 as per PTC India letter dt.07.03.2008.
342. 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 186.56 paise/unit for 2009-10 based on Central Transmission Loss of 3.88%. Thus, the power purchase cost from Chhuka Hydro Station for 265 MU @ 186.56 P/U works out to Rs. 49.44 crore for FY 2009-10.
343. The Commission scrutinized the application of GRIDCO and approved 184.65 paise/unit inclusive of central transmission loss and applicable transmission charges for 2009-10 for the power procurement from Chukka. So the cost for Chukka power comes to Rs.49.90 crore for 270.26 MU @ 184.65 P/U for 2009-10.
344. **TALA:** GRIDCO has stated that the procurement cost of both primary and secondary energy from TALA for 2009-10 has been fixed at Rs.1.80/Unit calculated based on the agreement signed between MOP/GOI, and Royal Govt of Bhutan on 28.07.2006.
345. 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 211.53 paise/unit for 2009-10 based on Central Transmission Loss of 3.88%. Thus, the power purchase cost from Tala Hydro Station for 174 MU @ 211.53 P/U works out to Rs. 36.81 crore for FY 2009-10.

346. Submission of GRIDCO was examined. The average rate per unit of TALA power has been reworked out at 209.61 P/U inclusive of central transmission loss of 3.87% and applicable transmission charge for 2009-10. The total cost of Tala power comes to Rs.36.48 crore for 174.02 MU for 2009-10 and the same is approved by the Commission.
347. **TEESTA:** GRIDCO has stated that CERC vide its Order dated 31.03.2008 has calculated the provisional tariff for Teesta power @ 1.62 P/U on the scheduled saleable energy, which is applicable from the date of Commercial Operation. As per the subsisting Order the Per Unit Cost of the energy from Teesta-V has been projected at 188.64 P/U including Central Sector Loss of 3.88% and the PGCIL Transmission Charges of 20.10 P/U. Thus, the power purchase cost from Teesta-V HEP for 490 MU @ 188.64 P/U comes to Rs. 92.43 crore for FY 2009-10.
348. After due scrutiny, the Commission approves the average rate per unit of TEESTA power at 186.73 P/U inclusive of central transmission loss of 3.87% and applicable transmission charge for 2009-10. The total cost of Teesta power comes to Rs.91.51 crore for 490.06 MU for 2009-10.

Central Sector Thermal Power Stations

349. GRIDCO in its filing dt 29.11.2008 stated that CERC was already in the process of finalising the Terms and Conditions of Tariff Regulations, 2009 for the next 5-year period starting from April 01, 2009 to March 31, 2014. However, since the Final Tariff Regulations for the period 2009-2014 was yet to be released, GRIDCO considered it prudent to take the Fixed Cost as approved by CERC for the respective Stations for FY 2008-09 in the tariff proposal for 2009-10.
350. In the mean time, CERC has notified the CERC (Terms and Conditions of Tariff) Regulations, 2009 on 19th January, 2009. Director (Tariff) in a query during hearing asked GRIDCO to furnish the impact of new CERC Regulations on tariff of central sector generating stations on GRIDCO. In its reply, GRIDCO stated that the tariff of Central Sector Stations for the period 2009-14 would be decided by CERC based on Capital Cost and Additional Capital Expenditure incurred upto 31st March, 2009 as submitted by respective generators before CERC. Since the above said audited capital cost figures of the respective generators are not available with GRIDCO, it is not possible to estimate the tariff for the year 2009-10 and the consequent impact on the ARR.
351. As already stated above, tariff determination 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 depending on the actual turn of events. In order to deal with such eventualities, the Commission has also accepted the concept of truing-up. So, the Commission feels it would be appropriate for the present to calculate the cost of power purchase from central sector stations based on CERC Tariff Regulations, 2004.

352. **Fixed Cost:** Tariff of Central Thermal Generating Stations is governed by CERC tariff notifications. Based on the CERC tariff notifications applicable for 2008-09 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 in respect of these, is shown in table below:

Table - 26
Fixed Cost of Central Thermal Stations for 2009-10

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 3.88% (P/U)	Commission's approval for Fixed Cost for 2009-10 (Rs. In Cr.)	Estimated energy Drawal (MU)	Commission's approval including Central Tr. Loss of 3.87% (P/U)
TSTPS -I	397.30	31.80	126.34	63.76	126.34	2105.51	60.01
TSTPS -II	863.50	10.00	86.35	69.29	86.35	1324.22	65.21
KHSTPS-II	515.38 (Unit-I& II)	2.00	9.32	82.54	10.31	198.63	51.89*
FSTPS	518.33	13.63	70.65	52.03	70.65	1443.00	48.96
KHSTPS- I	316.79	15.24	48.15	61.37	48.28	833.86	57.90

(*) The CERC has approved the provisional tariff for KHSTPS Stage -II (Unit-I & II) on 30.12.2008. The tariff for Unit- III OF KHSTPS has not yet been notified by CERC. GRIDCO has proposed in the ARR for 2009-10 to consider the fixed cost for Unit-II equivalent to Unit -I i.e. 82.54 P/U. After scrutiny the Commission allows the fixed cost of Rs. 10.31 crore for Unit-I& II only and directs GRIDCO to claim the fixed cost of Unit- III of KHSTPS as Pass through in subsequent year after CERC notification.

353. **Variable Charges:** GRIDCO stated that variable charges based on the CERC's notification for 2008-09 has been accepted for 2009-10. The Commission has accepted the variable charges proposed by GRIDCO as those are in accordance with the said notification. However, the cost in P/U changes as the Commission accepts a Central Transmission Loss of 3.87% and not 3.88% as proposed by GRIDCO. Further, in case of KHSTPS-II, the Commission has accepted the latest order of CERC dtd.31.12.2008. The proposed and approved variable charges are indicated in the table below.

Table – 27
Variable Charges of Central Thermal Power Stations

Stations	Variable Cost as per CERC order (excluding central transmission loss) (P/U)	GRIDCO's Proposal for 2009-10 (Including Central Tr. Loss of 3.88%) (P/U)	Variable Cost Approved by the Commission for 2009-10 (Including Central Tr. Loss of 3.87%) (P/U)
TSTPS -I	41.10	42.76	42.76
TSTPS -II	58.73	61.10	61.09
KHSTPS -II	125.37	125.68	130.42
FSTPS	98.57	102.55	102.53
KHSTPS -I	108.50	112.88	112.87

Fuel Price Adjustment (FPA)

354. GRIDCO in para 4.7.4.3 of ARR application had stated that the average FPAs of Central Thermal Generating Stations registered an increasing trend during the first six months of 2008-09. Therefore, GRIDCO proposed 10% escalation in FPA over the actual FPA bill served by NTPC for September, 08. Further Central Sector Transmission Loss @ 3.88% has been added over the escalated FPA.
355. Actual bills of NTPC are scrutinised and the Commission observes that the coal and oil prices have increased substantially. The details of coal and oil prices and FPA rates as produced by NTPC are given below.

Table – 28
Coal & Oil Prices and FPA Rates of CGSs

Month	FSTPS			KSTPS-I			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-08	26,385.7	1,417.3	33.90	29,955.8	1,271.1	16.28	25,225.7	785.7	29.88	25,225.7	810.1	14.29
May-08	26,385.7	1,464.1	28.53	31,566.4	1,244.4	15.02	25,373.4	838.3	35.39	25,373.4	838.3	17.76
Jun-08	32,957.9	1,382.0	19.98	31,566.4	1,416.0	35.53	37,535.2	763.9	34.61	37,535.2	763.9	16.99
Jul-08	32,957.9	1,494.3	43.99	40,206.8	1,318.3	22.87	37,253.6	696.8	29.63	37,253.6	696.8	12.00
Aug-08	33,724.5	1,204.1	23.63	42,628.1	1,174.7	12.33	39,349.9	724.1	34.58	39,349.9	724.1	16.96
Sep-08	22,842.4	1,233.2	19.96	41,552.2	991.8	0.00	38,850.8	742.4	35.28	38,850.8	742.4	17.65
Oct-08	35,501.6	1,433.7	41.34	33,965.6	1,106.1	0.53	38,268.5	901.2	53.39	38,268.5	901.2	35.77
Nov-08	32,644.0	1,432.0	45.38	23,239.3	1,099.4	3.61	21,504.8	874.9	47.22	21,504.8	874.9	29.59
Dec-08	17,495.8	2,290.9	105.17	19,064.8	2,228.9	101.05	17,746.0	1,431.1	91.62	17,746.0	1,431.1	74.00
Jan-09	17,495.8	2,089.9	93.39	18,071.3	1,977.4	78.22	17,949.7	1,377.1	83.38	17,949.7	1,377.1	65.75
Avg 4/08 to 1/09	28,988.4	1,483.5	45.47	32,638.4	1,316.7	28.96	31,234.2	862.0	47.41	32,920.2	794.0	30.00

356. It is observed from the above table that the coal price has gone up substantially w.e.f December, 2008. To the Commission's query, GRIDCO has replied that the wide variation in FPA Rates in recent times was due to the use of imported / high cost coal by NTPC for power generation in its Plants.
357. The Commission is of the opinion that the use of imported /high cost coal for generation of power may not be regular and permanent phenomenon. In fact, this may not continue during the year 2009-10. Considering the above, the Commission estimated the FPA rates based on the average price and GCV of coal and oil for the period from April,08 to January,09 with 5.5% escalation over average FPA to meet the changes in WPI as against an escalation of 10% proposed by GRIDCO. In case of any further variation in FPA during the year 2009-10, the same may be allowed as pass through in the ARR for the next year.

Table - 29
Fuel Price Adjustment Charges of CGSs for 2009-10

Figs in Paise/Unit

Stations	GRIDCO's proposal (including central Tr. Loss of 3.88%)	Avg FPA for the Period from April,08 to Jan,09	Approval of the Commission with an escalation of 5.5%	Approval of the Commission including central Tr. Loss of 3.87%
TSTPS -I	40.37	47.41	50.02	52.03
TSTPS -II	20.20	30.00	31.65	32.93
FSTPS	30.68	45.47	47.97	49.90
KHSTPS - I	19.68	28.96	30.56	31.79
KHSTPS - II	0.00	1.50	1.58	1.65

358. **Year-end Charges:** GRIDCO has proposed the year-end charges for 2009-10 including Central Sector loss based on the actual year-end charges for 2007-08.
359. The Commission has scrutinised the proposal and adopted the following principles for the purpose of calculation of the year-end charges for the year 2009-10.
360. Income tax constitutes a major segment of the year-end charges. On scrutiny, it is observed that NTPC has raised bills towards income Tax for 2007-08 to GRIDCO. GRIDCO has submitted a statement showing the details of Year-end charges payable by GRIDCO to NTPC for 2007-08 in its filing dt.06.01.2009. The Commission provisionally accepts the same towards year-end charges in the ARR of GRIDCO for FY 2009-10.
361. Electricity duty for TSTPS Stage-I and Stage-II has been calculated @ 20 paise/unit based on the auxiliary consumption for 2009-10.

362. The Commission has considered generation at PLF of 85% for 2009-10 for which payment towards incentive has been taken into account at present for CGSs. The incentive is calculated at a flat rate of 25 P/U for ex-bus scheduled generation in excess of ex-bus energy corresponding to target Plant Load factor i.e 80%.
363. NTPC has raised water cess bills for CGSs for the year 2007-08. The Commission approves the water cess payments for FY 2009-10 based on NTPC bills for 2007-08.
364. Accordingly, the year-end charges approved by the Commission including central transmission loss are given in the table below.

Table – 30
Approved Year-end Charges for 2009-10 (Paise/Unit)

Central Thermal Stations	GRIDCO's Proposal Including Central Sector Loss @ 3.88%	Commission's Approval Including Central Sector Loss @ 3.87%
TSTPS -I	2.14	3.25
TSTPS -II	2.16	3.27
FSTPS	10.08	8.34
KHSTPS - I	0.04	1.59
KHSTPS - II	0.00	1.53

Transmission Charge for PGCIL System

365. 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 Dec,2008 Regional Energy account, GRIDCO has to pay a weighted average of 15.44% share of the fixed cost towards Regional Transmission System and 23.273% for inter-regional transmission system as PGCIL transmission charges.
366. In the ARR application, GRIDCO has shown the annual fixed charges of Rs.662.29 crore for PGCIL transmission system consisting of Rs.649.85 crore for regional and Rs.12.44 crore for inter-regional transmission system based on the claims made by PGCIL for September 2008 for all the users of the PGCIL system. GRIDCO's share for the same comes to Rs. 100.92 crore and 2.92 crore for regional Transmission Charges and inter-regional Transmission Charges respectively.
367. 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 an amount of Rs. 14.19 crore to PGCIL towards ULDC charges both for State and Central sectors.
368. Further, GRIDCO has to pay an amount of Rs.10.36 crore towards year-end charges and adjust an amount of Rs.4.5 crore received from short term open accesses customers towards utilising central sector transmission system. The net transmission charge aggregates to Rs.123.90 crore. Considering the above, the Transmission charges for PGCIL transmission system works out to 20.10 P/U including central sector transmission loss at energy drawal of 6413.95 MU.
369. Further GRIDCO in its filing dt 28.01.2009 submitted that the regional Transmission Charges as considered by GRIDCO in its original filing had undergone a change due to additions of new regional lines for which tariff has been approved by CERC. The new regional lines include the following:
- Circuit – II of 400KV D/C Teesta (Stage –V) siliguri Transmission System associated with Teesta Stage –V HEP (CERC Order dt.11.12.2008).
 - ICT – II at Baripada Substation (CERC Order Dt.11.12.2008).
370. Considering all these asset additions, the cost of total Transmission charges for Regional Transmission System has been enhanced to Rs.655.957 crores from Rs.649.849 crore as filed earlier and also PGCIL has claimed Rs.6.47 crore towards income tax for the year 2007-08.
371. The Commission examined the monthly bill for December, 2008 produced by PGCIL and found that it has claimed Rs.668.40 crore as annual fixed cost towards transmission charges for both regional and inter-regional transmission systems for the whole region. Therefore, the Commission considers a sum of Rs.668.40 crore as fixed cost towards PGCIL transmission charges for 2009-10 comprising Rs.655.96 crore towards regional transmission system and Rs.12.44 crore towards inter-regional transmission system duly deducting the apportionment to other regions.
372. Further, GRIDCO has shown a sum of Rs.10.36 crore as year-end adjustment charges comprising of income tax of Rs.2.53 crore, incentive of Rs.4.62 crore, and FERV & Interest paid for Floating rate of interest incurred for 2007-08 at Rs.3.21 crore.
373. PGCIL is eligible for incentive for availability of transmission system above 98% as per CERC notification. GRIDCO had considered Rs.4.62 crore towards incentive for 2009-10. The Commission scrutinised the proposal of GRIDCO and approved an amount of Rs.3.83 cr for 2009-10 as incentive based on amount paid to PGCIL for FY 2007-08.
374. The amount of income tax for the ensuing year has been calculated by prorating the actual advance income tax paid by PGCIL up to the 2nd quarter of 2008-09 (Rs.1.78 crore upto 2nd quarter) as Rs.3.57 crore. The Commission approves this amount of Rs.3.57 crore for 2009-10.

375. The Commission scrutinised the amount filed by GRIDCO under the head year-end charges of Rs.3.21 crore towards FERV and differential interest paid for Floating rate of interest incurred for 2007-08. The Commission approves the same amount of Rs.3.21 crore as proposed by GRIDCO.
376. After totalling all the items, the Commission approves an amount of Rs.10.61 crore towards year-end adjustment charges of PGCIL for 2009-10.
377. GRIDCO has implemented unified load despatch and communication scheme as a part of ULDC programme for the Eastern Region. On scrutiny, it is observed that PGCIL has claimed an amount of Rs.8.376 crore towards state sector ULD and communication charges and also an amount of Rs.5.122 crore towards central sector ULD and communication charges totaling to Rs.13.498 crore/Year. The Commission provisionally accepts the aforesaid claim of PGCIL and allows pass through of Rs.13.498 crore in the tariff for 2009-10. An expenditure of Rs.13.498 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.
378. It is further observed from the statement submitted by GRIDCO that an amount of Rs.2.7945 crore has been credited to GRIDCO account towards short-term open access charges for the period from April, 2008 to December, 2008. The Commission after prorating the same for the whole year has deducted an amount of Rs.3.726 crore from PGCIL transmission charges.
379. The total cost towards PGCIL transmission charges is indicated in the table below:

Table - 31
PGCIL Transmission Charges for 2009-10

	GRIDCO's Proposal	Commission's Approval
Regional Transmission System (Rs. crore)	649.85	655.96
Inter-Regional Transmission system chargeable to Eastern Region (Rs. crore)	12.44	12.44
TOTAL FIXED COST	662.29	668.40
GRIDCO's Share form Regional Tr. System (Rs. crore) (15.44%)	100.92	101.28
GRIDCO's Share form Inter-Regional Tr. System (Rs. crore) (23.273%)	2.92	2.90
Sub-Total	103.846	104.173
GRIDCO's Share for Year end charge (Rs. crore)	10.36	10.61
ULD and communication charges	14.19	13.498
Total annual Transmission Charge Payable by GRIDCO for Central Transmission System (Rs. crore)	128.396	128.281
Less: Transmission Charges Received from Short term customers	4.50	3.726
Net amount payable by GRIDCO towards Tr. Charge (Rs. crore)	123.896	124.555
Energy Drawl by GRIDCO (MU)	6413.95	7114.80
PGCIL Tr. Charge (P/U)	19.32	17.51
PGCIL Tr. Charge Including Central Loss of 3.87% (P/U)	20.10	18.21

380. 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 - 32
GRIDCO PROPOSAL & COMMISSION'S APPROVAL FOR 2009-10

Generators	GRIDCO's PROPOSAL			COMMISSION'S APPROVAL		
	Energy (MU)	Total Rate (P/U)	Total Cost (Rs.in Cr.)	Energy (MU)	Total Rate (P/U)	Total Cost (Rs.in Cr.)
HYDRO (OLD)	3,948.35	45.95	181.44	3,948.35	52.78	208.38
Indravati	1,971.09	66.90	131.86	1,971.09	73.35	144.58
Machakund	265.00	25.92	6.87	265.00	13.90	3.68
Total Hydro	6,184.44	51.77	320.18	6,184.44	57.67	356.64
OPGC	2,955.66	194.04	573.51	2,955.66	193.70	572.51
TTPS	3,085.07	155.46	479.61	3,085.07	152.80	471.39
Total CGPs	450.00	297.71	133.97	124.64	300.00	37.39
Total Renewable	530.00	264.15	140.00	530.00	269.43	142.80
TOTAL STATE	13,205.16	124.74	1,647.26	12,879.81	122.73	1,580.74
CHUKHA	265.00	186.56	49.44	270.26	184.65	49.90
Tala HPS	174.00	211.53	36.81	174.02	209.61	36.48
Teesta-V	490.00	188.64	92.43	490.06	186.73	91.51
Total Central Hydro	929.00	192.33	178.68	934.34	190.39	177.89
TSTPS St-I	1,981.42	169.14	335.14	2,105.51	176.25	371.09
TSTPS St-II	1,246.18	172.86	215.40	1,324.22	180.71	239.30
FSTPS	1,357.95	215.43	292.54	1,443.00	227.94	328.91
KhTPS St-I	784.62	214.03	167.93	833.86	222.35	185.41
KhTPS St-II	114.79	228.32	26.21	198.63	203.69	40.46
Total Central Thermal	5,484.95	189.10	1,037.23	5,905.23	197.31	1,165.17
Total Central Sector	6,413.95	189.57	1,215.89	6,839.57	196.37	1,343.06
TOTAL GRIDCO	19,619.11	145.94	2,863.15	19,719.38	148.27	2,923.80

Rebate for Prompt Payment from the Generators

381. 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 @ 1.25% per month on the billed amount is payable by GRIDCO to the generators.
382. 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 DISCOMs for payment through L.C.

FINANCIAL ISSUES

Employees Cost

383. GRIDCO has projected Rs.6.80 crore towards employees cost for FY 2009-10. A comparative picture of break-up of proposed employees cost under major heads along with the approved figure for the FY 2008-09 is depicted in the table below:

Table – 33

(Rs. in Crore)

	2008-09 (Approval)	2009-10 (Proposed)
Basic Pay	1.38	1.89
DA	0.69	0.49
HRA	0.22	0.38
Medical reimbursement	0.07	0.19
Others	0.49	1.17
Arrear payment	-	1.92
Terminal Benefit	0.48	0.76
Total	3.33	6.80

384. It is observed from the above table that the rise projected in employees cost for 2009-10 is more than 100% over the corresponding approved figure for 2008-09. This is attributable to likely revision of pay in line with 6th Pay Commission recommendations along with the arrear.
385. Regarding proposed implementation of 6th pay Commission recommendations, the Commission takes the same stand as has been done in case of OPTCL. The Commission directs GRIDCO to submit a detailed calculation of enhanced salary employee-wise for scrutiny. Then only the Commission may decide to allow the arrear payment to employees in a staggered manner over a period of few years.
386. For the present, Commission provisionally allows revision at the average rate of 30% on the pre-revised basic pay, DA, HRA for the FY 2009-10 without considering the payment towards arrear. The differential amount, if any, shall be taken care of in the truing up exercise after the audited accounts are available to the Commission.
387. GRIDCO has submitted the Audited accounts for the year 2007-08. The basic pay as indicated in these audited accounts is Rs.1.08 crore. The Commission allows escalation

@ 3% of the basic pay towards normal annual increment on year to year basis, and approves a figure of Rs.1.15 crore for the FY 2009-10.

388. As regards DA, the rate of DA before 6th Pay Commission gave its recommendations was 47%. The Commission considers the DA @ 47% to assess the quantum.
389. In respect of expenditure such as Medical reimbursement, HRA, the principle adopted in the last year tariff order has been followed mutatis mutandis.
390. For the year 2009-10, GRIDCO claimed an amount of Rs.0.76 crore towards terminal benefit assuming 40% on proposed basic pay. The Commission allows the terminal benefit at the rate of 40% over the approved basic pay of Rs.1.15 crore. Summary of employees cost proposed by GRIDCO and approved by the Commission for FY 2009-10 is shown in the following table:

Table – 34

(Rs. in Crore)

	GRIDCO's Proposal	Commission's Approval
Basic Pay	1.89	1.15
DA	0.49	0.54
HRA	0.38	0.18
Medical reimbursement	0.19	0.06
Others	1.17	0.85
Terminal Benefit	0.76	0.46
Arrear of 6 th Pay	1.92	NIL
Sub-Total	6.80	3.24
30% rise over pre-revised	-	0.56
Total:	6.80	3.80

Repair and Maintenance Cost

391. GRIDCO has proposed Rs.0.50 crore towards repair and maintenance of vehicles, furniture and office equipments for FY 2009-10. In line with the order for FY 2008-09, Commission disallows the same.

Administrative and General Expenses

392. GRIDCO has projected an amount of Rs. 5.14 crore towards administrative and general expenses for the FY 2009-10. This is as against an approved amount of Rs.2.41 crore for FY 2008-09. The audited account for 2007-08 revealed an amount of Rs.3.08 crore under the head A&G. This includes an amount of Rs.0.80 crore towards license fee. The Commission escalates the audited figure (excluding license fee) @ 5.5% (Average of WPI & CPI) on year to year basis and arrives at an amount of Rs.2.53 crore during 2009-10. After addition of an amount of Rs.0.50 crore towards license fee, the Commission approves an amount of Rs.3.03 crore towards A&G expenses. In case, there is any increase in License Fee during FY 2009-10, the same shall be allowed as pass through in 2010-11.

ERLDC Charges

393. GRIDCO has projected Rs. 1.32 crore towards ERLDC fees for the financial year 2009-10. The Commission approves the same and allows Rs.1.32 crore to be passed on to annual revenue requirement for 2009-10.

Interest on Loan

394. During financial year 2008-09 GRIDCO had projected an amount of Rs.128.49 crore towards interest on long-term liability; the detailed calculation of which is submitted in TRF-3. Commission observed that GRIDCO has not shown any addition of new loan during 2008-09 and 2009-10. All the loans upto 31.03.2008 are approved loan on which Commission has been allowing interest every year. The Commission dealt with this matter in last year's tariff order extensively (para-383 to 390 of BSP order 2008-09). In line with earlier order for FY 2008-09, the Commission allows interest on all the loans except loan from State Govt. and Pension Trust Bond. A table showing interest liability of GRIDCO as proposed and approved for FY 2009-10 is depicted in table below:

Table – 35**(Rs. in Crore)**

		2009-10	
		Proposed by GRIDCO	Approved by Commission
A	Govt. Loan		
1.	State Govt. Loan (WCL)	15.60	NIL
2.	State Govt. (OPGC Adj.)	4.47	NIL
3.	NTPC-III (Govt.)	67.96	67.96
	Sub Total	88.03	67.96
B	Institutional Loans		
1.	REC Term Loan	NIL	NIL
2.	REC Short-term	NIL	NIL
3.	OPTCL Loan	NIL	NIL
	Sub Total	NIL	NIL
C	Secured Loan		
1.	Union Bank of India-I	0.42	0.42
2.	Union Bank of India-III	6.49	6.49
3.	Union Bank of India-IV	9.49	9.49
4.	Allahabad Bank (I, II & III)	5.21	5.21
5.	Dena Bank-I & II	5.79	5.79
6.	Andhra Bank	2.66	2.66
7.	Karnatak Bank	0.66	0.66
8.	Syndicate Bank	2.10	2.10
	Sub Total	32.81	32.81
D	GRIDCO Bond		
1.	OHPC	NIL	NIL
2.	Pension Trust Bond	6.81	NIL
3.	NTPC Bond-IV	0.85	0.85
	Sub Total	7.66	0.85
	Grand Total (A+B+C+D)	128.49	101.62

Pass through of Other Expenses

395. GRIDCO has proposed pass through of uncovered expenses of the order of Rs.866.32 crore for the year 2008-09 and 2009-10 as presented in table below:

Table – 36

(Rs. in Crore)		
1.	Special appropriation for repayment of loan for FY 2009-10	394.09
2.	Pass Through of gap for 2008-09	399.66
3.	Arrear Payment to OPGC	72.57
		866.32

Special appropriation for 2009-10

396. GRIDCO has projected a total loan repayment of Rs.394.09 crore during FY 2009-10 as per schedule shown in TRF-3. GRIDCO submits that with the transfer of transmission assets of GRIDCO to OPTCL, all fixed assets have been transferred to OPTCL with effect from 1st April, 2005. After 1st April, 2005, GRIDCO has acquired very little asset the depreciation of which is very negligible. As such, GRIDCO will have no cash from depreciation source to meet repayment obligation recognized by the Commission.
397. GRIDCO further stated that the Commission in its tariff order for 2008-09 had mentioned that recovery of receivables of DISCOMs might be utilized by GRIDCO to bridge the gap in the revenue requirement which was synonymous with repayment of principal liability. The Commission in its order dated 20.7.06 had stressed that back to back arrangement between GRIDCO and DISCOMs should be scrupulously followed. Accordingly, Commission had allowed amortization of regulatory asset to DISCOMs in order to meet such repayments. As against arrear receivables from DISCOMs amounting to Rs.219.83 crore during 2008-09 (WESCO Rs.36.83 crore, NESCO Rs.65.00 crore and CESU Rs.118.00 crore), the present position of payment upto 10.02.09 is Rs.116.46 crore. The details are given in the table below:

Table – 37

	OERC approval for 2008-09	Actual receipt till 10.2.09	Balance to be recovered
WESCO	36.83	NIL	36.83
NESCO	65.00	80.72	(-) 15.72
SOUTHCO	-	5.38	(-) 5.38
CESU	118.00	30.36	87.64
	219.83	116.46	103.37

398. 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.

399. In view of the above, GRIDCO submits before the Commission to allow repayment liabilities of Rs.394.09 crore as a special appropriation in ARR for 2009-10.
400. The Commission vide order dated 20.7.06 in Case No.115 had approved the repayment schedule of GRIDCO considering only power purchase liabilities. The loan repayment liability does not include the liabilities towards pension trust bond and loan from State Govt.
401. From TRF-3 of GRIDCO's filing, it is found that the repayment liability of Rs.394.09 crore includes amounts of Rs.116.30 crore and Rs.32.63 crore towards repayment liability of State Govt. and pension trust fund. Excluding the above amount, the repayment liability on account of power purchase only works out to Rs.245.16 crore (394.09 – 116.30 – 32.63). The Commission in its supplementary order pertaining to the approved Business Plan of DISCOMs in Case No.115/2004 dated 20.7.06 had approved and recognized repayment liability in annual repayment schedule of Rs.226.74 crore for the FY 2009-10.
402. The difference of Rs.18.42 crore (Rs.245.16 crore – Rs.226.74 crore) is due to repayment liability of new loan availed from UBI to discharge NTPC liabilities already paid by GRIDCO in respect of Rs.400 crore of Power Bond, which should otherwise be paid by WESCO, NESCO and SOUTHCO.
403. Commission, therefore, recognizes the amount of Rs.245.16 crore as repayment liability of GRIDCO for 2009-10. As regards treatment of the same, Commission expects that the above amount should be met to the extent possible out of the earnings from export, UI charges, receivable from DISCOMs and outside states. Though the Commission accepts the repayment liability of GRIDCO, decides to exclude the same as a part of revenue requirement for fixation of BSP as it is expected to be met from export, UI charges and recoveries from DISCOMs etc.

Pass through of Gap for 2008-09

404. GRIDCO submitted that due to non-availability of surplus power for trading and meagre UI charges during 2008-09 and compounded with higher average cost of power purchase per unit compared to the approved figure, it may post a deficit of Rs.399.66 crore for 2008-09.
405. GRIDCO, therefore, filed a petition dated 31.10.2008 before OERC for revision of BSP for the year 2008-09 and submitted that the above amount might be approved as a pass through in the ARR for 2009-10.
406. The Commission examined the submission of GRIDCO with reference to the BSP order for 2008-09. Commission vide para 421 & 422 of BSP order 2008-09 had stated as follows:

“Para-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 DISCOMs.*

Para-422 *It is very much imperative that the back to back arrangement between DISCOMs and GRIDCO should be scrupulously followed so that GRIDCO is in a position to recover at least 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.”*

407. The present position of receipt of trading and UI charges as filed by GRIDCO in its cash flow statement (upto December, 2008) is given in table below:

	<u>Rs. in Crore</u>
UI Charges -	270.20
Trading -	24.34
ICCL NALCO-	60.01

Total:	354.55

408. The Financial year 2008-09 is not yet over. Hence, it is difficult to assess the exact income from trading and UI Charges during 2008-09 to bridge the gap allowed by the Commission. Therefore, after receipt of audited accounts for FY 2008-09 and short-fall if any accrued thereof would be adjusted with the approved gap to be recognized as regulatory asset and the carrying cost will be passed on to ARR in FY 2010-11.

Arrear Payment to OPGC:

409. GRIDCO submitted that it was liable to pay Rs.72.57 crore to OPGC towards arrear dues which were held up because of the dispute with regard to tariff norms applicable for procurement of power from OPGC.

410. Commission is of the view that the dues of OPGC will be considered after approval of amended agreement. Hence, the amount claimed by GRIDCO is not allowed at present as a pass through in the ARR.

Pass Through of Power Purchase related cost of OHPC

Income Tax

411. As per new CERC Regulations, 2009, tax on the income streams of the generating company or the transmission licensee, as the case may be, shall not be recovered from the beneficiaries, or the long-term transmission customers, as the case may be: Provided that the deferred tax liability, excluding Fringe Benefit Tax, for the period up to 31st March, 2009 whenever it materializes, shall be recoverable directly from the beneficiaries and the long-term customers.

412. Accordingly, income tax liability i.e. Minimum Alternative Tax paid by OHPC during the FY 2007-08 to the tune of Rs.8.74 crs , Rs.6.65 crs and Rs. 0.12 in case of UIHEP, Balimela and Rengali power station respectively is to be reimbursed directly to OHPC from GRIDCO. The Commission approves the said amount as pass through.

Electricity Duty on Auxiliary Consumption

413. As per the agreed PPA between OHPC and GRIDCO, the taxes and duties including ED on auxiliary consumption etc payable by OHPC to the State Government and other statutory bodies shall be passed on to GRIDCO in the shape of supplementary bill to be raised by OHPC and GRIDCO will make payment accordingly within 30 days of receipt of bills. To facilitate reimbursement of electricity duty, GRIDCO should include the same (based on the Design Energy), in its Annual Revenue Requirement prior to beginning of the year.
414. Accordingly, ED on Auxiliary consumption of all the hydro-electric projects to the tune of Rs.0.57 crore is to be reimbursed to OHPC from GRIDCO through separate billing. The Commission approves the same. The details of ED on auxiliary consumption and income tax are summarized in the table below:

Table - 38

(Rs. in Crore)

Component of Costs	RHEP	UKHEP	BHEP	HPS	Sub-Total	UIHEP	Total
ED on Auxli. Consumption	0.05	0.08	0.12	0.12	0.37	0.20	0.57
Income Tax (MAT)	0.12	0.00	6.65	0.00	6.77	8.74	15.51
Total	0.17	0.08	6.77	0.12	7.14	8.94	16.08

Pass Through of Power Purchase related cost of TTPS

415. GRIDCO has submitted before the Commission to consider the differential amount of Rs.71.90 crore towards fixed charge payable to NTPC for the years 2004-05 to 2008-09 as approved by the CERC vide Order dated 03.02.2009. Thus, the total additional cost of Rs.73.45 crore (Rs.1.55 Cr. + Rs.71.90 Cr.) towards Fixed Cost of TTPS may be factored and approved in the ARR & BSP for FY 2009-10. The CERC have directed the beneficiary (in this case, GRIDCO) for repayment of the same (in this case, the above additional costs) in three equal monthly instalments.

Truing Up for GRIDCO

416. The Commission had undertaken truing up exercise of GRIDCO from the FY 1996-97 to 2005-06 in the BSP order 2007-08 (para 5.35.11.1). In the said Order, Commission stated that the exercise was provisional subject to finalization after hearing from stakeholders namely GRIDCO and four DISCOMs.

417. The Commission heard the matter several times. Developments in this regard were narrated in para 402 of BSP order 2008-09 which is reproduced below:

“402. In accordance with the Commission’s earlier orders and based on the submission received from DISCOMs and GRIDCO, the Commission heard the matter on 24.07.2007 and directed both DISCOMs and respondent GRIDCO to carry out the following direction:

- a. DISCOMs should come up with element wise analysis of figures justifying the claim.*
- b. Written submission by the DISCOMs 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 DISCOMs 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 DISCOMs 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 DISCOMs, 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 DISCOMs of the arrear on BST dues was to be submitted on or before 31.12.2007.*
- g. Audit of receivables of DISCOMs 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 DISCOMs 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 DISCOMs filed their compliance as per the direction of the Commission.”*

418. On 01.12.2008, Commission passed order on securitization in which the issue of DPS and joint reconciliation has been addressed.

419. Regarding receivable audit, WESCO, NESCO & SOUTHCO have submitted the report to the Commission. CESU is yet to submit the report on receivable audit. After getting the report from three DISCOMs, Commission conducted a hearing and directed GRIDCO to file its comments on the said reports. GRIDCO submitted its comments on 18.08.2008 to the Commission. The Commission again directed WESCO, NESCO and SOUTHCO to file their views on the comments of GRIDCO to which they have submitted their replies on 27.09.2008. After going through the comments of GRIDCO and DISCOMs, it is revealed that there is disagreement on many issues pertaining to the receivables audit.

420. In view of the above, Commission is of the opinion that, this issue needs to be deliberated among all the stakeholders viz. GRIDCO, DISCOMs, State Govt. etc. to arrive at a final

settlement. For this purpose, if considered appropriate, the Commission will conduct a separate hearing and after eliciting the views of all the stakeholders shall pass appropriate order on the matter.

421. However, the Commission in continuation to the earlier truing up exercise has updated the same on provisional basis upto FY 2007-08 i.e. the year of availability of audited accounts. The table below shows the up-dated True-up requirement of GRIDCO.

Table – 39

(Rs. In Crore)

Financial Year	Gap in revenue requirement	Gap in revenue from sale of power	Total gap (for the year)	Add : approved gap in ARR allowed by the Commission	Gap considered for true up	Cumulative Gap (+/-)
1996-97						-295.00
1997-98	-325.65	5.86	-319.79	0.68	-319.11	-614.11
1998-99	-244.23	-420.39	-664.62	0.19	-664.43	-1278.54
1999-00	-237.01	244.14	7.13	-30.91	-23.78	-1302.32
2000-01	-360.22	194.43	-165.79	0	-165.79	-1468.11
2001-02	15.06	65.61	80.67	43.59	124.26	-1343.85
2002-03	-296.51	-264.11	-560.62	0	-560.62	-1904.47
2003-04	-84.95	586.13	501.18	0	501.18	-1403.29
2004-05	-102.67	322.13	219.46	217.35	436.81	-966.48
2005-06	-403.92	384.32	-19.60	15.72	-3.88	-970.36
2006-07	-175.75	1028.86	853.11	-504.52	348.59	-621.77
2007-08	148.57	902.41	1050.98	-464.86	586.12	-35.65

422. The true up requirement as arrived in BSP order 2007-08 has undergone certain changes due to adoption of different principle such as (i) considering the depreciation as per approval of the Commission instead of audited figure, and (ii) exclusion of interest on State Govt. loan from total interest liability.
423. Commission is of the opinion that the outcome of the order on receivable audit has some bearing on the income of GRIDCO and hence decides to undertake final truing up exercise after pronouncement of the order on receivable audit.

Return on Equity

424. 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 2009-10.
425. At the time of vesting of the transmission and 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 infusions 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 and other than cash. Therefore, the licensee claimed ROE @14% on the equity share capital of Rs.432.98 crore.

426. The Commission in earlier orders referred to the GoO Notification of 29.1.2003, wherein it has been stated that GRIDCO and OHPC should not be entitled to any return in equity till the sector becomes viable or FY 2005-06 whichever is earlier. Further, in partial modification of 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 becomes viable or end of 2005-06 whichever is earlier.” The Commission would like to clarify that correspondence has been made with Govt. of Orissa to clarify the status of the notification dtd. 29.1.2003, as it has great impact on Tariff. Govt.while communicating their views/comment in their letter No.1704 dtd. 17.02.2009 in response to the Commission’s letter No.2807 dtd. 31.12.2008 have stated as under:

“In the matter of extension of the moratorium period and other dispensation stipulated in Energy Department Notification No.1068/R&R-I-2/2002 dt.29.01.2003 upto 2011-12 it is stated that Finance Department has already concurred in the proposal of keeping in abeyance of up-valuation of assets of GRIDCO/OTCL & OHPC and freezing of RoE to GRIDCO & OHPC from the year, 2006-07 to 2010-11. The matter is going to be placed before the State Cabinet for a decision after which the same will be communicated.”

427. 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 1996-97 includes 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 Govt. of Orissa.
428. Keeping in view of the above facts, the Commission does not allow return on equity to GRIDCO for the Year 2009-10.

Miscellaneous Receipts

429. The GRIDCO had proposed 10 MU as emergency sale to CGP for the FY 2009-10 and the corresponding revenue receipt proposed under this head comes to Rs.3.30 crore. The Commission approves the same.

Revenue from Export of Power

430. GRIDCO in its filing for 2009-10 has stated that no surplus energy is expected to be available in the Financial Year 2009-10. Further, 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 hands of GRIDCO after meeting the requirements of the State during 2009-10.
431. While finalizing the expected aggregate revenue for 2009-10, the revenue earning by GRIDCO from export of power has not been taken into account on the ground that trading of surplus power involved certain risk and uncertainty which should not be transmitted to consumers in terms of tariff burden. Therefore, the Commission has not considered the power to be purchased and revenue to be earned from trading of such surplus power to outside states. The Commission accepts that 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 2009-10 and also shall reduce the burden of consumers of the State by way of liquidating the gap for 2009-10 and also past liabilities.

Revenue from UI charges

432. UI charges are dependent on several unknown risk factors like behaviour of grid, demand (peak and off peak) of the State, hydrology conditions, line availability etc. for which GRIDCO has not considered the revenue from UI charges for FY 2009-10. The Commission directs that any revenue earning by GRIDCO on account of UI charges during 2009-10 should be adjusted against the revenue gap for 2009-10 and clearance of past liabilities.

Receivables from DISCOMs:

433. The Commission in its order dt.01.12.2008 relating to securitization of receivables of GRIDCO as on 31.03.2005, approved the following amounts as depicted in the table below:

Table – 40

(Rs. in Crore)

A. Loan Balance	WESCO	NESCO	SOUTHCO	CESU
Principal	138.46	94.64	134.36	307.61
Interest	60.31	41.05	58.43	162.86
Sub-total (A)	198.77	135.69	192.79	470.47
B. Outstanding BST dues with DPS				
Opening balance as on 01.04.99	46.18	41.66	26.50	80.16
Arrear from 01.04.99 to 31.03.05	118.41	194.83	47.19	605.20
DPS on above	58.72	87.20	32.02	526.41
Sub-total (B)	223.31	323.69	105.71	1211.77
Grand Total (A+B)	422.08	459.38	298.50	1682.24

434. The direction of the Commission in the said order dtd.01.12.2008 regarding modalities of payment of the above amount are reproduced below:
21. *The principal and interest on loan outstanding as on 31st March, 2005 have been reconciled between WESCO, NESCO & SOUTHCO. But reconciliation statement between GRIDCO and CESU is yet to be finalized.*
 22. *In absence of the reconciliation between CESU & GRIDCO as stated in above para, Commission accepts the audited figure of GRIDCO provisionally, till the final reconciliation.*
 23. ***In line with our order dtd.20.07.2006, the Commission directs that the DISCOMs shall pay the outstanding loans including interest alongwith securitized BST dues as on 31.03.2005 in 120 monthly installments (maximum) within 2015-16.***
 24. *The security mechanism for payment of the amount shall be through escrow.*
 25. *The distribution companies are directed to pay the current BSP and transmission charges at the first instance. The Commission also desires that DISCOMs should meet their normal salary, Repair & Maintenance expenditure as per the approved figure of the Tariff Order applicable from time to time. Besides above the DISCOMs must generate enough cash to pay towards the monthly installment of the securitized amount to GRIDCO failing which DPS as applicable will be levied.*
 26. *The Commission vide order dtd.20.07.2006 had directed the following:*
“We order that the DISCOMs shall repay the outstanding loans including interest along with the securitized BST dues as at 31st March, 2005 in 120 monthly (maximum) equal installments starting from the FY 06-07 ending in 2015-16. They shall also continue to pay the monthly BST dues regularly through LC as per the bulk supply arrangement.”
In case of default of monthly dues by the DISCOMs they shall be liable to pay the delayed payment surcharge @ 1.25% per month as has been approved for default in payment in BST bills by DISCOMs to GRIDCO.
The status of the order of the Commission remains unaltered and the Commission directs that the DISCOMs shall pay the installment amount of the securitized amount to GRIDCO in time otherwise GRIDCO shall levy DPS at the rate of 1.25% per month on the defaulted amount of installment fixed by the Commission. In case of excess payment over and above the installment amount for any month, such excess would be treated as advance payment against subsequent installment for the purpose of computation of DPS. However, there will be no DPS on the DPS amount finalized for the purpose of securitization. The number of installments fixed by the Commission vide order dtd.20.07.2006 for the DISCOMs for liquidating the outstanding BSP dues (excluding DPS), loan and interest shall remain unaltered. In addition to above, the DISCOMs shall pay the DPS amount before 2015-16.
 27. *If the DISCOMs generate any cash surplus after adjusting the permitted expenditure from Escrow account in the manner stated in para 25 above Commission directs that*

such excess shall be transferred to GRIDCO to reduce the liabilities. In such a situation the number of monthly installment shall stand reduced.

435. In view of the above, the Commission directs CESU and SOUTHCO to pay Rs.151.00 crore & Rs.19.00 crore respectively to GRIDCO for liquidation of arrear BSP dues and loan along with outstanding interest during the FY 2009-10.
436. Commission in last year's BSP order (Para 415) directed the following:
"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."
437. As filed by GRIDCO, Commission observed that except NESCO, no DISCOM has paid the full amount during 2008-09 as per the direction of the Commission in its tariff order for FY 2008-09. A Table showing the approved amount vrs. the payments made by the DISCOMS by 10.02.2009 is given below:

Table - 41

(Rs. in Crore)

	Approved (2008-09)	Actual Receipts upto 10.02.2009	Differential Amount
WESCO	36.83	NIL	(+) 36.83
NESCO	65.00	80.72	(-) 15.72
SOUTHCO	-	5.38	(-) 5.38
CESU	118.00	30.36	(+)87.64
Total:	219.83	116.46	103.37

438. In view of the above scenario, Commission expresses its anguish and concern over the non-compliance of its directions. Last year, Commission fixed the average BSP @ 122.17 even though the approved power purchase rate was 127.40 p/u. Due to reduction in BSP for 2008-09, Commission expected that DISCOMs would generate sufficient cash to meet their obligations to GRIDCO. But the picture as reported by DISCOMs is dismal and their collection have fallen much below the target leading to non-payment of their obligations. This can no longer be glossed over and calls for exemplary deterrent action.
439. The Commission therefore directs WESCO and CESU to make good the above short-fall amount to GRIDCO during the remaining part of 2008-09 and 2009-10 by improving collection of current dues as well as arrear dues. The Commission further reiterates that default in installment payment shall be dealt in accordance with the securitization order of 01.12.2008 (para-26).
440. In para 415 of BSP order for FY 2008-09, the Commission had directed SOUTHCO to pay Rs.9 crore to WESCO through GRIDCO. The Commission observes that this direction has not been complied.

441. In view of the above, Commission directs SOUTHCO to pay Rs.9 crore extra to GRIDCO over and above the current BSP dues before 31.05.2009. GRIDCO shall adjust the same through escrow account of SOUTHCO and treat the amount of Rs.9 crore as a receipt from WESCO against current arrear of BSP dues of WESCO.

Receivable from other States:

442. GRIDCO in its reply to the query by the Commission submitted that it does not expect to collect any amount from the outside states in the ensuing year i.e FY 2009-10, as the claims of GRIDCO against other state utilities are subjudice. The Commission accepts the same.

Revenue Requirement of GRIDCO for FY 2009-10:

443. Based on above considerations, the Commission approves the revenue requirement of GRIDCO for FY 2009-10 as given in table below:

Table – 42
Revenue Requirement of GRIDCO for FY 2009-10

(Rs. in Crore)

		2008-09	2009-10	
A	Expenditure	Approved	Proposed	Approved
	Cost of Power Purchase	2351.75	2863.15	2923.80
	Employee costs	3.33	6.80	3.80
	Repair & Maintenance	-	0.50	0
	Administrative and General Expenses	2.41	5.14	3.03
	Other expenses (ERLDC Charges)	1.32	1.32	1.32
	Interest Chargeable to Revenue	127.72	128.49	101.62
	Sub-Total	2486.53	3005.4	3033.57
	Less: Expenses capitalized	-	-	-
	Total expenses	2486.53	3005.40	3033.57
B	Special appropriation			
	Carry forward of Previous Losses	-	399.66	-
	Repayment of principal	-	394.09	-
	Arrear payment of OPGC	-	72.57	-
	Power Purchase related cost of OHPC	-	-	16.08
	Power Purchase related cost of TTPS	-	-	73.45
	Total	-	866.32	89.53
C	Return on Equity	-	60.62	-
	TOTAL (A+B+C)	2486.53	3932.34	3123.10
D	Less Miscellaneous Receipt	3.30	3.30	3.30
E	Less receivable from DISCOMs	219.83	-	170.00
F	Less receivable from outside States	16.24	-	-
G	Total Revenue Requirement	2247.16	3929.04	2949.80
H	Expected Revenue (Full year) from DISCOMs	2152.23	2288.10	2312.11
I	GAP (+/-)	(-)94.93	(-)1640.94	(-)637.69

444. From the above table, it is found that GRIDCO after meeting all expenses would still be left with a gap of Rs.637.69 crore. The Commission expects that the same gap along with Rs.245.16 crore (refer to para 403 read with para 401) shall be bridged through export earning, UI charges and recovery of receivable of DISCOMs over and above Rs.170 crore already taken into account (refer to Para 435 and Table-42).

Bridging the gap in the account of GRIDCO

445. The Commission had approved procurement of 18460.26 MU energy by GRIDCO from different sources at an estimated cost of Rs.2351.76 crore for the year 2008-09 at an average power purchase price of 127.40 paise per unit meant for sale to distribution companies in the State. However, the Bulk Supply Tariff approved by the Commission for sale to the distribution companies for 2008-09 was 122.15 paise per unit. The gap between the revenue realization and the revenue requirement of GRIDCO for 2008-09 was approved at Rs.94.94 crore but including principal repayment by GRIDCO for Rs.315.12 crore, the total gap left was Rs.410.06 crore. The gap was supposed to be bridged by profit to be earned through trading of power or UI Mechanism etc. In the current year upto December, 2008, GRIDCO has earned Rs.354.55 crore through trading, UI earning and sale to CPP (para 407).
446. Taking into account the requirement of energy projected by GRIDCO and the DISCOMs for the year 2009-10, the Commission has approved 19719.38 MU energy for purchase by GRIDCO from different generators in order of ascending order of cost of generation for the year 2009-10. Based on the cost of generation determined for the generators, the average power purchase cost per unit comes to 148.27 paise. Thus, the cost of procurement of power by GRIDCO from the generators for the year 2009-10 comes to Rs.2,923.80 crore. After taking into account the salary cost, interest payment and A&G expenses of Rs.109.77 crore, power purchase related cost of TTPS of Rs. 73.45 crore (Para-415) and that of OHPC amounting to Rs.16.08 crore (Para-414), net revenue requirement works out to Rs.3123.10 crore. Against this, revenue realization anticipated from DISCOMs at the average existing bulk supply tariff of 122.2 paise/unit comes to Rs.2312.11 crore. After taking into account the Misc. Revenue of Rs.3.30 crore and the past receivables from DISCOMs amounting to Rs.170 crore there will be a gap of Rs.637.69 crore for the year 2009-10. This gap is either to be met by increasing the bulk supply tariff to be collected from the DISCOMs or from other sources including earning from trading, UI or subvention from Govt. If the Bulk Supply Price is increased to meet the projected gap of Rs.637.69 crore, the Retail tariff is to be correspondingly increased.
447. In response to the letter No.2807 dtd.31.12.2008 of the Commission seeking views/comments of the State Govt. on different aspects including probable rise of tariff, the State Govt. vide their letter No.1793 dt.18.02.2009 has stated “it is the responsibility of the DISCOMs to bring down the distribution loss, AT&C loss and improve their

efficiency to bridge of their revenue gap for the year 2009-10. Hon'ble Commission may consider these facts while determine the tariff." Subsequently, the State Govt. in their letter No.2329 dt.28.02.2009 have stated that "State Govt. is considering the aspect of providing subsidy to the power sector for the year 2009-10. The matter is being placed before the Cabinet for their consideration. Decision of the Govt. will be intimated shortly." Further in the meantime, State Govt. in their letter No.3132 dtd.16.03.2009 have communicated inter alia as follows:

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"Though it is the primary responsibility of the DISCOMs to improve their efficiency and functioning by way of reduction of AT&C losses and ensuring quality supply of power to the consumers, they are practically not in a position to do so. For all these hazards, the system should not collapse. Therefore, State Government is considering the question of extending support to the Distribution Companies during the year 2009-10 for the following:

- i. Replacement of LT conductors by AB cables in theft prone areas.*
- ii. Installation of Pillar Box metering system.*
- iii. Upgradation and replacement of Transformers to cater to additional load.*
- iv. Replacement of old Circuit Breakers with Vacuum Circuit Breakers (VCBs).*
- v. Replacement of faulty insulators wherever necessary.*
- vi. Replacement of existing weak LT/HT poles.*
- vii. Installation of new substation to improve voltage profile wherever needed.*
- viii. Re-conductoring in case of old lines with conductors of optimum size.*
- ix. Conversion of single phase into 3 phase system.*
- x. Earthing of substations.*
- xi. Installation of Lightning Arrestors.*
- xii. Complete Distribution Transformer Metering for energy audit purpose.*
- xiii. Provision of boundary wall/fencing wherever necessary around the S/S to ensure safety of the equipment and human lives and other such things.*

The above items of work are only illustrative but not exhaustive.

2. Before deciding the quantum of such support, the modalities of transfer of funds to the DISCOMs have to be worked out for concurrence by the Finance Deptt. Besides, in the process of release of financial support, the involvement of GRIDCO and mechanism of release need also to be considered.

3. Keeping the above in view, I would request you to please place the matter before the OERC and communicate the instructions of the Commission on paragraph 2 above to take a view in the matter."

448. In view of the indication given by the State Govt., the Commission feels that the BSP for the DISCOMs for FY 2009-10 can be kept at 122.2 paise/unit i.e. the same level as in the current FY 2008-09. The gap of Rs.637.69 crore between revenue requirement and the

expected revenue realization from the DISCOMs by GRIDCO, along with an amount of Rs.245.16 crore being the securitised amount towards loan (Ref. para 403), is to be met partly from the earning from trading of power as well as through UI mechanism. The balance uncovered amount, if any, should be met by availing loan from financial institutions so that GRIDCO does not face any difficulty in procurement of power and payment thereof to the generators in time. GRIDCO should be given State Govt. guarantee, wherever needed, to obtain loan from financial institutions. In that case, the interest that may be required to be paid to the financial institutions on short-term borrowing/working capital in order to ensure payment to the generators in time shall be considered by the Commission as carrying cost in the tariff order for the year 2010-11.

449. In view of the need for special repair and renovation of the existing old distribution network, the Commission welcomes the decision of the State Govt. to support the DISCOMs in their effort to improve and upgrade the distribution system network. If any support is so granted, the manner and method of release of this support and its utilization within a definite time frame will be decided by the Commission in consultation with the State Government. However, it must be mentioned that this support is to be in addition to the already approved and allowed R&M expenditure and not in substitution of the same.
450. The areas or items on which such fund is to be utilized will be determined by the Commission keeping in view the priority and need for system improvement which would reduce both technical and commercial losses and improve the quality of supply of power.

Design for Bulk Supply Pricing Philosophy

451. 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 embarked 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 in the HT & EHT segments would continue in that sector. However, the rapid pace of industrialization has overturned the equation.
452. 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 DISCOMs 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.

453. However, this load growth is mostly restricted to Western and North-Eastern/Central Orissa, largely due to exploitation of minerals for production of materials. On the other hand, the Southern part of the State is not witnessing growth of HT and EHT load due to absence of such natural 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 sales in WESCO & NESCO are 62.0% & 54.5% respectively, in case of CESU & SOUTHCO it is 49.7% & 31.2% respectively.
454. Presently there has been recessionary trend in the pace of industrialization in the State arising out of the Global Meltdown. In fact, the drawal of energy by the industries has started decreasing. It is expected that the recession in the economy is going to stay for some more time before the revival sets in.
455. South Orissa is also disadvantaged from the point of view of the nature of electricity consumption. As a forest dominated region with a tribal population, it has poor economic capacity for utilization of electricity. Therefore, SOUTHCO is entirely dependent on low voltage consumers, mostly domestic, for its revenues.
456. The industrial scenario is very different from the 90's with substantial growth of large and heavy industries 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 the State being a power surplus one. 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.
457. Further, GRIDCO used to procure surplus power from CGPs at variable cost or at negotiated price very close to the variable cost. Following the promulgations of Inter State Open Access Regulation, CGPs are increasingly interested to sell the surplus power outside the State at market-discovered price which is very much lucrative because of deficit power scenario in the country. In order to avail the surplus power of CGPs, GRIDCO has offered attractive rates to all the CGPs to meet the growing demand of the State in terms of the order dtd.14.03.2008 of the Commission on CGP pricing. As an interim arrangement, the Commission in their order dtd. 28.02.2009 has fixed Rs.3.00/kWH for surplus power from CGP and Rs.3.10/kWH from co-generation plants w.e.f 01.03.2009. In this connection, the para-16 & 17 of the order dt.28.02.2009 in Case Nos.6 to 20 of 2009 are reproduced below for ready reference.

“16. After going through the records and submission made by GRIDCO and the representative of CGPs and keeping in view the current difficult situation now being faced by the State as well as the recession being experienced by manufacturers and the economy, the Commission considers it fit and appropriate at this stage to pass an interim

order to enable harnessing of the available idle/bottled up capacity of CGPs at a reasonable price and keep the principal producing units in a sustainable mode while at the same time not burdening the users of electricity who are also hit badly by the recession. While the CCPPO expects the price prevailing in the Indian power exchange and the price available through UI mechanism, it cannot be such as to burden all consumers with an unsustainable loading through higher price. Considering all aspects in totality and adopting the principle of “harmonious balance” the Commission hereby directs as under :-

i) Keeping in view the number of CGPs in the State and their large variations in size/capacity and usage of fuel it is difficult for both CGPs and GRIDCO to adopt the competitive bidding route. The verification of costs and determination of prices, given the manner in which costs are allocated as between the main product and captive power generated, is going to be a cumbersome and long drawn affair. Considering the incongruent nature of different CGPs and Co-generating plants, the Commission examined and decided to adopt a simple approach and mechanism by which GRIDCO can procure power from CGPs in and around a reference point of the highest generation cost, currently being procured by GRIDCO.

ii) Because of the nature of generation by a CGP and captive generators with surplus power are at liberty of selling power, even for a short duration in the Power Exchange, it is not necessary in the interim to have a dividing line between short-term and long-term power. Power that can be scheduled on a day ahead basis can be absorbed in the system and can be programmed for full procurement by GRIDCO. CGPs/Co-generating plants who are capable of giving day ahead schedule should be, for the time being, treated as suppliers of firm power. Power injected by the CGPs/Co-generating plants without giving day ahead schedule would be treated as injectors of inadvertent power.

iii) For supply of power by the CGPs/Co-generating plants to GRIDCO for sale to DISCOMs meant for consumption by the consumers in the State, the procurement price of firm power from the CGPs as indicated at (ii) above will be Rs.3.00/KWh with effect from 01.3.2009. However, to encourage co-generation as is mandated under the Electricity Act, 2003 the power generated by co-gen. plants e.g. spongeiron plants such as NINL, Arati Steel, Tata Sponge, etc. may be given an incentive and shall be paid @ Rs.3.10 per/KWh with effect from 01.3.2009. The procurement price of Rs.3.00/KWh for all power meant for sale to Discoms is considered just and reasonable keeping in view the current cost of Rs.2.76/KWh of the highest cost of generation from a TPS in the Eastern Region. A premium of about 10% (ten percent) on this price is considered appropriate as a stimulous to the harnessing of bottled up capacity with the CGPs.

iv) In order to encourage the CGP/Co-generating plants to fully utilize their bottled up capacity for generation of captive power/Co-generation power and to enable GRIDCO to access power from different sources including CGPs/Co-generating plants for meeting

the demands in the State and making available a good quantum of power for trading, GRIDCO should offer a remunerative price to the CGPs in respect of power used for trading. Keeping in view the prevailing rate in the power exchanges, UI rate and price quoted in the bidding it would be just and equitable for GRIDCO and the CGPs and Co-generating plants to have an indicative rate of Rs.3.50 per KWh for procuring surplus power meant for trading. This is merely an indicative price suggested by the Commission. However, individual CGPs/Co-generating plant and GRIDCO, if they so like, may enter into further negotiation for an agreed price above this indicative rate. However, the procurement price by GRIDCO from the Captive Generating Plants/Cogenerating plants for the purpose of trading should not unduly vary from the indicative price of Rs.3.50 per KWh now being suggested by us as an interim measure. This is necessary for the benefit of the consumers of the State because the profit earned by GRIDCO from the trading will be taken as 'other receipt' to meet its revenue requirement and bridge the gap in the ARR. After bridging of the gap in the ARR, the balance of surplus gained on account of trading of CGPs/Cogeneration power may be shared with the CGPs/Co-generation plants at the year end.

v) In respect of injection of inadvertent power the payment would be equal to the pooled cost of hydro power of the State during 2008-09 and 2009-10 as the case may be depending on the period of supply.

vi) The rate of power indicated in (iii), (iv) and (v) will also be applicable with effect from 01.3.2009 to those CGPs/Co-generating plants having subsisting contracts/agreements with GRIDCO. This will be without any prejudice to the outcome of any dispute/arbitration pending in any court of law or any authority and will have no retrospective effect whatsoever.

vii) GRIDCO will devise a mechanism to decide on the quantum of energy to be procured for the Discoms and the quantum to be traded at the higher price of procurement. A transparent and simple accounting method must be maintained to obviate any dispute with CGPs/Co-generation plants. The accounts must also clearly show how the gap in the GRIDCO's ARR is being bridged and how the remaining surplus is being shared with the CGPs/Co-generation plants to the extent of power traded. The Commission hastens to state that they do not wish to prescribe a price at which the quantum being traded should be procured. We are only indicating a price around which procurement may be done for trading.

viii) It will take some time for the CGPs for establishment of SCADA and PLCC, wherever not yet done. OPTCL as on date have not implemented installation of SCADA in many grid substations. As recently stated in the tariff hearing in case No.63/2008, OPTCL has already taken initiative for expansion of ULDC scheme for broadband connectivity. In view of the above and considering the present situation of power availability in the State the Commission directs that the provision of installation of

SCADA and PLCC shall not be insisted upon for the CGPs before procuring their surplus power in the State grid as this is an emergent step taken by the Commission in an extremely difficult situation through which the state is passing through. However, the alternative mode of communication for the connectivity with the nearest SCADA interface point of the licensee i.e. telephone, fax, carrier communication, broadband communication, internet/other developed mode of communication should be established by the CGPs within three months from the date of synchronization with the grid.

ix) The CGPs/Co-generating plants may be paid as per the rates indicated in (iii), (iv), (v) and (vi) in the proportion of CGP/Co-generation power consumed inside the state and traded outside the state as certified by the Chief Load Dispatcher of SLDC in each month.

17. The Commission further reiterates that this is a common interim order and the arrangement suggested in Para 16 is an interim implementation plan and would be operative from 01.3.2009. After 30.6.2009 the Commission would review this arrangement as envisaged in Para 12.28 of the CGP pricing policy announced by the Commission in their order dated 14.3.2008.”

458. In other words, the entire high 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 cost of supply. In 2008-09 the approved weighted average cost of power purchase was 127.4 paise per unit (para 376, Table-41, Page-142 of BSP order for FY 2008-09) which has gone up now to 148.27 paise per unit for the FY 2009-10 (para-380).
459. Utilities in Orissa are entering a dynamic phase with introduction of open access from 1.4.2008. It is difficult to forecast at this point of time about the quantum of energy which shall move between utilities. 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 DISCOMs. The Bulk Supply Price now being determined is essentially being designed with the expected earning of revenue by the DISCOMs to meet the power purchase liabilities of GRIDCO Transmission charges of OPTCL and SLDC expenses.
460. 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 and 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.
461. OERC has been following a uniform retail tariff policy. Considerations of public interest for consumers of the entire State warrants continuance of an uniform retail tariff policy, and a 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 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 DISCOMs with higher concentration of HT/EHT industries than for those with little HT/EHT load. Therefore, with differential Bulk Supply Price there is no necessity of shifting away from the uniform retail tariff prevailing in the state of Orissa.

462. Until we move away from the uniform RST structure, the higher bulk pricing mechanism should give a signal to the utility having higher EHT & 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.
463. 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. 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.
464. 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.
465. 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 DISCOMs 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 2009-10. 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.

Determination of Demand and Energy Charges

466. 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.
467. 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.
468. 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 DISCOMs 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.
469. 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 DISCOMs. It needs to be emphasized that the Bulk Supply Price by GRIDCO to DISCOMs 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 09-10. 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

470. GRIDCO had proposed energy charge @ 209.82 P/U to be levied on the DISCOMs 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. The Commission have arrived the revenue requirement of DISCOMs for FY 2009-10 with existing BSP. It was revealed that except WESCO all other DISCOMs do not post any negative gap. The revenue gaps of four DISCOMs for the year 2009-10 considering the existing BSP are given below: -

(Rs. in Crore)		
WESCO	-	(-) 59.79
NESCO	-	(+) 21.81
SOUTHCO	-	(+) 0.68
CESU	-	(+) 0.81

471. It was also revealed that during 2008-09 except WESCO all other DISCOMs have availed a rebate of 2% on the current power purchase dues. WESCO availed the rebate of 1% by taking Secured Over Draft (SOD) from Banks.
472. In view of above, the Commission designs the BSP in such a manner that the positive gap of NESCO is passed on to WESCO by increasing the BSP of NESCO and consequent reduction in BSP of WESCO, keeping the average BSP unchanged. This will facilitate WESCO in reducing the negative gap and enable it to avail rebate in ensuring payment of current BSP Bill in time. This arrangement further ensures that there is no cash outgo from the Reliance managed three distribution companies taken together to other distribution company i.e. CESU and the same is retained within the two distribution companies which are managed by the same Reliance Energy Limited. The details of Bulk Supply Price as well as the quantum of energy approved by the Commission for each DISCOM are presented in a table below:

Table - 43

Bulk Supply Price and Quantum of Energy for 2009-10

Name of the DISCOM	Quantum of Energy (MU)	Bulk Supply Price (P/U)	Revenue from Bulk Supply Price (Rs. Crore)
CESU	6045.0	101.5	613.57
NESCO	4285.0	130.0	557.05
WESCO	6430.0	154.0	990.22
SOUTHCO	2161.0	70.0	151.27
Total	18921.0	122.2	2312.11

473. As against GRIDCO's total net revenue requirement of Rs.2949.80 crore, it will recover Rs.2312.11 crore through energy charge for the year 2009-10 from DISCOMs and will leave a total gap of Rs.(-) 637.69 crore excluding repayment liability of Rs.245.16 crore as explained in para 403. The treatment of this gap has already been discussed vide para 444 and read with para 448.
474. Determination of BSP for SOUTHCO possesses 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 utilities such that there is a breakeven of revenue for the ensuing 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 also consider merger of SOUTHCO and WESCO if legally and administratively it does not pose any problem so that it can lead to beneficial advantages to 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

475. 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.
476. 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

477. For payment of bills through a letter of credit on presentation/upfront by cash within two working days(except holidays under N.I.Act), 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

478. 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

479. 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.
480. Around 31.4% 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.
481. 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) and Biju Gramya Jyoti Yojana (BGJY). The surplus scenario is fast diminishing. Effective steps need to be 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.
482. 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 possesses a vast coast, has large number of sunny days, a good number of streams 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. In this connection the Commission in their letter No.2807 dtd.31.12.2008 had asked the views/comments of the State Govt. as follows:

“Section 61(h) and 86 of the Electricity Act, 2003 read with Para 6.4 of the national Tariff Policy notified on 6.1.2006 mandates the State Electricity Regulatory Commission for the promotion of co-generation and generation of electricity from renewable sources of energy. The OERC in their tariff order for 2007-08 in case No.14 of 2005 vide para 9 (a) had stipulated that the distribution companies should procure energy from renewable sources at 3% of the total energy purchased from all sources which should increase by 0.5% to reach 5% of the total procurement by 2011-12. OERC had fixed 400 MU from renewable sources for the year 2007-08 and for 2008-09 such target has been fixed at

375 MU (1.98% of the total drawal). But during 2007-08 only around 278 MU were drawn from renewable sources including co-generation. In Orissa there is large potential for production of energy from renewable sources which includes the energy from Mini hydro plants. There is an inordinate delay in approval of the projects for tapping renewable energy from Mini hydro sources. A time bound and co-ordinated efforts are needed to exploit all renewable sources of energy from Mini hydro sources, wind, solar biomass, waste heat etc.”

State Govt. vide their letter No.1704 dtd.17.02.2009 have responded by saying “Regarding steps/proposed to be taken for exploitation of renewable sources of energy in a time bound manner to comply with the order of OERC read with the provisions of the Sec.61(h) of the Electricity Act, 2003 it is stated that a revised small/micro Hydro policy has already been formulated & a copy of the same has been placed before the OERC. In the meantime one small/hydro project namely Middle Kolab Hydro Electric project of 25 MW capacity has already been synchronized & the generation will start shortly. Similarly another small/Hydro Project namely Orissa Power Consortium Ltd. with capacity of 20 MW is expected to go for generation by June-July, 2009. State Govt. has already signed MoU with 29 Private developers for setting up small/Hydro Projects which are in different stages of implementation. For the other renewable sources of energy like biomass/wind/solar, Science & Technology Department is the nodal Department. The following power plants through non conventional energy source are being developed.

- 1) 5 MW solar Energy based power plant by Reliance Energy Ltd. at Khurda for investment of Rs.125 crores.*
- 2) 18 nos. of biomass based power project totalling 194 MW under OREDA.*
- 3) 5 MW power plant from municipal waste (MSD) of twin city of OPGC.*
- 4) Proposed 2 MW demonstration wind power project at Damanjodi through OREDA.”*

483. In India, solar energy is usually considered for rural or off-grid applications. However, international experience shows that technology development and commercialization is best achieved by way of large-scale deployment of solar PV in grid-integrated mode. With a view to developing and demonstrating technical performance of grid interactive solar power projects in India, the Ministry of New and Renewable Energy (MNRE) has come out with guidelines for generation-based incentives for Grid Interactive Solar Power generating projects for the first time in January, 2008. As per the guideline, the Ministry would provide generation-based incentives of a maximum of Rs.12/kWh and Rs.10/kWh for Solar PV and Solar Thermal Projects commissioned by December, 2009. Thereafter the incentive amount will be curtailed by 5%. The notional cap for the Solar Photovoltaic and Solar Thermal tariff will be Rs.15/kWh and Rs.13/kWh respectively.

MNRE would support a maximum of 50 MW (Solar PV + Solar Thermal) during FY 2007-12. Each State will be allowed to set up max 10 MW grid interactive solar power projects. The generation based incentive will be available for a period of 10 years from the date of commissioning and regular power generation. It is further clarified that preference will be given to projects proposed in the States that have approved / notified tariff for solar power. The investor claiming the MNRE generation based incentive can not avail the accelerated depreciation benefit under Section 32 of IT Act, 1961.

484. OERC had floated a discussion paper on harnessing renewable energy including co-generation to elicit public opinion. The Commission received various comments on the matter. In the meantime, the Commission has engaged a consultant to work out tariff for various sources of renewable energy after making a detailed field study in this regard. The consultant will take some time to submit a detailed report to the Commission. At the first instance, the Commission would take expeditious action for fixation of tariff for solar photovoltaic and solar thermal after consulting different stakeholders including OREDA which is the nodal agency for developing renewable sources of energy in the State.
485. 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 Clause 57 of the OERC (Conduct of Business) Regulation, 2004.
486. The Bulk Supply Price in respect of GRIDCO will become effective from 1st April, 2009 and shall continue until further orders.
487. The application of GRIDCO in Case No.62/2008 is disposed of accordingly.

(K. C. BADU)
MEMBER

(B. K. DAS)
CHAIRPERSON