

ODISHA ELECTRICITY REGULATORY COMMISSION

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

*** **

**Present : Shri S.P. Nanda, Chairperson
Shri K.C. Badu, Member
Shri B. K. Misra, Member**

CASE NO. 91 / 2011

DATE OF HEARING : 22.02.2012

DATE OF ORDER : 23.03.2012

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 2012-13.

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 Odisha. 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 for DISCOMs under S.86 (1)(b) of the Act. For supply of surplus power to any other person anywhere, after satisfying the requirements of DISCOMs of Odisha, the bulk supply prices hereby fixed for DISCOMs would not be applicable. So far as DISCOMs of Odisha are concerned the prices at which GRIDCO would supply power has to be determined by reference to ARR of GRIDCO. Hence GRIDCO was called upon to file its ARR for ensuing Financial Year.

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.orienc.org) in order to invite suggestions/objections from the intending objectors. The public notice inviting suggestions/objections/views was published in the leading daily newspapers, Commission's website and GRIDCO's website. The Commission directed 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 12 numbers of objections/ suggestions from the following persons/ associations/ institutions/ licensees:

(1) M/s Sterlite Energy Ltd., 1st Floor, City Mart Complex, Barmunda, Bhubaneswar; (2) Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur; (3) National Institute of Indian Labour, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar; (4) M/s Odisha Power Consortium Ltd., 6-2-913/914, Third Floor, Progressive Towers, Khairatabad, Hyderabad; (5) M/s Ferro Alloys Corporation Ltd., GD-2/10, Chandrasekharapur, Bhubaneswar; (6) Orissa Consumer's Association, Debajyoti Upovokta Kalyan Bhawan, Biswanath Lane, Cuttack; (7) Keonjhar Navanirman Parishad, Chandni Chowk, Cuttack; (8) Federation of Consumer Organisations, Odisha, Biswanath Lane, Cuttack; (9) M/s Power Tech Consultants, 1-A/6, Swati Villa, Surya Vihar, Link Road, Cuttack; (10) NALCO, NALCO Bhawan, P/1, Nayapalli, Bhubaneswar; (11) Shri R.P. Mahapatra, Plot No.775 (Pt.), Lane-3, Jayadev Vihar, Bhubaneswar; (12) CSO (NESCO, WESCO, SOUTHCO), Plot No.N 1/22, IRC Village, Nayapalli, Bhubaneswar. The applicant submitted its reply to the issues raised by the various objectors.

3. 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 to World Institute of Sustainable Energy (WISE), Pune as consumer counsel for objective analysis of the licensee's Annual Revenue Requirement and Bulk Supply Price proposal. The Consumer Counsel presented its views on the matter in the hearing.
4. The date for hearing was fixed as 22.02.2012 and it was duly notified in the leading newspapers mentioning the list of the objectors. The Commission also issued notice to the Government of Odisha through the Department of Energy informing them about the date of hearing and requesting to send the Government's authorized representative to take part in the proceeding.
5. In its consultative process, the Commission conducted a public hearing at its premises on 22.02.2012 and heard the Applicant, Objectors, Consumer Counsel and the Representative of Dept. of Energy, Govt. of Odisha at length. The following persons were participated in the hearing process.

(1) Shri Sanjay Sen, Advocate and Miss Savitri Ratho, Advocate on behalf of M/s Sterlite Energy Ltd. (2) Sri G.N. Agrawal, Convenor-cum-Gen.Secy., Sambalpur District Consumers Federation (3) Sri Ramesh Chandra Satpathy, Secretary, National Institute of Indian Labour (4) Shri R.P.Mohapatra, authorized representative of M/s Odisha Power Consortium Ltd. (5) Sri M.V.Rao, Resident Manager, M/s Ferro Alloys Corporation Ltd. (6) Sri Bibhu Charan Swain, Sr. Consultant, M/s Power Tech Consultants (7) Shri Pradeep Kumar Nath, AGM (Elect.), NALCO (11) Shri R.P.

Mahapatra (8) Shri Anil Kumar Bohra, Chief Executive Officer and Shri Debasish Das, GM, CSO (NESCO, WESCO, SOUTHCO). Shri Sukanta Chandra Mohanty, representative of Dept. of Energy, GoO is also present during hearing. No representative were present on behalf of Orissa Consumer's Association, Keonjhar Navanirman Parishad, and Federation of Consumer Organisations, Odisha. However their written submissions were taken into record and also considered by the Commission.

6. The Commission convened the State Advisory Committee (SAC) meeting on 29.02.2012 at 11 AM at its premises to discuss about the ARR applications and Bulk Supply Price proposal of the licensee. The Members of the SAC, Special Invitees, the Representative of DoE, Govt. of Odisha actively participated in the discussion and offered their valuable suggestions and views on the matter for consideration of the Commission.

**BULK SUPPLY PRICE (BSP) PROPOSAL OF GRIDCO FOR THE FY 2012-13
(Para 7 to 40)**

7. GRIDCO Ltd. (hereinafter called GRIDCO) is a Deemed Trading Licensee under the 5th Proviso to Section 14 of the Electricity Act, 2003 and carries out the business of Bulk Supply of electricity to the four Electricity Supply Companies (hereinafter called DISCOMs) by utilizing the transmission network of OPTCL, the State Transmission Utility & CTU / others. GRIDCO continues to procure power from various generators for supply the same to the DISCOMs. GRIDCO also supplies emergency power to Captive Generating Plants (CGPs) and trades the surplus power available, if any, from time to time. Under the existing Bulk Supply Agreements between the DISCOMs and GRIDCO, the DISCOMs are to purchase power from GRIDCO at a regulated 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. Thus, as a statutory requirement, GRIDCO is required to submit its Annual Revenue Requirement (ARR) before OERC for determination of the procurement price of 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) (a) & (b) and other applicable provisions of the Electricity Act, 2003, GRIDCO is required to submit its Annual Revenue Requirement (ARR) and Bulk Supply Price (BSP) proposal to the Commission for approval, before 30th November of each year for the ensuing year. Accordingly, GRIDCO has filed an application for approval of its proposed Annual Revenue Requirement and revision of Bulk Supply Price for the FY 2012-13 to enable it to carry out its functions of bulk supply to DISCOMs and emergency supply to CGPs.

Projection of Demand and Energy

8. The total Simultaneous Maximum Demand (SMD) of the four DISCOMs of the state for the FY 2012-13 has been projected by GRIDCO at 3412.43 MVA per month based on the highest of the monthly SMD of each DISCOM during first 6 months of FY 2011-12. The average of actual SMD for first six months of 2011-12 and projection for 2012-13 as submitted by GRIDCO in its application are given in Table below.

Table -1
Projection of Simultaneous Maximum Demand (SMD) for FY 2012-13
(Figures in MVA per Month)

DISCOMs	OERC approval for FY 2011-12	Average SMD of first Six months of FY 2011-12	Projection of GRIDCO for FY 2012-13 considering the highest monthly SMD during first Six months of FY 2011-12
CESU	1237.00	1160.74	1193.22
NESCO	846.00	801.47	833.76
WESCO	1133.00	913.78	943.79
SOUTHCO	432.00	428.86	441.65
TOTAL	3648.00	3304.86	3412.43

9. GRIDCO has projected 23931.85 MU as the energy drawal by DISCOMs for FY 2012-13 based on the estimation submitted by DISCOMs. Emergency Power Supply to Captive Generating Plants (CGPs) like NALCO & IMFA for FY 2012-13 has been projected at 10 MU. The actual for first six months of FY 2011-12, projection for FY 2011-12 on pro-rata basis and projection for FY 2012-13 as submitted by GRIDCO in its BSP application are indicated in Table below.

Table – 2
Projection of Energy Sale for FY 2012-13

(Figures in MU)

AGENCY	Actual Energy drawal from 4/11 to 09/11 (MU)	Projection for FY 11-12 on pro-rata based on first six months drawal (MU)	OERC approval for 2011-12 (MU)	Approval in the Business Plan for 2012-13 (MU)	DISCOM's Projection submitted to GRIDCO for 2012-13 (MU)	GRIDCO Projection for FY 12-13 (MU)
CESU	3809.36	7618.72	7791.00	7868.10	8532.67	8532.67
NESCO	2586.26	5172.52	5323.00	5769.50	5469.18	5469.18
WESCO	3159.06	6318.12	6630.00	6800.00	6500.00	6500.00
SOUTHCO	1412.84	2825.68	2733.00	3083.00	3430.00	3430.00
TOTAL DISCOMS	10967.52	21935.04	22477.00	23520.60	23931.85	23931.85
IMFA	9.74	19.48	100.00	-	-	0.50
NALCO	161.14	322.28		-	-	9.50
TOTAL CGPs	170.88	341.76	100.00	-	-	10.00
TOTAL SALE	11138.40	22276.80	22577.00	23520.60	23931.85	23941.85

Energy Availability to GRIDCO for FY 2012-13

10. GRIDCO has projected the energy availability of 24412.96 MU during FY 2012-13 from different generating stations. The estimation for drawal of hydel power from OHPC is 5874.05 MU including 262.50 MU from Machkund and 1944.36 from Upper Indravati;

and thermal power of 2864.82 MU from OPGC, 2957.32 MU from TTPS, 1121.28 MU from State CGPs and 6032.61 MU of Odisha share of power from Eastern Regional thermal power stations. GRIDCO has proposed to purchase 916 MU towards Odisha share from Eastern Regional hydro power stations like Tala, Chukha and Teesta hydel plants. Further, GRIDCO has proposed to procure 3556.92 MU from the two existing IPPs namely M/s Sterlite Energy Ltd. and Arati Steels Ltd. and three upcoming IPPs during FY 2012-13. GRIDCO has also proposed to procure 621.96 MU from Co-generation plants inside the state. Further GRIDCO has proposed to procure 468 MU from Renewable Energy sources during FY 2012-13 (300 MU from SHPs, 122 MU from Bio-mass Projects and 46 MU from Solar Projects). The station-wise details in respect of availability of power proposed by GRIDCO is given in the table below:

Table – 3

Summary of Proposed Energy Availability to GRIDCO for FY 2012-13

Stations	Availability (After transformation loss and Auxiliary Consumption) (MU)	Odisha Share %	Projection for FY 2012-13 (MU)	Approved for 2011-12
HHEP	767.48	100	767.48	
CHEP	356.40	100	356.40	
Rengali	576.18	100	576.18	
Upper Kolab	793.98	100	793.98	
Balimela	1173.15	100	1173.15	
OHPC(Old)	3667.19	100	3667.19	3676.86
Indravati	1944.36	100	1944.36	1942.38
Sub-Total OHPC	5611.55	100	5611.55	5619.24
Machhkund	262.50	100	262.50	262.50
Total State hydro availability	5874.05	100	5874.05	5881.74
OPGC	2864.82	100	2864.82	2892.49
TTPS	2957.32	100	2957.32	2957.32
IPPs	3556.92		3556.92	3357.12
CGPs	1121.28		1121.28	603.79
Co-generation Plants	621.96		621.96	512.46
Small Hydro (RE)	300.00		300.00	300.00
Bio-mass (RE)	122.00		122.00	
Solar (RE)	46.00		46.00	
Total State availability	17464.35		17464.35	16504.92
TSTPS Stg.-I	2163.22	31.80	2163.22	2163.00
TSTPS Stg.-II	1343.46	10.00	1343.46	1360.38
FSTPS	1472.38	13.63	1472.38	1476.42

Stations	Availability (After transformation loss and Auxiliary Consumption) (MU)	Odisha Share %	Projection for FY 2012-13 (MU)	Approved for 2011-12
KhSTPS Stg.-I	844.98	15.24	844.98	847.47
KhSTPS Stg.-II	208.57	2.05	208.57	209.16
Total Central Thermal availability	6032.61		6032.61	6056.42
Chukha	263.00	15.19	263.00	273.36
TALA	143.00	4.25	143.00	143.16
Teesta	510.00	23.40	510.00	511.32
Total Central hydro availability	916.00		916.00	927.84
Total EREB	6948.61		6948.61	6984.26
Total Availability	24412.96		24412.96	23489.18

Power Procurement Projected by GRIDCO

11. GRIDCO has projected the total energy sale of 23941.85 MU including 10 MU for sale towards the emergency power of the CGPs. Considering OPTCL transmission loss of 945.73 MU @ 3.80% for the year 2012-13, GRIDCO has estimated the total energy requirement of 24887.58 MU. But, the energy availability has been projected at 24412.96 MU from various Generating Stations. Thus, there is a shortfall of 474.62 MU. In order to meet the demand of DISCOMs and CGPs and make necessary allowance for transmission loss, GRIDCO has proposed to avail the shortfall quantum of 474.62 MU through UI / Trading / Short Term Open Access as indicated in the table below.

Table - 4
Demand and Energy Projection for FY 2012-13

Item	Projection for FY 2012-13
SMD for DISCOMs (MVA per month)	3412.43
Energy demand of DISCOMs (MU)	23931.85
Emergency Power to CGPs (MU)	10.00
Total Energy demand (MU)	23941.85
Transmission loss @ 3.80% in OPTCL system (MU)	945.73
Total Energy Requirement (MU)	24887.58
Total Energy Availability (MU)	24412.96
Shortfall of Power (MU) <i>(To be met through UI / Trading / Short Term Open Access)</i>	474.62

Revenue Requirement Projected for 2012-13

12. In its application for FY 2012-13, GRIDCO has projected to procure hydel power of 5611.55 MU from OHPC and 262.50 MU from Machkund. GRIDCO has provisionally assumed the OERC approved rates of different OHPC Power Stations for FY 2011-12

towards procurement of such energy. But the rate of energy from Machkund Joint Project has been calculated at 30.66 P/U considering Odisha share at 50%. Accordingly GRIDCO has proposed to procure the total hydel energy of 5874.05 MU from OHPC at a cost of Rs.396.48 crore with an average rate of 67.50 P/U against the average rate of 65.96 P/U approved for 2011-12.

13. The power purchase cost of 2864.824 MU from OPGC @ 229.69 P/U has been projected at Rs. 658.01 crore for FY 2012-13. The proposed power purchase cost is based on the statement of tariff calculation furnished by OPGC to GRIDCO, which is subject to the approval of the Commission. The power purchase cost of 2892.49 MU from OPGC @ 179.22 P/U approved by the Commission for 2011-12 was Rs.518.39 crore.
14. Based on the latest NTPC petitions filed before CERC in respect of Talcher Thermal Power Station (TTPS), GRIDCO has projected to procure 2957.32 MU from TTPS with the procurement cost of Rs. 761.76 Cr. @ 257.58 P/U against 180.50 P/U approved by the Commission for 2011-12.
15. The Commission vide its Order dated 23.11.2010 in Case No. 117&118 of 2010 has revised the price to Rs. 2.75 / 3.10 / 3.25 per unit for procurement of power from CGP and Co-generating Plants not availing any Open Access and Rs. 2.75 / 3.00 / 3.20 per unit for CGP and Co-generating Plants who have opted for supply 60% and above of their surplus power to GRIDCO after availing Open Access up to 40% of their surplus power. The Commission in its various orders has clarified that the rate of surplus power fixed by the Commission is an indicative upper limit and GRIDCO has to negotiate an appropriate rate within/below that limit considering the Commission's directives. As such GRIDCO had been procuring power at a flat rate of Rs. 2.75/ unit from the CGP's /Co-Generation Plants from the month of November 2010 and onwards on the basis of Letter of Intent (LoI) to that effect issued by GRIDCO to the CGPs/ Co-generation Plants. However, to maximize the generation from the CGPs/ Co-generation Plants so as to supply their surplus power to GRIDCO, GRIDCO has offered to pay at the rate of the aforesaid slab price fixed by the Commission to all CGPs/ Co-generation Plants with effect from 16.11.2011. Considering the above rates, GRIDCO has estimated to procure 1121.28 MU from CGPs at a cost of Rs. 320.92 crore during FY 2012-13 with an average rate of 286.21 P/U. Similarly, GRIDCO proposes to procure 621.96 MU from Co-generating Plants at a cost of Rs.176.03 crore during FY 2012-13 with an average price of 283.02 P/U.
16. GRIDCO has proposed to procure 468.00 MU from renewable energy sources (Non-Solar and Solar) during FY 2012-13 at a cost of Rs.193.62 crore @413.72 P/U on an average. It includes 300 MU from Small Hydro sources (150 MU each from Meenakshi Power Ltd. and Orissa Power Consortium Ltd.) at a price of 368 P/U, 122 MU of Biomass energy from M/s. Shalivahan Green Energy Ltd @ 487 P/U and 46 MU of Solar energy (13 MU from 8 Nos. of Solar PV projects of 1MW each under RPSSGP and 33 MU from NVVN through 20 MW of 'New Projects' scheme under JNNSM) at an average rate of 517.52 P/U.
17. Pending approval of the power procurement price, GRIDCO has proposed to procure 2612.57 MU from M/s Sterlite Energy Ltd at a cost of Rs.718.46 crore at a provisional rate of 275 P/U. However, a rate of 175 P/U as variable cost is proposed for procurement

of 40 MU from M/s Arati Steels Ltd towards State share of 12% of generation which will entail a cost of Rs.7.00 crore to GRIDCO. Similarly for three upcoming IPPs, GRIDCO has proposed a provisional rate of 294.81 P/U on an average to procure 904.35 MU at the total cost of Rs.266.61 crore.

18. GRIDCO submitted that NTPC has filed applications before CERC for approval of tariff of its different Central Sector Thermal Stations for 2009-14 periods. Pending finalization of tariff, CERC has approved 95% of tariff projection made by NTPC. Accordingly, GRIDCO considers the Fixed Cost as approved by CERC and Energy Charge Rate (ECR) for FY 2012-13 has been taken as 30% increase over first six month actual ECR data of FY 2011-12. Accordingly, GRIDCO has estimated to procure 6032.61 MU from Central Sector Thermal Power Stations with a total cost of Rs.2846.77 crore at an average rate of 471.90 P/U. GRIDCO has also projected to procure 916 MU from Chukha, Tala, Teesta-V hydro power stations with the procurement cost of Rs.179.01 crore at average rate of 195.42 P/U.
19. GRIDCO has proposed to buy 474.62 MU through Unscheduled Interchange (UI) / Power Exchange / Short Term Open Access @ 450 P/U at a total cost of Rs.213.58 crore to meet the shortfall as the energy requirement is 24887.58 MU and availability from all sources is 24412.96 MU.
20. The detailed cost of power purchase as furnished by GRIDCO for 2012-13 is reproduced hereunder in Table below.

Table – 5
Summary of Proposed Power Procurement Cost during FY 2012-13

Stations	Availability (After Transformation Loss and Auxiliary Consumption deduction) (MU)	Rate (P/U)	Total Cost (Rs. Crore)	Approved rate for FY 2011-12 (P/U)
HHEP	767.48	79.74	61.20	
CHEP	356.40	69.26	24.68	
Rengali	576.18	63.64	36.67	
Upper Kolab	793.98	35.72	28.36	
Balimela	1173.15	72.78	85.38	
OHPC(Old)	3667.19	64.44	236.30	63.15
Indravati	1944.36	78.24	152.13	77.21
Sub-Total OHPC	5611.55	69.22	388.43	
Machhkund	262.50	30.66	8.05	22.06
Total State Hydro	5874.05	67.50	396.48	65.96
OPGC	2864.82	229.69	658.02	179.22
TTPS	2957.32	257.58	761.75	180.50
Small Hydro	300.00	368.00	110.40	320.32
Biomass Energy	122.00	487.00	59.41	N.A.
Solar Energy	46.00	517.52	23.81	N.A.
CGPs	1121.28	286.21	320.92	277.76

Stations	Availability (After Transformation Loss and Auxiliary Consumption deduction) (MU)	Rate (P/U)	Total Cost (Rs. Crore)	Approved rate for FY 2011-12 (P/U)
Co-generation Plants	621.96	283.02	176.03	275.00
IPPs	3556.92	278.91	992.07	275.00
Total State	17464.35	200.34	3498.88	167.71
TSTPS Stg.-I	2163.22	409.55	885.95	294.27
TSTPS Stg.-II	1343.46	408.50	548.80	301.56
FSTPS	1472.38	596.33	878.02	417.14
KhSTPS Stg.-I	844.98	507.84	429.11	318.82
KhSTPS Stg.-II	208.57	502.92	104.89	345.03
Total Central Thermal	6032.61	471.90	2846.78	331.05
Chukha	263.00	196.30	51.63	181.38
TALA	143.00	221.89	31.73	206.97
Teesta	510.00	187.55	95.65	172.17
Total Central Hydro	916.00	195.42	179.01	180.25
System Operation Charges & Market Operation Charges payable to ERLDC			3.15	
Total EREB	6948.61	435.91	3028.94	311.02
Total Availability	24412.96	267.39	6527.82	210.32
Shortfall to be procured thru.' UI / Trading / Short Term Open Access	474.62	450.00	213.58	
Total Requirement / Procurement	24887.58	270.87	6741.40	210.32

Pass through of arrear dues paid / to be paid during FY 2011-12

21. GRIDCO proposes to consider for pass through of expenses, already incurred or to be incurred till FY 2011-12, in the ARR for the FY 2012-13. This expenses amounts to Rs.634.96 crore consisting of Govt. Guarantee Commission (Rs.34.34 crore), Arrear Payment to OHPC towards Water Cess (Rs.2.19 crore), Arrear Payment to OPGC (Rs.109.48 crore) and Arrear Estimation of NTPC-TTPS till FY 2011-12 as per its filing before the CERC (Rs.488.95 crore).

Special Appropriation towards of Repayment of Principal for FY 2012-13

22. GRIDCO has proposed a sum of Rs.1580.66 crore on account of repayment of principal of all loans to be recovered through tariff of the FY 2012-13 as detailed in table below. The Govt. of Odisha provided support to the extent of Rs.196.17 Crore towards the amount deducted by the Central Govt. from the Central Plan Assistance (CPA) over the period from 1997-98 to 1999-00. Govt. of Odisha in the Notification Dated 25.06.2011 converted these amounts towards loan carrying interest @ 10% to 12%. The total financial

implications on this account including interest upto 31-03-2011 amounts to Rs. 433.90 Crore.

Table – 6
Proposed Special Appropriation in the ARR & BSP for FY 2012-13
(Rs. Cr.)

State Govt. Loans	154.81
NTPC-GoO Special Bonds (Rs.1102.87 Crore)	441.16
Pension Trust Bond	32.63
Bank Loans	518.16
Sub Total	1146.76
CPA Adjustment	433.90
Total	1580.66

Interest, Financing & Other expenses

23. GRIDCO has proposed to recover Rs.546.90 crore during the FY 2012-13 towards interest on loans and financial charges related to Power Purchase. Based on the actual expenses of Rs.3.31 crore towards employees cost during FY 2010-11, GRIDCO has considered an amount of Rs.4.88 crore towards Employees Cost for the FY 2012-13. The interest, financing and other charges including administrative and general expenses cost etc. as proposed by GRIDCO is presented in Table below.

Table - 7
Interest, Financing & Other expenses for FY 2012-13

(Rs. Cr.)

	GRIDCO's proposal for FY 12-13
1. Interest & Financial Charges	546.90
2. Other Costs:	
a. Employee Cost	4.88
b. A&G Cost	3.89
c. ERLDC, NLDC fees, ULDC and SLDC Scheduling Charges	1.32
d. Repair & Maintenance Cost	0.25
Sub-Total - Other Costs	10.34
3. Depreciation	0.22
Total (1+2+3)	557.46

Return on Equity:

24. GRIDCO has proposed RoE of Rs.67.11 Cr @ 15.50 % on its equity capital of Rs. 432.98 Cr.

Other Income / Miscellaneous Receipts:

25. GRIDCO expects to earn an amount of Rs. 6.40 crore (at existing approved tariff) from proposed sale of 10 MU emergency power to NALCO and IMFA.

Receivable from DISCOMs and other parties

26. DISCOMs have defaulted in payment of Rs.747.63 crore towards securitized dues, Rs.780.55 crore towards NTPC Bonds and Rs.987.83 crore towards Year-end-Adjustment (YEA) Bills etc. Further, GRIDCO has outstanding dues of Rs.296.53 crore from parties other than DISCOMs (Govt. Departments, PSUs etc). However, GRIDCO has indicated that this receivable from the parties other than DISCOMs may not be considered in the ARR of GRIDCO for FY 2012-13.

Annual Revenue Requirement:

27. The proposal for Annual Revenue Requirement of GRIDCO for FY 2012-13 is summarised in the table below.

**Table - 8
Annual Revenue Requirement of GRIDCO for FY 2012-13**

(Rs. Cr.)

	Item	OERC approval for 2011-12	GRIDCO's Proposal for 2012-13
a)	Power Purchase Cost	4940.30	6741.40
b)	Pass through expenses and Special Appropriation	741.62	2215.62
c)	Interest, Financing and other expenses	335.00	557.46
d)	Return on Equity	-	67.11
e)	Revenue Requirement (a+b+c+d)	6016.92	9581.59
f)	(-) Misc. Receipts	64.00	6.40
g)	Net Revenue Requirement (e-f)	5952.92	9575.19

Proposed Revenue Earning at Existing BSP Rates

28. GRIDCO proposes to earn revenue of Rs 5467.63 crore during 2012-13 from the anticipated sale of 23931.85 MU to DISCOMs at the existing BSP rates for 2011-12, the details of which is given in table below.

**Table - 9
Expected Revenue for FY 2012-13 with anticipated sale to DISCOMs at Existing BSP Rates**

	Energy (MU)	Existing BSP Rate (P/U)	Amount (Rs. Cr.)
CESU	8532.67	219.00	1868.65
NESCO	5469.18	262.00	1432.93
WESCO	6500.00	262.00	1703.00
SOUTHCO	3430.00	135.00	463.05
TOTAL	23931.85		5467.63

Excess / Deficit in the ARR for 2012-13

29. GRIDCO has proposed that it would suffer revenue deficit of Rs.4107.56 crore considering the proposed ARR and the revenue to be earned from sale of the proposed energy of 23931.85 MU to DISCOMs during FY 2012-13 at the existing BSP Rate of FY 2011-12, the details of which are shown in the table below:

Table - 10
Excess / Deficit on Revenue Requirement for FY 2012-13

(Rs. Cr.)

	Item	GRIDCO's Proposal for 2012-13
a)	Total Revenue Requirement	9,581.59
b)	Less: Misc. Receipts	6.40
c)	Net Revenue Requirement	9,575.19
d)	Revenue Receipt from DISCOMs (at existing BSP)	5,467.63
e)	Excess(+) or Deficit(-)	-4,107.56

Recovery of Proposed Cost in the ARR through Energy Charge during FY 2012-13

30. In order to meet the estimated deficit of Rs. 4107.56 crore, GRIDCO has submitted the application before the Commission for revision of Bulk Supply Price for the FY 2012-13. The licensee proposes to recover the Net Revenue Requirement of Rs.9575.19 crore from the Distribution Licensees through rise in BSP from the existing average energy charge of 231.65 P/U to 400.10 P/U during 2012-13 indicating a hike of 72.72% over the previous year.

Demand Charge

31. GRIDCO proposes that the Demand Charges may be levied @ Rs.200/KVA/Month from DISCOMs, when the actual SMDs of DISCOMs in a month exceed the permitted Monthly SMDs (110% of the approved SMD). The monthly bills raised by GRIDCO in this regard may be paid by DISCOMs on provisional basis to take care of monthly variations, subject to adjustment at the end of the year.

Other Allied Submissions to Facilitate GRIDCO for Recovery of its Expenses

Over Drawl and Year End Charges

32. GRIDCO proposes that any excess drawal of energy by DISCOMs during a month over and above the approved energy quantum would be payable on provisional basis at the highest OERC approved Power Purchases Rate fixed for a Station for FY 2012-13 (which includes transmission charges and transmission loss) on a monthly basis instead of the normal differential BSP applicable to the respective DISCOMs subject to final Year End Adjustment (YEA) considering the highest Power Purchases rate/ cost including the rate/s of energy drawn through U.I. Route of the month plus transmission charges and transmission loss.

Fuel Price Adjustment (FPA)

33. Any excess payment made by GRIDCO towards FPA for a particular / relevant month will be levied on DISCOMs in the succeeding month in proportion to their actual drawl during the preceding month along with the BSP bills if the Fuel Surcharge Price of the particular month paid by GRIDCO exceeds by more than 5% of the approved Average Bulk Supply Price subject to maximum of 25% of the approved Average Bulk Supply Price which will be passed on to consumers in the same month along with their normal energy bills served to the consumers at a rate which will be arrived at by considering their approved monthly sale quantum to the consumers.

Rebate

34. A rebate of 2% on monthly energy bill may be allowed in case of full payment against monthly energy bill of GRIDCO including over drawal and FPA charges, by remitting funds to the account of GRIDCO in Union Bank, Main Branch, Bhubaneswar, within two working days (except holidays under NI Act) of submission of the bill by GRIDCO. In case DISCOMs make payment for the full bill amount including over drawal and FPA charges through LC or upfront on any day within a period of 30 days of the presentation of the bill, a rebate of 1% shall be allowed. However, the DISCOMs will be entitled to the rebate of 1% as mentioned above provided the L.C. is established in favour of GRIDCO as per the terms and conditions of the Escrow Agreement entered between GRIDCO and the DISCOMs.

Delayed Payment Surcharge

35. For payment after the periods of 30 days from the date of submission of bills, Surcharge for delayed payment @ 1.25% per month may be levied pro-rata 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).

Escrow Arrangement

36. GRIDCO has entered into escrow agreements with the DISCOMs which are operative due to the default in payment by DISCOMs to GRIDCO towards energy dues and loan dues. GRIDCO has been directed to allow escrow relaxation to DISCOMs and priority of release of funds from the escrow account has been fixed by the Commission. In order to ensure the escrow arrangement, GRIDCO has requested the Commission to give a direction along with priority for escrow relaxation to be allowed for FY 2012-13.

Revenue Gap of GRIDCO in the ARR vis-à-vis the Actual

37. The actual aggregate Revenue Gap of GRIDCO (FY 2008-09 to FY 2010-11) is Rs. 2,050.55 crore against Rs.2099.05 crore as approved by OERC. After considering the arrear dues from DISCOMs on account of Year-end Adjustment (YEA), the actual aggregate revenue gap becomes Rs.2675.72 crore. Non-availability of surplus power due to increase in demand of the State because of massive rural electrification and rapid industrialization coupled with hydrology failure during last few years along with increase in the cost of power, have made GRIDCO cash-strapped. In its mandated to ensure uninterrupted power supply to the State and to avoid imminent Power Regulation, GRIDCO borrowed Rs.3, 153.71 crore from Banks mainly with the Govt. Guarantee Support in order to pay to the generators. Out of the total borrowings, Rs. 907.47 crore was utilized

towards repayment of past loans resulting in net availability of loan of Rs.2, 246.24 Crore. The balance deficit of cash flow were addressed through availing Over- Draft at high rates of interest, deferring payments to Govt. towards loans, and deferring payment of Power Purchase Dues etc.

38. The OERC approved revenue gap, the actual revenue gap from FY 2008-09 onwards are given in the table below:

Table - 11
Status of Financial of GRIDCO

(Rs. Cr.)

Fi nancial Year	OERC Approved Gap	Actual Gap in P&L Account	Year-end- Adjustment Bills Considered in Accounts but not paid by DISCOMs	Actual Gap considering Year- end- Adjustment Bills	Amount of Loan Availed
1	2	3	4	5=3-4	6
2008-09	(410.05)	98.14	163.94	(65.80)	300.00
2009-10	(882.85)	(1560.84)	164.22	(1725.06)	1213.00
2010-11	(806.15)	(587.85)	297.01	(884.86)	1640.71
Total	(2099.05)	(2050.55)	625.17	(2675.72)	3153.71

Carry forward of Revenue gap

39. GRIDCO prays that in case of a gap between the approved revenue requirements for FY 2012-13 and the revenue realized, the Commission may kindly approve to carry forward the gap for adjustment during the future years.

Summary of Tariff Filing for FY 2012-13

40. GRIDCO has prayed the Commission to approve the following for FY 2012-13 and make the same effective from 1st April, 2012.
- i) Energy charges @ 400.10 paise/unit on energy supplied to DISCOMs.
 - ii) Demand charges @ Rs.200 /KVA/month, when actual SMD exceeds the permitted monthly SMD.
 - iii) Charges for over drawl of energy at a cost of highest OERC approved power purchase rate fixed for a station for FY 2012-13 to be recovered on monthly basis subject to final adjustment at the end of the year.
 - iv) Any excess payment made by GRIDCO towards FPA for a particular / relevant month will be levied on DISCOMs in the succeeding month in proportion to their actual drawl during the preceding month along with the BSP bills, if the Fuel Surcharge Price of the particular month paid by GRIDCO exceeds by more than 5% of the approved Average Bulk Supply Price subject to maximum of 25% of the approved Average Bulk Supply Price.
 - v) Rebate @ 2% / 1% as proposed above.
 - vi) Delayed Payment Surcharge @1.25% per month for the period of delay beyond 30 days from date of submission of bills.

- vii) The Electricity Duty levied by the Government of Odisha 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.

VIEWS OF THE OBJECTORS AND CONSUMER COUNSEL ON THE BULK SUPPLY PRICE PROPOSAL FOR FY 2012-13

41. 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 2012-13. World Institute of Sustainable Energy (WISE), Pune appointed as consumer counsel put up certain queries and objections regarding ARR and BSP filing of GRIDCO. The objectors also made a number of comments/observations regarding the submission of the licensee.
42. 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 2012-13. Based on their nature and type, these objections have been categorized broadly as indicated below:

VIEWS OF CONSUMER COUNSEL (Para 43-70)

43. WISE, Pune as consumer counsel had analyzed the application of the licensee and some of the important observations of WISE are as follows.

Energy sale to DISCOMs

44. GRIDCO has projected 6.04% increase in sale of energy to DISCOMs during the FY 2012-13 over the approved quantum of FY 2011-12, as compared to increase of 7.47% over the projected sale of 2011-12 (prorated based upon six monthly actual figure of 2011-12). GRIDCO has projected to sale 411 MU more energy to DISCOMs than approved quantum given in Business Plan of DISCOMs for FY 2012-13. Sudden increase in SOUTHCO's energy demand (21%) has to be reviewed considering the changes in consumer base, if any.

Energy Availability

45. GRIDCO has proposed to purchase 24887.58 MU from different sources in FY 2012-13 including shortfall purchase of 474.62 MU through UI/Trading/Short-Term Open Access. GRIDCO is purchasing 70% energy from thermal sources. The contribution from thermal sources has increased from 66% (2010-11) to 70% (2012-13) and contribution of hydro power has decreased from 32% (FY 2010-11) to 28% (FY 2012-13).
46. Total energy availability and energy procurement are increased by 3.93% and 5.95% respectively in FY 2012-13. In FY 2011-12, the approved energy availability was increased by 11.83%, compared to FY 2010-11. Availability from projects situated in the state has increased due to Co-generation and CGPs. Energy availability from central sector projects is nearly unchanged.
47. Energy availability from OPGC can be increased if auxiliary consumption is taken as standard 9.5% instead of 10.3% as proposed. Central transmission loss calculation methodology has undergone a change and therefore the proposed loss data should be verified. Energy availability from IPPs should be reviewed based upon present stage of

development of each IPP. After reviewing the energy demand and energy availability from all sources, the shortfall in energy requirement, if any, can be decided.

RPO status

48. GRIDCO proposes to procure 468 MU of renewable energy (RE) from SHP, biomass and solar. The purchase obligation given in OERC (Renewable and Co-generation Purchase Obligation and its Compliance) Regulations, 2010 is compared with the proposal of GRIDCO. Actually GRIDCO proposes to purchase more than specified percentage given in regulation for FY 12-13. Solar energy purchase is 8.67 MU more than specified in regulation. This will have an impact on power purchase cost and on end consumers as solar is costly power. So the quantum of solar power purchase needs review. The amount of thermal energy availability from unallocated quota of NTPC under NVVN bundle scheme is not given by GRIDCO.

Table - 12

Purchase obligation of GRIDCO

	FY 2011-12		FY 2012-13	
	As per OERC Regulation	As Approved by OERC	As per OERC Regulation	As Proposed by GRIDCO
Solar	0.10%	-	0.15%	0.18%
Non Solar	1.20%	1.28%	1.40%	1.70%
Co-gen	3.70%	2.18%	3.95%	2.50%

ARR Component

49. Power purchase cost is the largest component (70%) of proposed ARR for FY 2012-13; followed by special appropriation (23%) and interest, financing and other expenses (6%). In approved ARR of GRIDCO for FY 11-12, contribution of power purchase cost was 82% of total ARR. The detailed components of ARR are shown in figure below.

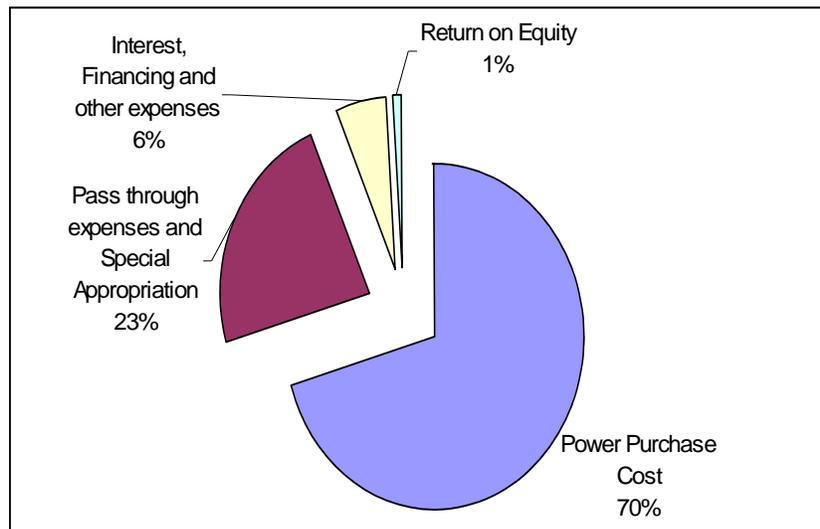


Figure: ARR of GRIDCO for FY 2012-13

Power purchase cost

50. GRIDCO has projected the energy purchase cost as Rs.6741.40 crore (later revised to 6749.82 crore), which is 36.46% higher than power purchase cost approved for FY 2011-12. The source wise quantum of power purchase and rates are given below (figure below). Overall average power purchase rate of GRIDCO is 270.87 P/U for FY 2012-13.

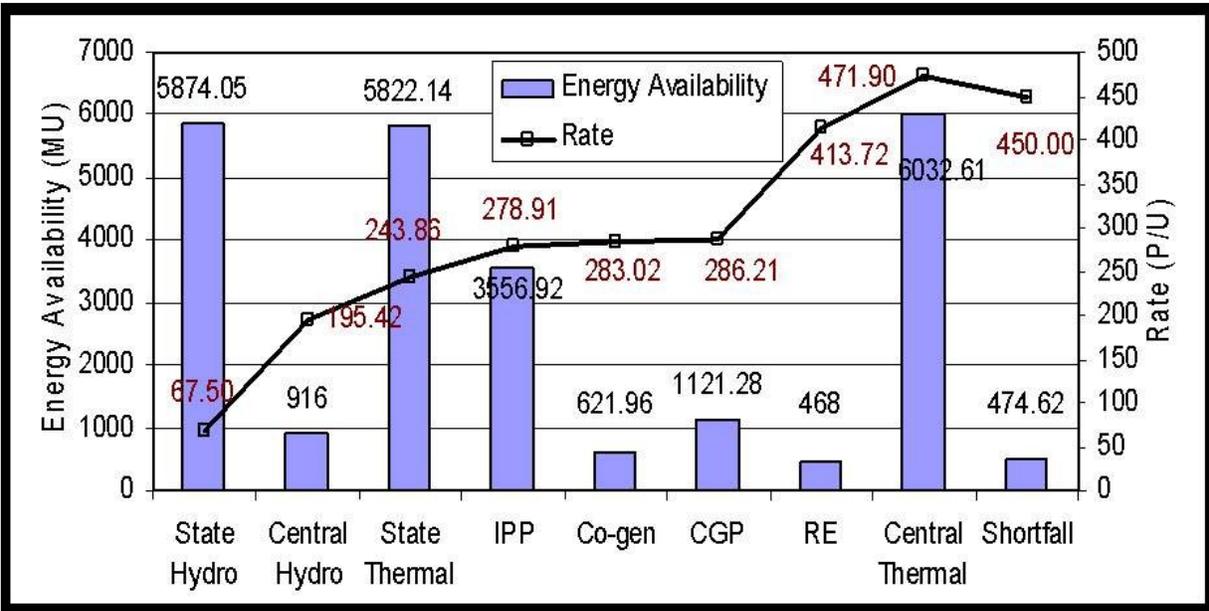


Figure: Power purchase cost details of GRIDCO (FY 2012-13)

51. Considering the present situation of fuel availability and fuel prices related to thermal power plants, the energy demand and supply situation needs review for the energy security of the State. 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 by GRIDCO as hydro power is cheapest source. The power procurement from Co-gen, CGP and RE may be encouraged keeping in provisions under EA and NEP in mind.
52. For TTPS, GRIDCO has projected Rs.381.69 Crore as fixed cost, which is claimed by NTPC in the petition submitted to CERC. But as the petition is pending, Rs.200.88 Crore may be allowed as fixed cost for TTPS as determined by the Commission in earlier orders. FPA for TTPS has been claimed as 20% escalation over highest FPA of first six months of FY 2011-12, which can be calculated as reasonable escalation over average of first six months of FY 2011-12. GRIDCO has claimed incentive and U.I. overdrawal as Rs 9.19 crore and Rs 4.16 crore respectively. U.I. overdrawl can not be judged now and so can not be considered in ARR of FY 2012-13. The incentive amount claimed is substantial and needs review.
53. For OPGC, increase in fixed cost as proposed is minimum (7.28%) and within the range of approved figure for FY 2011-12. The variable cost increase proposed is 52%, which needs a review in variable cost component of OPGC. In case of YEA charges, water cess

and cost of environment protection equipments have been increased compared with approved cost of FY 2011-12.

54. The overall increase proposed in the power purchase rate from the central thermal projects is within the range of 35%-59%. The fixed costs are approved by CERC in the interim tariff orders. Energy charge is considered as 30% escalation over first six month data of FY 2011-12, the proposed escalation needs a review considering the present fuel price variation. The transmission charges are increased by nearly 80%, therefore, the methodology now in place should be considered for reviewing the transmission charge. Individual station wise data shows FSTPS (596.33 P/U) is the costliest power source except roof-top solar PV.
55. The energy charge rate (ECR) of all thermal power stations has increased substantially from the approved figure for FY 2011-12. The highest increase is 145.80 P/U for KhSTPS-I. In monetary terms the implication is extra burden of Rs 856.53 crore in FY 2012-13 considering the energy availability from these sources for FY 2012-13. This ECR increment has a dominant effect on total ARR.

Table – 13
Impact of ECR

Generators	Energy Charge Rate (P/U)		Proposed increase in ECR (P/U)	Proposed Energy (MU)	Cost implication of increased ECR (Rs crore)
	Approved for 2011-12	Proposed for 2012-13			
TSTPS Stage -I	201.38	292.22	90.84	2,163.22	196.51
TSTPS Stage -II	197.77	290.55	92.78	1,343.46	124.65
FSTPS	340.75	480.15	139.4	1,472.38	205.25
KhSTPS-I	232.11	377.91	145.8	844.98	123.2
KhSTPS-II	219.92	349.86	129.94	208.57	27.102
				Sub Total	676.70
TTPS	110.19	121.71	11.52	2,957.32	34.06
OPGC	97.61	148.49	50.88	2,864.82	145.76
				Grand Total	856.53

56. The increment in purchase rate for CGP and Co-generation plants is on the lower side (about 9 P/U). The rates for power purchase from CGP and Co-generation for FY 2012-13 can be determined by OERC, if required, then that can be considered in ARR for FY 12-13. Individual PPA with IPPs has to be referred for deciding the purchase rate of GRIDCO from the concerned IPPs.
57. The RE power availability as proposed by GRIDCO for FY 2012-13, if purchased then there would be no requirement of purchase of REC for meeting the obligation for FY 2012-13 only. Therefore, no cost is associated with REC purchase for GRIDCO for meeting the specified purchase obligation.

58. The proposed average power purchase rate is 27% higher than approved rate for FY 2011-12. The approved average power purchase rate for FY 2011-12 was 20% higher than the rate approved for FY 2010-11. Purchase rate of TTPS has been proposed to be increased by 42.7%. The details are given below.

Table – 14
Comparison of power purchase rate

Stations	Rate for FY 2012-13 (P/U)	Approved rate for FY 2011-12 (P/U)	Approved rate for FY 2010-11 (P/U)	Growth in 11-12 over 10-11	Growth in 12-13 over 11-12
State Hydro	67.5	65.96	62.51	5.52%	2.33%
OPGC	229.69	179.22	149.04	20.25%	28.16%
TTPS	257.58	180.5	171.38	5.32%	42.70%
Renewable energy	413.72	320.32	305.00	5.02%	29.69%
CGPs	286.21	277.76	325.00	-14.54%	3.04%
Co-generation Plants	283.02	275	330.00	-16.67%	2.92%
IPPs	278.91	275	243.54	12.92%	1.42%
Total State	200.34	167.71	145.22	15.49%	19.46%
TSTPS Stg.-I	409.55	294.27	207.08	42.10%	39.17%
TSTPS Stg.-II	408.5	301.56	216.01	39.60%	35.46%
FSTPS	596.33	417.14	302.57	37.87%	42.96%
KhSTPS Stg.-I	507.84	318.82	275.32	15.80%	59.29%
KhSTPS Stg.-II	502.92	345.03	279.63	23.39%	45.76%
Central Thermal	471.9	331.05	243.54	35.93%	42.55%
Chukha	196.3	181.38	183.32	-1.06%	8.23%
TALA	221.89	206.97	209.12	-1.03%	7.21%
Teesta	187.55	172.17	186.42	-7.64%	8.93%
Central Hydro	195.42	180.25	189.07	-4.66%	8.42%
Total EREB	435.91	311.02	236.12	31.72%	40.15%
Total Availability	267.39	210.32	174.58	20.47%	27.13%

Pass Through and Special Appropriation

59. The proposal for pass through and other special appropriation, if approved, would pose burden on the general consumers of the state. The details proposed for FY 2012-13 are given in the table below.

Table – 15
Pass through and special appropriation proposed by GRIDCO for FY 2012-13

Particulars	Amount Rs. Crore
Proposed Pass Through Expenses	
· Outstanding Govt. Guarantee Commission	34.34
· Arrear payment to OHPC towards Water Cess @ 1P/U	2.19
· Arrear Payment to OPGC	109.48
· Arrear payment to TTPS	488.95
Sub-Total of Pass Through Expenses	634.96
Special Appropriation	
· State Govt. Loans	154.81
· NTPC-GoO Special Bonds	441.16
· Pension Trust Bond	32.63
· Bank Loans	518.16
Sub-Total Loans	1146.76
· Payment towards CPA Adjustment	433.90
Sub Total : Special Appropriation	1580.66

60. Arrear payment to NTPC (for TTPS) is the difference in billed fixed cost amount and fixed cost proposed as per petition filed by NTPC in CERC. As the final decision on the petition is pending, the arrear payment to NTPC may not be approved in the ARR of 2012-13. The principal loan repayments towards State Govt loan, NTPC bond and pension trust bond should not be allowed as per OERC's recommendations to GoO. In OERC Orders for FY 2010-11 and FY 2011-12, approved loan principal repayments to be considered in FY 2012-13 are Rs 140.85 crore and Rs 325.75 crore respectively. New loan availed during 2010-12 is Rs 1872.71 crore. Considering all the facts of the proposed special appropriation related to loans needs review. CPA adjustment related order has been passed by GoO to GRIDCO, which can be reviewed and if possible the impact can be passed on in instalments.

Employee, R & M, A&G Expenses, Return on Equity and Interest on Loans

61. Employee cost during 2011-12 was approved at Rs.4.21 Crore. GRIDCO has projected Rs.4.88 Crore for the FY 2012-13, which is an increase of 15.91% from the approved figure for FY 2011-12.
62. GRIDCO has proposed a 37.46% increase in A&G expenses from Rs.2.83 Crore approved for FY 2011-12 to Rs.3.89 Crore projected for FY 2012-13.
63. Besides, GRIDCO has proposed Rs.0.25 Crore for R&M expenses during FY 2012-13. The Commission had, however, not approved any R&M expenses proposed by GRIDCO during 2011-12. In line with the earlier order, the Commission should disallow the same.
64. GRIDCO has proposed Rs.67.11 Crore as return on equity on its equity capital of Rs.432.98 Crore @ 15.5%. But as per Govt directives, this return may not be allowed.
65. GRIDCO has proposed Rs. 546.90 Crore as interest and financial charges in the ARR of FY 2012-13. Interest and other financial charges with respect to proposed new loan of Rs.500 Crore may not be allowed in this ARR. Also, the interest related to new loans taken by GRIDCO in FY 2010-11 and in FY 2011-12 have to be reviewed.

Table – 16

Interest Financing and Other expenses

Particulars (In Rs crore)	2010-11 Approved	2011-12 Approved	2012-13 Proposed	% increase 11-12 over 10-11	% increase 12-13 over 11-12
1. Interest & Financial Charges	194.69	326.64	546.90	67.77%	67.43%
2. Other Costs:					
a. Employee Cost	4.97	4.21	4.88	-15.29%	15.91%
b. A&G Cost	3.41	2.83	3.89	-17.01%	37.46%
c. ERLDC, NLDC fees, ULDC and SLDC scheduling Charges	1.32	1.32	1.32	0.00%	0.00%
d. Repair & Maintenance Cost	0.00	0.00	0.25		
<i>Sub-Total - Other Costs</i>	<i>9.70</i>	<i>8.36</i>	<i>10.34</i>	<i>-13.81%</i>	<i>23.68%</i>
3. Depreciation	0.00	0.00	0.22		
Total (1+2+3)	204.39	335.00	557.46	63.90%	66.41%
Return of Equity	0.00	0.00	67.11		

Revenue Gap

66. GRIDCO has projected a revenue gap of Rs 4107.56 Crore during FY 2012-13 (later revised to Rs 4367.92 crore), with a net revenue requirement of Rs 9575.19 Crore (revised to Rs 9835.55 crore) and revenue receipts of Rs 5467.63 Crore at existing BSP. However, the revenue requirement has included a proposal of Rs 2215.62 Crore (revised to 2467.55 crore) as pass through expenses and special appropriation. In order to meet this deficit, GRIDCO has given the proposal for revision of Bulk Supply Price during the

FY 2012-13. It has proposed to increase the BSP by 72.72% from the existing charge of 231.65 P/U during FY 2011-12 to 400.10 P/U during FY 2012-13. The calculation of Revenue Gap by GRIDCO for the FY 2012-13 is presented in the following table.

Table – 17
Revenue Gap Projected by GRIDCO during FY 2012-13

(Rs. Cr.)

Particulars	OERC approval for 2010-11	OERC approval for 2011-12	GRIDCO's Proposal for 2012-13	GRIDCO's Proposal for 2012-13 (Revised)	% increase in 11-12 over 10-11	% increase in 12-13* over 11-12
Power Purchase Cost	3666.85	4940.30	6741.40	6749.82(a)	34.73%	36.46%
Pass through expenses and Special Appropriation	371.20	741.62	2215.62	2467.55(b)	99.79%	198.75%
Interest, Financing and other expenses	204.39	335.00	557.46	557.46	63.90%	66.41%
Return on Equity	-	-	67.11	67.11		
Revenue Requirement	4242.44	6016.92	9581.59	9841.95	41.83%	59.24%
Misc receipt	5.10	64.00	6.40	6.40	1154.90%	-90.00%
Net revenue requirement	4237.34	5952.92	9575.19	9835.55	40.49%	60.85%
Expected revenue	3431.19	5206.87	5467.63	5467.63	51.75%	5.01%
GAP	-806.15	-746.05	-4107.56	-4367.92	-7.46%	450.57%

* Original submission (a) Rs 8.423 crore and (b) Rs 251.93 crore extra amount proposed in revised submission

67. The gap arises as a result of the proposal for increase in ARR during FY 2012-13 and accumulated past losses of GRIDCO on account of power purchase cost. The Commission should not allow GRIDCO to increase the BSP, which if allowed would ultimately be passed on to consumers. Reducing the revenue requirement, which is shown very high, can reduce this higher revenue gap.

Bulk supply price (BSP)

68. GRIDCO has proposed to increase the BSP by 72.72%, whereas the average power purchase rate would be increased by 28.79%. The approved BSP for 2011-12 was increased by 36.06% and average power purchase rate was increased by 20.47%. Last three year data of BSP and average power purchase rate is given in figure below.

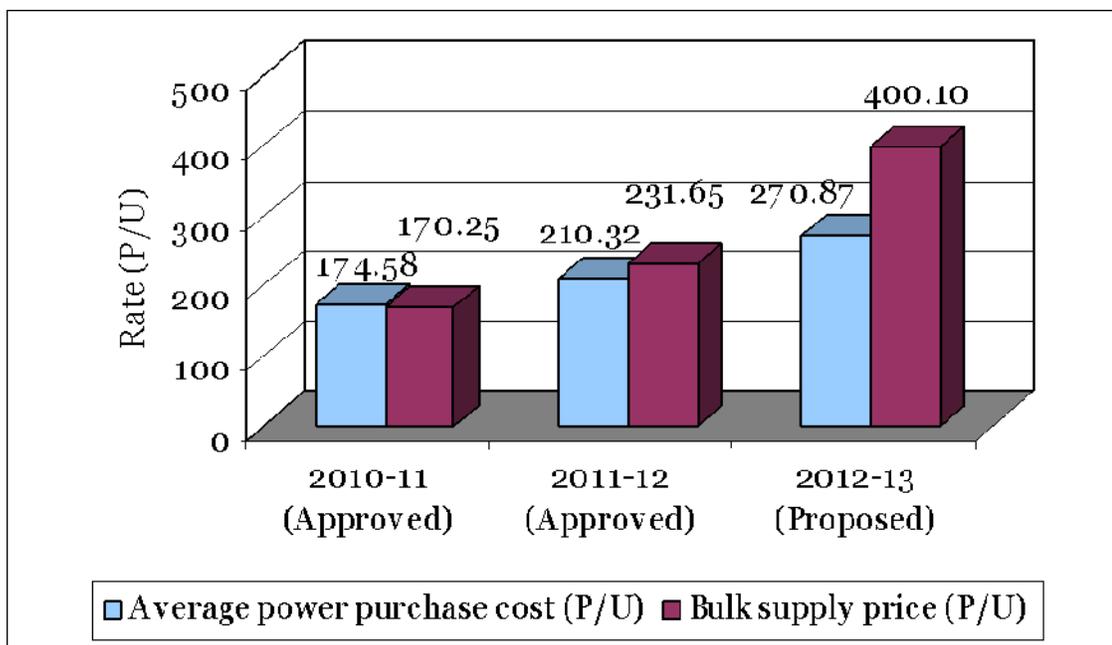


Figure: Average power purchase rate and BSP of GRIDCO

Effect of BSP on average cost of supply of DISCOMs

69. Based upon proposed BSP of GRIDCO, the average tariff will increase by 83.27%. Power procurement cost of DISCOMs, for FY 2012-13, is taken as revised BSP proposed by GRIDCO for FY 12-13. Other distribution related cost is taken as approved for FY 2011-12. Net saleable energy by DISCOMs is calculated based upon the T&D loss assumption of CESU – 35%, NESCO – 29%, WESCO – 34.51% and SOUTCO – 43.72%. The detailed calculation is given below.

**Table – 18
Effect of BSP on average tariff**

Parameters	Value
Average tariff of Discoms (FY 11-12) (P/U)	404.01
Bulk supply tariff proposed by GRIDCO (FY 12-13) (P/U)	400.10
Sale to Discoms projected by GRIDCO (FY 12-13) (MU)	23931.85
Power purchase cost of Discoms at proposed BST (FY 12-13) (Rs crore)	9575.13
Distribution cost, Transmission cost and SLDC charges of Discoms (FY 11-12 approved) (Rs crore)	1988.12
Projected total cost of Discoms (FY 12-13) (Rs crore)	11563.25
Net saleable unit to consumers (FY 12-13) (MU)	15616.61
Projected Average tariff of Discoms at proposed BSP (FY 12-13) (P/U)	740.45
% increase in average tariff of Discoms	83.27%

Summing Up

70. Design of BSP for DISCOMs has direct impact on consumer tariff; therefore, the Commission may consider the observations of Consumer Counsel related to GRIDCO ARR on following points: energy availability from all sources may be reviewed, review of fixed charges and UI over drawl in case of TTPS, review of cost components of OPGC, review of energy charges in case of Central thermal stations, review of transmission loss and transmission charges in case of Central sector projects, power procurement rates for CGPs, Co-generation plants and IPPs may be reviewed, review of pass through and special appropriation including CPA adjustments, interest on proposed new loan shall not be pass through in the ARR, R&M cost, depreciation and RoE shall not be pass through in the ARR.

VIEWS OF OBJECTORS (Para 71 to 151)

Legal Issues:

71. Electricity Act, National Electricity Policy, Tariff Policy do not have any provision for an entity responsible for bulk procurement and supply to the distribution licensee. Consequently, the application for approval of annual revenue requirement (ARR) is not maintainable in its current form and liable to be rejected.
72. The application so filed by the so called deemed licensee in contravention of mandatory provisions of the central act for determination of tariff is not tenable because this Commission has no authority under law & more particularly u/s 62 of Electricity Act, 2003, bulk supply trader is multiplying the establishments to over burden / taxing the consumers.
73. GRIDCO, who is a trader cannot bonafide apply for tariff-setting and such application is not tenable under law.As such the same is liable to be rejected.
74. Functioning of GRIDCO as company is unnecessary as it acts as middle man between the generating licensee and distribution licensee, and that too in absence of competition.
75. Some objectors oppose the proposal of GRIDCO to consider past losses, securitization of arrear while approving the ARR of GRIDCO which is affecting the BSP and in turn burdening the consumers while fixing the RST.
76. Submission of the licensee about CPA adjustment is nothing but an adjustment of the payable and receivable between the State Govt, Central Govt and GRIDCO. The Electricity Act 2003 only provides for the pass through of expenses, not the liabilities.
77. GRIDCO, being a trader, is entitled to, if at all, a trading margin of 4 paise/unit.
78. GRIDCO has proposed super normal increase in the BSP price for the FY 2012-13, which raises the question, as to whether an organization like GRIDCO is required in the interest of power sector in the State.
79. The additional cost claimed towards purchase of costly power in past years is solely on account of GRIDCO, violating the statutory provisions and working as per the directions of the State Govt. GRIDCO, following the instruction of the State Govt, did not carry out the load regulation in accordance with the Order dated 14.01.2010 of the Commission in case no 1/2010.

80. GRIDCO has not followed the orders of the Commission in the matter of the Load Regulation (Protocol) during periods of shortage of power supply. On the other hand in spite of being a regulated entity, it was guided by the directions of the State Govt. to procure costly power.
81. The Commission vide its order dated 11.05.2010 in Case No. 1/2010, while suspending the order on Power Regulation passed on 17.04.2010, ordered that, based on the broad guidelines/modalities prescribed, when a situation of mis-match of demand and supply arise in future SLDC, OPTCL and DISCOMs will take appropriate steps for equitable distribution of power as per Sec-23 of Electricity Act, 2003.
82. The Commission vide its order dated 07.03.2011 in Case No 162/2010 has directed the DISCOMs, GRIDCO, SLDC, and OPTCL to periodically discuss the matter in GCC Relating to Load Regulation Protocol.
83. In spite of its precarious financial position GRIDCO is procuring costly power at the time of shortage of power supply for reasons which are well known. It has not been operating following prudent practices, so any excess expenditure incurred by GRIDCO due to such action is not to be reimbursed in subsequent years.
84. The Commission had approved the BSP of 231.65 p/u for the year 2011-12, whereas GRIDCO has projected the BSP of 412.28 p/u for the FY 2012-13. The Trading margin of GRIDCO of about 180 p/u for FY 2012-13 is not acceptable under any circumstances. Any expenditure incurred without following prudent procedure is not to be considered.
85. GRIDCO has failed to clear the dues of the CGPs and Renewable Energy Developers and allowed large arrears to continue and has also unilaterally reduced the tariff approved by the Commission for such procurement. But, GRIDCO is buying costly power from the outside state without taking prior permission of the Commission.
86. OPGC has not submitted its ARR and Tariff application to the Commission for the FY 2012-13. In absence of any clear cut information and scrutiny of ARR of OPGC by the Commission, the arrear power purchase dues of OPGC amounting to Rs109.48 crore should not be passed through in the ARR of GRIDCO for FY 2012-13.
87. GRIDCO should produce a report on the status of PPA signed with OPGC as per the notification of Govt. of Odisha.
88. The Commission may direct OPGC for submission of its ARR for FY 2012-13 and accordingly the power purchase cost may be approved.

Energy Requirement & Availability:

89. It is necessary to find out exact energy requirement of the state and how to face it ensuring quality and quantity of power supply; requirement for the year under consideration, short time and long time requirement, generation and supply for which the necessary documents have not been presented.
90. It is not clear how and what distribution losses are considered by GRIDCO while projecting the power demand of the distribution companies. None of the DISCOMs are abiding by the distribution losses fixed by the Commission from time to time. Hence, the Commission should determine the quantum of power procurement based on the T&D losses approved by the Commission in its earlier orders.

91. GRIDCO should avail opportunity for importing off-peak and surplus thermal energy from neighbouring states and storing hydro energy for peak operation and irrigation demand. Such import can be supplied back during low frequency period through generation from hydro stations under ABT.
92. GRIDCO should make necessary arrangements for procurement of power through long term agreement from different IPPs in various states to meet the demand. The long term power is a cheaper power and can be easily sourced as lot of power stations are coming in a big way.
93. The Commission may determine the projected shortfall, which may not be procured and load regulation may be imposed.

Availability from State Stations

94. Power availability from OHPC may be considered on design energy or based on actual performance for a number of years with additional capacities built up during 2007-08.
95. Based on the reservoir levels in the current year, generation performance level and past trends, the availability of power from state hydro stations would be 5874 MU in FY 2012-13.
96. Some objectors do not agree with the energy projections made by GRIDCO for state thermal plants and estimates that availability will be more in line with the previous performance trend. They submit that PLF for OPGC and TTPS may be considered at 89.97% and 90% respectively for FY 2012-13 and the estimated drawal would be 2988 MU and 3246 MU respectively.

CGPs

97. GRIDCO may procure maximum power available from the Captive Power Plants in the State and then avail the allocation of the Central Power Stations in the merit order to meet the demand of the State Consumers.
98. Under the changed circumstances of global meltdown and sudden drop in demand of mineral based processing industries, off take from CPPs would be much higher, in the range of 2256 MU. Similarly, with co-generation plants the off take will be to the tune of 745 MU in FY 2012-13.

Central Sector Stations

99. Considering maximum PLFs attained by the Central Sector Thermal Stations in the first part of the current year, the CGS stations will achieve average PLF of 90% in the ensuing year FY 2012-13. The energy available from CGSs would be 6413 MU.

Generation from Renewable Energy

100. The Commission may entrust responsibility on GRIDCO for development of Energy from waste management.
101. The projection by GRIDCO for availability of energy from Co-generation plants and Renewable sources are not agreed upon by some objectors.

Total Power Availability

102. The DISCOMs do not agree with the projected energy availability of 24887 MU as proposed by GRIDCO and estimated that the total availability of power would be 26464 MU during FY 2012-13, therefore 1576 MU would be surplus energy available with GRIDCO.

Power Procurement Cost

103. The Commission should scrutinize the power cost projected by the state generating stations and allow the procurement from central power stations on merit order to meet the power requirement of the state for GRIDCO.
104. The procurement of power from sources other than OHPC, OPGC, CGPs and Central Sector stations should be done by open bidding to reduce the cost of power purchase.
105. The procurement of high cost power due to low hydro and constraints of generating stations are done by the consent of the State Govt. Therefore the differential amount claimed by GRIDCO towards additional power procurement cost should be subsidized by the Govt.
106. The Commission may examine / scrutinize whether cheap power is being purchased by GRIDCO to put fewer burdens to the consumers and also whether the administrative, establishment, general and legal expenses are reasonable.
107. The State is facing serious shortage of power and GRIDCO has taken no steps to co-ordinate with the other licensees and obtained the approval of the Commission for enforcing the load regulation and equitable distribution of power. GRIDCO is buying costly power from UI and Power Exchange without the approval of the Commission, hence not recoverable from the consumers.

OPGC

108. 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 expenses in each year. The truing up exercise is essential to find out the actual fixed cost paid by GRIDCO to OPGC in comparison to the fixed cost allowed in the ARR of GRIDCO in each year.
109. The fixed cost of OPGC may be estimated for FY 2012-13 separately and that 8% escalation on O&M expenses ought to be made on the audited O&M expenses of FY 10 which is on the lower side. Variable cost of 134.99 p/u in respect of OPGC is extremely high in comparison. Hon OERC should consider conducting an audit on the coal and oil cost claims.

TTPS

110. Some objectors do not agree with the submissions made by GRIDCO estimating the AFC of Rs.381.69 crore & UI charges of Rs.4.16 crore in respect of TTPS for the FY 2012-13. AFC as fixed by Hon OERC for FY 2011-12 should be considered.

Central Sector Stations

111. The process of finalization of charges for the period of 1st April 2009 to 31st March 2014 by the CERC has been already started and in the absence of any benchmark, the fixed cost as approved by CERC for FY 2011-12 should be considered.
112. Some objectors submit that to arrive at the FPA for FY 2012-13, they consider the average FPA for the period of April-August 2011, with an escalation of factor of 10%. For calculation of variable charges for FY 2012-13, they have considered the variable charges for FY 2008-09 as approved by OERC with central line losses of 2.29%.

PGCIL Charges

113. Revenue earned from additional medium term and short term open access is much higher and should be taken into consideration while approving the PGCIL charges.

Captive, IPPs and Renewable Purchase cost

114. GRIDCO is liable to pay idle capacity charges to Sterlite Energy Ltd (SEL) calculated at 85% plant availability for the full allotted quota of 600 MW.
115. SEL has calculated the total annual revenue requirement of GRIDCO on account of energy purchase from SEL and same found to be around Rs 2299.14 crore. However, GRIDCO has projected only Rs 718.46 crore towards purchase of energy from SEL, which is wrong and erroneous.
116. GRIDCO has projected only 275 P/U for procuring power from SEL unit which is erroneous and at this tariff SEL will not be able to supply energy to GRIDCO. GRIDCO has not considered the past projected arrear for FY 2010-11 and FY 2011-12 on the account of likely tariff revision of SEL by the Commission and also the idle capacity charges payable to SEL.
117. GRIDCO has purchased costly power from outside the State without permission and approval of the Commission is required when the power was available at cheaper rate from the captive power plants within the State.
118. The rate for SHEP approved in the ARR application of GRIDCO should not be treated as the approved rate for payment of energy charges. The Commission may clarify that the rate at which the power is to be procured by GRIDCO shall be based on the orders passed by the Commission from time to time and the approved rates in the ARR are only estimates and not binding. GRIDCO may be directed to make payment of the monthly energy bills in accordance with the applicable generation tariff order.
119. The projection of GRIDCO in respect of power purchase cost from renewable energy sources i.e. from Small Hydro Projects of Meenakshi Power Ltd. and Orissa Power Consortium Ltd. are not in conformity with actual generation.

Employees Cost and A&G Expenses

120. The proposed expenses of administrative employees, R.M. cost is unjustified and imaginary.

Interest on Long Term Liabilities

121. A power development fund may be created by the State Government or from the profit of GRIDCO earned from UI and trading of surplus power. The principal loan repayment shall be made from this fund. Further, the Commission may advise the State Govt. to bear at least the interest part of the eventual loan lying in books of account of GRIDCO.
122. Some objector do not agree with the submissions made by GRIDCO on interest cost of Rs.546.90 crore and estimates the interest cost of GRIDCO to the tune of Rs.398.94 crore on the basis of following assumptions.
- The proposed a loan amount of Rs.500 crore shown by GRIDCO during FY 2011-12 has not yet been availed.
 - Zero percent interest on Govt Loan.
 - Govt to consider the waiver of the guarantee commission to GRIDCO.
 - The securitization of OHPC, if at all, needs to be like the securitization of the DISCOMs dues at 0% interest rate.
 - Interest on overdraft may be considered in line with the approvals to DISCOMs.

Special Appropriation

123. The repayment of principal is a part of cash management of GRIDCO and not a part of ARR. There is no provision for the pass through of repayment of principal in the ARR. Hon'ble ATE in their several judgements has held the view that repayment of principal cannot form as a part of the ARR and ought to be dealt separately.
124. CPA adjustment is nothing but an adjustment of the payable and receivable between the State Govt, Central Govt and GRIDCO. The Electricity Act 2003 only provides for the pass through of expenses not the liabilities.

Past Losses

125. The proposal for passing through of past losses and unforeseen expenses to the extent of Rs 634.96 crore, if approved, would pose burden on the general consumers of the State.
126. The past losses of GRIDCO are mostly on account of its inefficient operation and failure in collection of dues and are therefore should not be allowed in ARR.
127. Some objectors submitted that following pass losses should not be considered.
- State Govt, being a major stakeholder, may waive the guarantee commission in the interest of the consumers.
 - The Commission may consider the proposal to waive the water cess for generation of power.
 - OPGC had already recovered more than that of normal charges towards depreciation and interest in the past, which may be adjusted against arrear payment to OPGC.

Export of Power & UI

128. GRIDCO should undertake energy trading with different states both for long term and short term basis and expression of interest (EOI) should be invited both for procurement and sale of the power in advance so that this can be executed at the time of necessity.
129. GRIDCO should have gone for competitive bidding, for establishment of Thermal Power Stations in the State 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 Odisha. After meeting the State demand, the surplus power may be traded at higher rate to keep the RST stable.

Revenue Gap and BST

130. The Commission should not allow GRIDCO to increase the energy charge, which if allowed would ultimately be passed on to consumers.
131. There is no need for any enhancement in BST, rather reduction, because CAPEX system is to work properly, reservoir levels of Hydro Stations have been improved in comparison to last year, and local CGPs are committed to supply. Hence, there is not much burden to purchase high cost NTPC power. Our state's share from all stations is to be properly monitored and received benefit of sale of surplus power to others.
132. Any increase in BSP will have direct bearing on RST and in the past the burden of BST increase was loaded on HT and EHT consumers availing load factor incentive tariffs.
133. The Commission should scrutinize the actual consumption of DISCOMs for LT categories and proposed consumption against HT & EHT categories and fix bulk supply price such that the consumers of the state more specifically EHT and HT consumers are not burdened with RST.
134. The proposal of GRIDCO to increase the average BSP by 72.72% i.e. from the existing rate of 231.65 p/u to 400.10 p/u is not acceptable. This rate is projected at higher side without proper basis and such increase in BSP will affect the retail tariff. The huge increase asked for by GRIDCO, being a trader is not bonafide and tenable under law, as such the same is liable to be rejected.

Levy of Over Drawl Charge and Year End Adjustment

135. The DISCOMs submits that only the incremental cost for additional generation may be approved for billing in case there is a over drawl by any DISCOMs over and above the quantum fixed by OERC as the entire fixed cost is taken while computation of power purchase cost of GRIDCO.
136. The additional power cost incurred by GRIDCO is allowed in the yearly trueing up exercise, therefore, there is no need of double recovery of the charges from DISCOMs; hence the year end adjustment bills raised by GRIDCO may be withdrawn.

Rebate and FPA

137. A rebate of 2% may be allowed to the Licensees for prompt payment of BSP bills within three working days excluding Sundays and Holidays as per Negotiable Instrument Act from the date of presentation of the BSP bill.

138. The DISCOMs submit that the guidelines related to FPA ought to be formulated by the OERC and instead of an automatic pass through there has to be a scrutiny of costs.

Other Issues

139. For implementation of Intra-state ABT, identification of beneficiaries and their mutual relationship needs to be clearly established. Hence, PPA allocation is a primary requirement. Therefore, the net capacity available should be allocated amongst the DISCOMs in proportion to their Demand or Energy Input.
140. GRIDCO is a deemed trading licensee in the state and fully owned Govt company for supply of power to the 42 lakhs consumers of Odisha through OPTCL and DISCOMs. The Commission may direct GRIDCO to give an undertaking through an affidavit that, it will supply quality power with proper voltage to all consumers of the state, which has not happened during the year 2011-12.
141. The Commission should look into the issue of power evacuation from IPPs those are now generating power and going to generate power in the state as per the MoUs signed with GRIDCO till date. GRIDCO should intimate its planning on this issue for information of the consumers as the STU is not able to evacuate power from IPPs and CGPs.
142. GRIDCO should produce a report on the status of PPA signed with OPGC as per the notification of Govt. of Odisha.
143. GRIDCO should intimate its plan for meeting the state demand of 9000 MW (CEA forecast) in the year 2012-13 under Rajiv Gandhi Gramin Bidyut Yojana and Biju Jyoti Yojana.
144. GRIDCO should produce a status report on the action taken by it, as per direction of the Commission in the Tariff Orders for FY 2009-10, 2010-11 & 2011-12. GRIDCO, being a Govt. owned company, should also produce the status report of other trading licensees to whom license has already been issued.
145. The erection of 132/33 KV substations is the responsibility of OPTCL but are to be properly approached by DISCOMs and GRIDCO which is not being done with sincerity.
146. GRIDCO should produce a status report how much outstanding bills are there on the DISCOMs till 10.01.2012 and what steps GRIDCO has taken to realize such outstanding dues. GRIDCO should produce the status report about the quantum of power received from Power Banking.
147. GRIDCO account has not been audited for the financial year 2008-09, 2009-10 and 2010-11; as such there is no availability of its yearly audited account which would have shown the base / standard of its performance, financial position etc before the Commission.
148. When DISCOMs are making full payment of monthly power purchase bills on regular basis and LC is in place, the need for escrow mechanism on entire receivables needs to be re-examined.
149. GRIDCO has failed to collect its dues from the DISCOMs as well as arrears from the Govt. Deptt./PSUs etc. The total outstanding is around Rs. 2812.00 Cr. Therefore, any loan availed by GRIDCO against the said outstandings should not be allowed in its ARR.

150. The proposed sale of energy to the CGPs i.e NALCO & IMFA to the tune of 10 MU @ Rs.6.40 per unit is unreasonable. This should be increased to 100 MU & the rate may be reduced accordingly.
151. GRIDCO has not improved its efficiency and standard of service, performance and has not reduced T&D losses, administrative expenses etc as directed for which Commission should not penalize consumers.

GRIDCO's RESPONSE TO THE OBJECTORS (Para 152 to 239)

152. In response to the views of the objectors on GRIDCO's application for approval of the Annual Revenue Requirement and Bulk Supply Price for FY 2012-13, GRIDCO had filed rejoinders on the same. GRIDCO's rejoinder on the views expressed by the objectors has been broadly classified into the following main issues.

Legal Issues

153. GRIDCO happens to be a Deemed Trading Licensee under 5th proviso 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 Odisha that prevails in the State as a matter of historical legacy.
154. After hiving off the Transmission function from GRIDCO to OPTCL by virtue of the Govt. of Odisha Transfer Notification No. 6892 dated 09.06.2005, only the bulk purchase of electricity for sale to DISCOMs in Odisha remained with GRIDCO. This satisfies the definition of trading in 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 an activity is tenable under the law.
155. Moreover, Govt. of Odisha 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.
156. 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.

157. The Commission has also upheld the legal status and continuance of GRIDCO under the Single Buyer Model as a “Deemed Trading Licensee” and filing of its ARR & BSP Application for approval in the overall interest of the Odisha Power Sector by dealing with this issue in the ARR & BSP Order for FY 2011-12, dated 18.03.2011. In fact, the Commission has extensively dealt with the legal status of GRIDCO and the tenability of its ARR & BSP filing before the Commission in Para Nos. 277 to 287 of the ARR & BSP Order Dated 18.03.2011.
158. Thus, in present scenario of the State’s power sector, the single buyer model is absolutely essential and hence should be continued with. GRIDCO a wholly owned undertaking of the State Government and a Company incorporated under Companies Act, 1956 for discharging its obligations of the transferee under clause 11 of the Transfer Scheme in accordance with the Govt. of Odisha, Department of Energy Notification No.6899 dt.09.06.2005 from the date of transfer i.e. w.e.f. 01.04.2005. GRIDCO, despite its critical financials that arose mainly due to lower tariff as compared to its cost and the failure of DISCOMs to clear the outstanding dues payable to GRIDCO, has till date been able to maintain the power supply without much disruptions, should be credited rather than discredited.
159. The Trading Margin of 4 Paise per Unit per se (which is relevant to inter-state power traders) is not applicable to GRIDCO as the power trading by GRIDCO is of the nature of intra-state transaction for bulk supply of energy. This has been upheld by the Hon’ble Supreme Court of India in Appeal No. 5722 of 2006 (Gajendra Haldea vrs. GRIDCO & Others).
160. Regarding load restriction, it is not the duty of GRIDCO but of the DISCOMs and the SLDC. They have not restricted the drawal of power for which GRIDCO was compelled to purchase high cost power through UI mechanism and also from the CGPs etc, to meet the demand. Besides, cheaper hydropower was also not available due to poor hydrology. GRIDCO has made all-out efforts to meet the power requirement of the State. In fact, the DISCOMs have not restricted their drawal and reduced the AT&C loss level as approved by OERC which has resulted in higher drawal resulting in higher power purchase cost. There is no violation of statutory provisions by GRIDCO.
161. GRIDCO has filed its ARR & BSP Application for FY 2012-13 with absolute fairness in terms of the Section-86 (1) & (a) & (b) of the Electricity Act, 2003 and all other applicable provisions of the Electricity Act, 2003 read with relevant provisions of the OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004, and OERC (Conduct of Business) Regulations, 2004, and other related Rules and Regulations. Further, following the directions of the OERC, GRIDCO has also arranged to publish the Public Notice regarding its filing of the ARR & BSP Application for FY 2012-13 in English and Odia language in leading dailies of the State on 13.12.2011 & 14.12.2011 followed by publication of another Public Notice stating the name of the objectors to the ARR & BSP Application in the Newspapers dated 03.02.2012. GRIDCO’s filing of the ARR & BSP Application is absolutely in line with the provisions contained in the Electricity Act, 2003 and conforms to the requirement of the regulations framed under the Act. The Notice indicated that interested persons may inspect / peruse the said Annual Revenue Requirement (ARR) & Bulk Supply Price (BSP) Application for 2012-13 and take note thereof by 14.01.2012 in the Office of GRIDCO and also in the websites of

GRIDCO (www.gridco.co.in) and the Commission (www.orierc.org). Hence sufficient information has been given for inviting objection and this cannot be treated as a frustrated exercise and contrary to the law and/or principle of natural justice.

162. It may be noted that the filing of ARR by GRIDCO before the OERC has been carried out in due process of the law and therefore, the question of duping anybody or ignoring / avoiding the Order of the Hon'ble High Court does not arise at all. GRIDCO has all along been carrying out the Orders of the Hon'ble Courts including those of the High Court as are applicable to it.

Energy Availability and Procurement

163. The projection by GRIDCO towards power procurement during FY 2012-13 in the ARR & BSP Application is estimation only. The procurement of power is planned in such a manner that it entails minimum cost to GRIDCO with maximum availability of energy. Further, GRIDCO is obliged to procure contracted power from the organizations as per the Power Purchase Agreement, Memorandum of Understanding (MOU) and also as per the allotment to Odisha from the Central Generating Stations from time to time etc. on least cost combination basis for supply to DISCOMs.
164. Considering the above, GRIDCO has projected its quantum of power procurement from different sources for 2012-13 based on the following assumptions / factors to meet the demand of DISCOMs, which are subject to prudent check by the Commission:
- I. Projection from OHPC, OPGC & TTPS has been taken as per the generation plan submitted by them.
 - II. Projection from Machhkund is assumed as per the allotment.
 - III. Projection from Samal and Meenakhi HPS has been assumed as per the PPA.
 - IV. Projection from Central Generating Stations at 85% PLF has been considered based on the CERC (Determination of Tariff) Regulations, 2009.
 - V. Projection from Chukha HPS & Tala HPS has been taken by considering the trend of supply during the past years (Average drawal of past 6 years in case of Chukha and 4 years in case of Tala HPS).
 - VI. Projection from Teesta HPS has been considered based on the annual saleable energy and the state share of 23.40%.
 - VII. Projection from the IPPs has been taken as per the provisions of the PPA.
 - VIII. Projection of procurement from CGPs /Cogeneration Plants has been taken as 1743.24 MU; besides 168 MU of Bio-mass & 46 MU of Solar energy is proposed to be procured during FY 2012-13.
 - IX. However, even after considering the entitlement of GRIDCO from the all the sources, GRIDCO's projected requirement falls short by 474.62 MU which is proposed to be met through UI/Trading/Short Term Open Access.
165. Generators like OHPC, OPGC & TTPS submitted their Generation Plans along with the filled-in OERC forms, TRT-2 relating to Scheduled / Forced maintenance of generating units with due consideration to the available capacities, planning for the scheduled

maintenance and other related factors. GRIDCO can not intervene / influence in the internal planning matters of these Generators. Besides, GRIDCO does not possess any authority to revise the projection of energy generation plans given by a generator, as it will lead to serious prejudice and may cause distortions in fixing the appropriate tariff. Hence, GRIDCO has the only option to accept the generation plans submitted by the above generating organizations. Therefore, the projections furnished by GRIDCO as per the generation plans of OHPC, OPGC & TTPS may be taken into consideration.

166. GRIDCO proposes to draw 1743.24 MU from different CGPs and Co-generating Plants by considering maximum drawal up to 50 MW at a rate of 310 P/U in order to restrict power purchase cost. GRIDCO proposes to draw 1089.96 MU from different Solar and non-solar sources.
167. Power demand of the State has surged to an average of 2700 MW with a peak demand of 3300 MW. Presently, there is peak shortage of about 500 MW and average shortage of about 300 MW.
168. GRIDCO is also committed towards harnessing surplus power from various Captive Generating Plants (CGPs) and Co-generating Plants of the State at approved/ negotiated rates at the time of need, if required subject to approval by the Commission.
169. The projection of power procurement of 24887.58 MU is based on the sales projection of 23941.85 MU (consisting of 23931.85 MU of sale to DISCOMs and 10 MU towards emergency sale of power to NALCO & IMFA) plus the transmission loss of 945.73 MU @3.80%, which is the approved loss by the OERC for FY 2012-13. Thus, power procurement projection is scientifically derived.
170. GRIDCO has never suppressed the power demand of the State; rather power demand is dependent upon the state of socio-economic or industrial activities. However, it is a fact that after launching of favourable Industrial Policy (IPR) by the State Govt., Odisha attracted investment in the area of industrialization and this coupled with Rural Electrification Programmes suddenly contributed to surge in electricity demand of the State. GRIDCO is committed to meet the demand through various means available at its disposal including sourcing of power through UI/Trading/Banking modes besides availing the entitled demand of the State from the firm sources.
171. Consumption of electricity is optional in nature and therefore, the consumers can contribute their bit by way of conservation which will have a very positive effect in impacting the cost of theirs as well as of the Licensees and the overall economic health of the Power Sector, as a whole.

Renewable Energy

172. GRIDCO has targeted to procure about 46 MU of solar power i.e. 8 MU more than the requirement @ 0.15% of the total proposed power procurement of 24887.58 MU, say 25000 MU during FY 2012-13 from Solar Projects to meet its Solar Purchase Obligation (SPO). GRIDCO hopes to procure about 24 MU of Solar Energy out of which 13 MU is expected from the Solar Projects to be developed in this State as per RPSSGP scheme.
173. GRIDCO has already signed Power Sale Agreement (PSA) during January, 2011 to procure power bundled with un-allocated power from NTPC Stations through new GRID connected Solar Power Project under Phase-1 of Jawaharlal Nehru National Solar

Mission (JNNSM). GRIDCO is trying its best to explore possibilities to procure Solar Power for the State. If required, GRIDCO may buy Solar Renewable Energy Certificates (REC) for balance Solar Power to fulfill its SPO.

174. With regard to Bio-mass energy, GRIDCO has executed PPAs with the following Biomass Power Plant Developers (total Installed Capacity is 118 MW), whose projects have been approved by the State Technical Committee (STC). The details are given below:

Table-19
Biomass Projects approved by STC

Sl. No	Name of the Developer	Location	Installed Capacity (MW)	executed of PPA
1.	M/s. Rashmi Power Pvt. Ltd.	Gandhigram, Dist.: Boudh	10	23.12.2010
2.	M/s. Satya Bio (India) Pvt. Ltd.	Digapahandi, Dist.: Ganjam	10	30.12.2010
3.	M/s. Shalivahana Green Energy Ltd.	Nimidha, Dist.: Dhenkanal	20	30.12.2010
4.	M/s. Prasad Bio-Energy (P) Ltd.	Therubali, Dist.: Rayagada	10	30.12.2010
5.	M/s. Rake Power (P) Ltd.	Jhrsuguda	23	30.12.2010
6.	M/s. AVN Power Projects (P) Ltd.	Jayapatra (V), Dist.: Kalahandi	10	30.12.2010
7.	M/s. Andhavarapu power Projects (P) Ltd.	Dhabugaon (V), Dist.: Nawarangpur	10	30.12.2010
8	Star Light Energy (P) Ltd.	Bhera (Kala) Village Dist: Nuapada,	15	04.01.2011
9.	M/s. Swarnajyoti Projects (P) Ltd.	Katapalli, Dist: Sambalpur	10	04.01.2011
Total			118	

175. These PPAs have been submitted before the OERC for approval. It is expected that it might be possible for GRIDCO to procure about 122 MU of Bio-mass energy subject to availability from such plants in future and approval of the Commission.

CGSs:

176. For various Units of the Central Generating Stations (CGSs) of NTPC, GRIDCO has considered the PLF of 85% as per the applicable CERC Tariff Regulations, 2009. Most of the Thermal Stations are unable to generate to the maximum because of the shortage of coal supply. Assumption of higher percentages of PLF and the consequent procurement of energy as suggested may therefore not be accepted.

IPPs

177. PPA with SEL has been signed incorporating the State Thermal Policy dt.08.08.2008, where it has been stipulated that in addition to 25% of share of power from the project,

additional 7% will be available to the state as per the allotment of coal block in the state. Hence there is no ambiguity in interpreting the State Thermal Policy. GRIDCO is ready to take its full share of power from the project but SEL is not declaring the availability of the Unit-2 which is beyond 300MW dedicated to the state.

178. The 220 kV D/C line with moose conductor connecting the SEL project with STU at Budhipadar can evacuate 500MW of power safely. Most of the times the availability declared by SEL to SLDC is only 300MW. This has been brought to notice of SEL. SLDC is instructing SEL to enhance generation, but SEL is not complying with the instruction of SLDC to increase generation. The constraints if any are not known to SLDC and GRIDCO. Probably the plant is using linkage coal for Unit-2, on the other hand SEL is increasing the generation of VAL Units marginally for some time only.

Sales Projection

179. The DISCOMs furnished their energy requirement for the FY 2012-13 on 25th and 26th of Nov, 2011. GRIDCO generally considers the demand projection of the DISCOMs as submitted by them. Since it is found to be over estimated, GRIDCO taking these figures into account, formulated its procurement projection for FY 2012-13. Transmission Loss has been taken as 3.80% as approved by OERC vide its Order dated 20.03.2010 pertaining to the 5-year Business Plan (FY 2008-09 to FY2012-13) of OPTCL.
180. Considering DISCOMs' estimated requirement of 23931.85 MU and 10 MU towards emergency supply to M/s. IMFA and M/s. NALCO, the total energy projected by GRIDCO for FY 2012-13 worked out to be 23941.85 MU. After adding the transmission loss of 945.73 MU calculated @3.80%, GRIDCO projected the power procurement of 24887.58 MU for FY 2012-13. This may be considered as realistic and accordingly, be accepted by the Commission instead of considering the over-estimated energy projection of 26464 MU given by the DISCOMs. GRIDCO does not consider distribution loss for projecting the DISCOMs' energy demand.
181. After considering the availability from the entities / organizations in the State as well as from the Central Pool as mentioned above, there is a shortfall of 474.62 MU to be procured through UI/Power Exchanges/ Short Term Open Access for meeting the demand of DISCOMs, emergency supply to M/s. IMFA and M/s. NALCO including the transmission loss.
182. GRIDCO submits that going by its estimation, GRIDCO does not foresee any surplus situation during FY 2012-13 and as such, it has not projected towards sale of any surplus power as has been estimated by the objectors. However, the projection of power procurement by GRIDCO from different Stations for FY 2012-13 to meet the demand of DISCOMs is not final as the same is subject to the approval by the Commission.
183. NALCO & IMFA are basically supplier of their surplus power to GRIDCO after meeting their own captive consumption and occasionally they draw their requirement towards the emergency & back-up power from the grid. From the past records, it is observed that the limit of drawl of such power usually remained within 10 MU. But in the FY 2010-11 & during the current year, NALCO has drawn comparatively more back-up and emergency power from the grid as it was not able to generate enough power due to short supply of

coal. GRIDCO feels that such type of situation may not continue and accordingly, projected 10 MU of power to be drawn by CGPs like NALCO & IMFA.

Power Procurement Cost

184. Projected power procurement from different sources for 2012-13 to meet the demand of DISCOMs, the following are considered which are subject to approval by the Commission:

- I. As regards to the estimation of power procurement cost from different sources, the latest rate / tariff applicable for each station (as fixed vide different orders of the Relevant Authorities) has been taken into consideration, which is subject to prudence check by the Commission.
- II. After considering the entitlement of GRIDCO from the all the sources, GRIDCO's projected requirement falls short by 474.62 MU which is proposed to be met through UI/Trading/Short Term Open Access. at an average rate of 450 P/U. This apart, GRIDCO will try to harness surplus power from various Captive Generating Plants (CGPs) / Co-generating Plants of the State at approved rates / negotiated rates, at the time of need, subject to the approval from the Commission.
- III. Other important factors contributing to significant increase in the proposed power purchase cost are;
 - The coal prices have gone up contributing increase in the cost of Thermal Power. Besides, the use of costly blended coal has led to further increase in cost of power
 - Overall increase in the state demand has arisen primarily because of rapid industrialization and massive Rural Electrification under Rajiv Gandhi Grameen Vidyut Karan Yojana (RGGVY), Biju Gramya Jyoti Yojana (BGJY) & Biju Saharanchal Vidyut Karan Yojana (BSY) etc.
 - This coupled with continuous failure of monsoons during the last couple of years has resulted in hydrology failure leading to fall in the share of cheaper hydropower in the overall power pool thereby resulting in increase of the total power purchase cost of GRIDCO.

Thus, the proposed power purchase cost is very much realistic and not inflated.

State Hydel Plants (OHPC)

185. OHPC has submitted its application before OERC for approval of its ARR and Tariff of its Hydro Stations for FY 2012-13, which is registered as Case No. 90 of 2011. Once approved, the OHPC tariff for FY 2012-13 would be reckoned by the Commission while approving the power purchase cost in the ARR & BSP of GRIDCO for FY 2012-13.

Thermal Power:

186. GRIDCO has submitted its proposal for Fixed Cost, Year-End Charges and FPA for Talcher Thermal Power Station (TTPS) before the OERC supported with Evidential Documents so as to enable the Commission to approve the appropriate costs / charges for TTPS, based on prudence.

187. The tariff calculation submitted by OPGC is submitted before the OERC in Evidential Documents of the ARR & BSP Application. The Commission is to take an appropriate decision, in this regard, based on prudence.

Central Generating Stations (CGSs)

188. The Commission may kindly consider the projection of GRIDCO at PLF of 85% for NTPC stations and the provisional approval of Annual Fixed Cost by CERC (which is 95% of the filing by the NTPC) pending finalization of Petitions of NTPC before CERC as per the CERC Tariff Regulations, 2009.
189. With regard to the Variable Charges / Energy Charge Rate (ECR) of these Stations, GRIDCO has assumed the same with 30% increase over the actual relevant price, prevalent during 1st six month of FY 2011-12 (Aprl'11 to Sept.'11). This is because of the steep rise in the coal prices which is further exacerbated by the shortage of coal (both indigenous and imported) and also use of costly blended coal by the NTPC Plants, The Commission may kindly consider the above including the current coal crisis, increase in coal prices and other relevant costs while finalizing the tariff.
190. OPGC and Central Thermal Generating Stations are Government Organizations and therefore, the scope of inflating prices is remote because of the rigorous auditing process.
191. Being the State Designated Agency, it is the mandate of GRIDCO to ensure supply of power to the State. GRIDCO takes every care to source the power by following the least cost approach. It is rather the external factors like continuous failure of monsoons during last couple of years, shortage of coal and rise in coal prices, use of costly imported coal blended with indigenous coal power plants which have contributed to overall increase in the power purchase cost because of high proportion of thermal power in the total power purchase basket. This has been a nation-wide problem and is not specific to GRIDCO. The Central Sector NTPC Power has been very costly because of the increased coal prices and use of imported coal due to non-availability of the required quantum of indigenous coal.

CGPs / Co-generation / Renewable Energy

192. GRIDCO has been paying the CGPs/ Co-Generation Plants @275 P/U or at the approved rate taking into consideration of their CGP status. That does not mean that GRIDCO will not settle the bills of these generators. In fact, while settling the issues with some of the CGPs, it has been observed that GRIDCO has overpaid their bills which need to be adjusted in the subsequent bills of the CGPs.
193. The small hydro tariff order dtd.17.04.2011 of the Commission, the interim tariff @Rs.3.68 per kWh (inclusive of 4 Paise per kWh of margin of PTC) has been indicated on 100% net generation. While GRIDCO is settling the bills of the OPCL @ Rs.3.20 per kWh, it has approached the Commission with a Review Petition wherein the other issues like 12% free power to the State, tariff for the entire period of 13 years from the date of CoD etc. are to be decided. However, the price projection @Rs.3.68 per kWh towards the procurement of power from the SHEP has been taken in the ARR & BSP Application for FY 2012-13 in terms of the OERC Order dated 19.05.2011 in Case No.17 of 2011.

IPPs

194. The provisional tariff calculation submitted by SEL in respect of Fixed Charge (FC) and Variable Charge (VC) for (4x600) MW Project at Jharsuguda appears to be on the higher side to which GRIDCO is not agreeable due to the fact that the actual Project Cost is yet to be determined by the OERC and SEL is not following prudent Fuel Supply Management regarding linkage/e-auction and imported coals that are being used for power generation. During the meeting held on dtd. 04.02.12, GRIDCO conveyed its disagreement to M/s SEL. However, GRIDCO calculated the FC and VC for the 600MW Unit-2 dedicated to the State as Rs.1.12 and Rs.1.00 respectively considering the Project Cost as per the MoU and linkage coal cost as per tariff proposal submitted by SEL to OERC.
195. M/s SEL has been allotted with coal block as well as linkage coal in the state for the project. instead of exploring the advantage of the same and not following a prudent Fuel Supply management, arrangement for which the state consumers are unnecessarily burdened with high Variable Cost due to use of high cost e-auction imported coal as has been calculated and submitted by SEL to OERC.
196. GRIDCO will pay only the proportionate Fixed Charge (FC) for the Declared Capacity from the SEL Project and the variable charge and for additional 7% of power only at variable charge to be determined by OERC.
197. M/s SEL has been allotted with coal block in the state, linkage coal from MCL and the Project being a pit head station adopting advanced technology, the cost of supply should not be more than 200 P/Unit. Claiming more than 275 P/Unit means SEL is not operating the plant with prudent utility practices and not encouraging efficiency which they claim in their submission made to OERC.
198. The Commission may kindly scrutinize the Project Cost, Fuel Supply Management and power sold to outside the state by SEL with due diligence and accordingly issue tariff order for FY2012-13. Any lower estimate towards purchase of power by GRIDCO will be taken care of by OERC during public hearing.
199. M/s SEL Project cannot be compared with NTPC Projects. SEL Project is using advanced technology where as there is no such technology adopted by NTPC projects. However, NTPC/TTPS Project which is dedicated to the state using linkage coal can be compared for variable charge calculation.

Other issues related to power purchase cost

200. GRIDCO is contractually obliged to purchase power from the generators with whom it has long-term Power Purchase Agreements (PPAs). However, with the changes in circumstances i.e. opening of competitive bidding process of power purchase, GRIDCO will explore such opportunities.
201. GRIDCO will be guided by the advice of the Commission with regard to procurement of shortfall quantum from outside subject to such additional costs are recognized through tariff.
202. Any higher availability is always welcome provided the economics of purchase & sale of power proves to be remunerative and is within the approval of the Commission.

203. GRIDCO follows the “Merit Order” power procurement policy which ensures that the cheaper power is purchased first and the costlier power is bought gradually to keep pace with the demand. Needless to mention that GRIDCO follows the terms and conditions of the Power Purchase Agreements faithfully in letter and spirit.
204. GRIDCO is ensuring availability of maximum power by procuring at very high prices (Rs.8/- to Rs.16/-) in order to see that the State does not suffer from Power Regulation.

PGCIL Transmission Charges

205. GRIDCO has projected the charges as per the new hybrid methodology called the Point of Connection Charges (PoC) which is effectively higher as compared to the earlier transmission charges. GRIDCO has therefore appealed in the Hon’ble High Court of Odisha against implementation of the new Order. Other beneficiaries like Bihar have also objected for adoption of such a methodology. However, PGCIL moved to the Hon’ble Supreme Court of India against the beneficiaries and the Apex Court has now transferred all such cases to the Hon’ble Delhi High Court where such analogous cases are pending.
206. While GRIDCO does not object to the reduction of charges received on account of short term open access customers, if any. However, it is of the opinion that this should be adjusted based on actuals, but not on the basis of presumptions. Since the customers are always uncertain, any undue deduction based on assumptions will affect its BSP.

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

207. The actual expenses towards Employees Cost, A &G expenses and the R&M expenses for FY 2010-11, the estimated expenses for FY 2011-12 and that projected for FY 2012-13 are given below clearly justifies that GRIDCO’s expenses are very much within the prescribed limits and about 0.05 % of the projected ARR.

Table - 20
Overhead Expenses of GRIDCO

Particulars	(Rs. in Crore)		
	FY 2010-11 (Actual)	FY 2011-12 (Estimated)	FY 2012-13 (Projected)
Employees Cost	3.31	4.23	4.88
A&G Expenses	3.13	3.72	3.89
R&M Expenses	0.01	0.25	0.25

Interest on long term Liabilities

208. GRIDCO requests the the Commission to compute and allow interest cost as Rs.546.90 Crore on actual basis by considering the details as submitted in the filled-in TRF-3 format in the ARR & BSP Application for FY 2011-12.
209. Due to reform in the Power Sector, GRIDCO has been burdened with all the losses of the sector right from the OSEB days and no losses were transferred to the DISCOMs which started their operations with a clean slate. With passing of time, DISCOMs did not even pay the BSP dues in full that led to mounting of arrears on them whereas GRIDCO was /

is under obligation to ensure power supply to the DISCOMs to meet the state demand. Therefore, the loan burden of GRIDCO increased with consequent carrying costs.

Past Losses and Special Appropriation

210. GRIDCO has proposed Pass Through of Rs.634.96 Crore (later revised to Rs.886.89 Crore) consisting of past period power purchase liabilities and arrear payment to OPGC & NTPC-TTPS on account payment of additional Variable Charge/ Energy Charge / Addl. FPA amounting to Rs.172.08 Crore for the period from Jan'11 to Dec'11 to NTPC Stations and 79.86 Crore towards revision of Annual Fixed Cost of Teesta as per CERC Order dated 05.12.2011 and also revision of tax for FY 2007-08 & FY 2008-09. The past losses are due to the following reasons:
- i. Due to inadequate BSP (tariff) approved by OERC in all the years, GRIDCO has been selling power to the four DISCOMS at the approved BSP, which is much lower than the Power Purchase Cost.
 - ii. Due to purchase of high cost power during hydrology failure in FY 2008-09, 2009-10, 2010-11 and even during the current year which has added to the losses of GRIDCO.
 - iii. Due to fall in the share of low cost hydro power because of increase in the State's Power Demand on account of rapid industrialization and Rural Electrification Schemes of the Govt. of India and the State Govt.
 - iv. Due to shortage of coal, increase in the prices of coal and also use of costly imported coal for blending with indigenous coal for power generation (all these termed as the "Coal Crisis") have contributed to increase in the price of thermal power across the country which has contributed to increasing deficit of GRIDCO.
 - v. As per the approved tariff, a revenue gap is being left out by the Commission in each year in the ARR of GRIDCO with a direction to bridge the same out of trading revenue & UI charges etc. It has not been possible to bridge the revenue gap during FY2009-10, FY 2010-11 and also during the current year due to non-availability of surplus power.
 - vi. GRIDCO's deficit has ballooned because of the fact that the DISCOMs are not paying for the overdrawn power and the year-end charges.
211. The revenue gaps that have arisen due to the above reasons, have been financed through a series of loans from banks / FIs since there is no avenue for GRIDCO to replenish such gaps from any other source. As the losses have arisen out of inadequate tariff allowed by the Commission and the consequential cash deficit is met by availing loans from various banks, issuance of bonds etc., the same need to be serviced by way of recovery through BSP. Unless such costs are allowed through the BSP, GRIDCO is very likely to fall into the "Debt Trap" and its operations may come to a grinding halt.
212. The DISCOMs have failed to pay the dues to GRIDCO as per the OERC Orders from time to time. Therefore, there is no failure on the part of GRIDCO to collect its dues from DISCOMs as all the revenues from DISCOMS are deposited in the Escrow Account and Escrow relaxations are allowed complying with the orders of the Commission.
213. The deficit in power availability was not limited to the past period only, but is continuing now due to poor hydrology conditions and also due to increased State demand. Therefore, the shortfall in revenue for these difficult years should be recognized and allowed as pass through in subsequent years.

214. The Accounts of GRIDCO are up-to-date till FY 2010-11. Copy of the Audited Accounts for FY 2010-11 has already been submitted to the Commission. Needless to mention here that the ARR & BSP Application has been prepared and based upon, among other things, the figures of the finalized accounts.
215. GRIDCO can not fudge its Accounts as it is subjected to a three-tier Audit Process wherein the Internal Audit, Statutory Audit and the supplementary audit U/S 619(4) by the Comptroller & Accountant General (C&AG) take place before finalization. Therefore, there is no room for manipulation and fudging of the accounts.
216. Arrear / dues to be recovered from Govt. / Public Body, amounting to Rs.205.20 Crore, are carried over in the Accounts of GRIDCO although they are the consumers of DISCOMs pursuant to the Transfer Notification dated 25.11.1998. The DISCOMs have not yet collected the outstanding dues nor have provided the detailed status of these consumers and also the outstanding dues as per the Customers' ledger.
217. GRIDCO has applied for inclusion of "Repayment of Principal" amounting to Rs.1146.76 Crore and CPA Adjustment of Rs.433.90 Crore in the ARR & BSP totaling Rs.1580.66 Crore under the head "Special Appropriation" as it does not have any assets on which it could have been allowed depreciation to be utilized for repayment of principal component of the these loans which have fundamentally arisen because of outstanding power purchase liabilities. GRIDCO has to resort to borrowing because the DISCOMs have not been able pay the dues of GRIDCO in full and in time including the outstanding. In such a situation, unless loan is serviced alongwith the principal as per the installments falling due for payment, there is every likelihood of GRIDCO to default to the Banks/FIs in which case availing any further loan in future will virtually be impossible.
218. Although the DISCOMs are paying the current BSP dues in full, they are also allowed back funds by way of escrow relaxation to the extent of their Salary and a part of their R&M Charges. GRIDCO's revenue is not sufficient to meet the bills of generators and therefore, GRIDCO has been defaulting to OHPC in payment. The current bills of generators amount to about Rs.400 Crore whereas the revenue from DISCOMs is calculated to be about Rs.300 Crore, resulting in deficit of around Rs.100 Crore every month. Since GRIDCO is not able to pay the full bills of OHPC, it has been proposed to securitize arrears of OHPC amounting to Rs.250 Crore in the present ARR & BSP Application.

Export of Power & UI Income

219. Procurement from all the entitled sources including those from CGPs / Co-Generation Plants / IPPs etc. are being done in order to meet the power demand of the State. It has not been possible to fully cater to meet the demand of the State which has increased due to rapid industrialization and rural electrification. Therefore, the question of earning of any revenue through sale of surplus power does not arise at all as the State, as of date, is sourcing power from outside.

Overdrawal Charges

220. GRIDCO is obliged to purchase the contracted power from within the State as well as the Odisha share from the central pool. As per the merit order procurement policy, the

cheapest power is considered first for consumption inside the State. In a shortage scenario, any excess drawal over and above the approved drawal by any DISCOM will force GRIDCO to source it from costly CGP sources / the spot market at a very high cost. Therefore, any excess drawal shall have to be billed at the highest cost as proposed in the ARR Application in the monthly bills as well as in the bills for Year-End-Adjustments served to the Long Term Customers like the DISCOMs.

Escrow Mechanism

221. The monthly payables of GRIDCO exceed by around Rs.100 Crore than the receipts. Despite this, GRIDCO has been relaxing escrow to the DISCOMs towards the salary and R&M expenses as per the directions of the Commission. GRIDCO, however, does not agree to the proposal of DISCOMs for making the repayment of loan on account of CAPEX to be considered as 1st priority over the payment of BSP Bills as GRIDCO is equally cash strapped to settle the bills of the generators.

BSP

222. GRIDCO has signed Long Term PPAs /Agreements to procure power for the State. GRIDCO has no other avenue except the BSP to meet its cost. Earlier GRIDCO has been meeting the power requirement of the State by way of borrowing since the BSP approved by the Commission is not sufficient to meet the power purchase cost. In fact, the Commission approves the average BSP which is less than the approved power purchase rate/cost. Incidentally, it has been observed that the actual average power purchase rate is more than the approved BSP, as a result of which GRIDCO suffers from acute financial crisis. This is evident from the following:

Table - 21
Shortfall suffered by GRIDCO

Particulars	FY 2008-09		FY 2009-10		FY2010-11	
	OERC Approval	Actual	OERC Approval	Actual	OERC Approval	Actual
Revenue Gap / Deficit (Rs. Crore)	-410.04	-645.25	-882.85	-1673.71	-806.15	-1296.25
Average Power Purchase Cost (P/U) (A)	127.40	151.00	148.27	196.95	174.58	199.15
Approved Average BSP (P/U) (B)	122.15		122.20		170.25	
Shortfall suffered by GRIDCO (P/U) C=(A-B)	28.85		74.75		28.90	

223. The ARR for FY 2012-13 is estimated as Rs.9575.19 Crore (later revised to Rs. 9835.55 Crore due to some additional costs like payment of Additional Variable Charges/Fuel Price Adjustment Charges to the NTPC Stations, Pass Through of Revised Fixed Cost of Teesta as per CERC Order Dated 05.12.2011, Revised Tax Payment, Revision of Tariff / Base Energy Rate of Tala HEP) and accordingly, arrived at the proposed BSP of 400.10 P/U (later revised to 411 P/U) in order to recover the proposed ARR during the year. Unless the current average BSP of 231.65 P/U is revised upwards, GRIDCO will be left

with a deficit of Rs. 4367.92 Crore as with present BSP GRIDCO can recover an amount of Rs.5467.63 Crore from the proposed sale of 23931.85 MU of energy to the four DISCOMs.

224. The approved BSP during earlier years has not been sufficient for GRIDCO to recover its full approved costs as may be evident from the Table given below:

Table - 22
Actual and approved revenue gap of GRIDCO

Particulars (As per OERC Approval)	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Demand Charge (Rs./KVA/Month)	200	200	200	200	200	200	200	200
Energy Charge (P/U)								
WESCO	96.5	98.82	98.02	157.25	157.25	154	194	262
CESU	92	85	79	101.5	101.5	101.5	157	219
NESCO	86	86	81	125	125	130	195	262
SOUTHCO	84	75	70	70	70	70	90	135
ARR (Rs. Crore)	1632.08	1659.53	1774.44	2041.27	2152.23	2312.11	4242.44	5206.87
Sale to DISCOMs (MU)	12469.8	13188.1	14683	17021.9	17620	18921	20154	22477
Average BSP (P/U)	130.88	125.84	120.85	119.92	122.15	122.2	170.25	231.65
% Change	1.52%	-3.85%	-3.96%	-0.77%	1.85%	0.04%	39.32%	36.07%
Revenue Gap (+/-) As per OERC approval (Rs. Crore)	217.35	15.72	-504.52	-464.86	-410.05	-882.85	-806.15	-746.05
Actual Revenue Gap (+/-) (Rs. Crore)	466.29	-3.88	43.03	587.48	118.57	-1540.69	-1296.25	
Cumulative Gap (Rs. Crore)	-903.40	-907.28	-864.25	-276.77	-158.20	-1698.89	-2995.14	

225. The Commission have been approving lesser BSP as compared to the power purchase cost over the years and leaving deficit revenue gaps in the ARR of GRIDCO which are evident from the following:

Table – 23

Revenue gaps in the ARR of GRIDCO

Financial Year	ARR Appvd. by OERC (Rs. Crore)	Surplus (+) / Deficit (-) left in the ARR (Rs. Crore)	Appvd. Avg. BSP (P/U)	Appvd. Avg. Power Purchase Rate (P/U)
2008-09	2486.53	(-) 94.93	122.15	127.40
2009-10	3123.10	(-) 637.69	122.20	148.27
2010-11	4242.44	(-) 806.15	170.25	174.58
2011-12	5952.92	(-) 746.05	231.65	210.32

226. Although it seems that the approved BSP of 231.65 P/U is higher than the power purchase rate of 210.32 P/U during FY 2011-12 the fact is not so, as GRIDCO has not been allowed its full recovery of BSP bills from the DISCOMs which is capped at 97% in case of CESU, WESCO, NESCO & at 95% from SOUTHCO due to pending of tariff related cases before the Hon'ble High Court of Odisha, leading to increase in overall deficit in revenue realization of GRIDCO.
227. Further, in absence of availability of surplus power for UI & Trading due to less hydrology coupled with increased State demand during recent years and due to inadequate BSP as compared to the ARR / the power purchase rate approved by the OERC over the years, GRIDCO has not been able to replenish the gap left in the ARR & has been incurring losses by selling power to the four DISCOMS. The losses need to be serviced by way of recovery through BSP. Further, the interest burden alone has touched a level of around Rs.500 Crore per annum. Unless such costs are allowed through the BSP, GRIDCO is very likely to fall into the "Debt Trap" and its operations may come to a grinding halt.
228. Moreover, with regard to Rs.400 Cr. NTPC Bond and Year-end-Adjustment Bills, the claims of GRIDCO are genuine and proper which are as per the related Rules & Regulations and various contractual Agreements and obligations. GRIDCO is justified in including such amounts in the ARR for recovery through the BSP as it has no other source of income.

Fuel Price Adjustment (FPA) Charges

229. GRIDCO has already paid the additional Variable Charges (VC) / Energy Charges (EC) to the NTPC from April, 2011 to December, 2011 and accordingly requested the Commission to pass through the same in the ARR & BSP for FY 2012-13. As these expenses are incurred by GRIDCO towards power purchase for supply to the DISCOMs and GRIDCO is contractually obliged to pay for these dues (which have been already paid), these are ought to be passed through in the ARR & BSP.

Miscellaneous Issues

230. GRIDCO, through its representation in the Board of Directors, always advises the management of DISCOMs to improve the operational performance through various means. The CMD of GRIDCO guides the MDs / CEOs for enforcing various measures so

as to reduce the losses as per targets given by the Commission. However, since the majority in the Board hangs in favour of the DISCOMs, the advices of GRIDCO, is fully dependent on the discretion of the DISCOMs.

231. The Commission has dealt with the matter of performance of DISCOMs at Para-64 & 65 its Order dated 12.05.2011 in the Case No. 35 of 2005 by providing another opportunity to the DISCOMs to improve upon the performance which will be reviewed in every three months. Another Petition has been filed before the Hon'ble Odisha High Court by GRIDCO against the above DISCOMs for oppression & mismanagement of company under various provisions of the Companies Act, 1956.
232. GRIDCO is making all-out efforts to supply the power requirement of the State through OPTCL transmission system consisting of 100 Grid Substations of different voltage classes, transmission line about 11284 Ckt. Kms. The system availability of OPTCL system is more than 99% (determined on the basis of the CERC Guidelines) which indicates that the supply of quality power to DISCOMs at proper voltage from the Grid Sub-station end. GRIDCO is not responsible to ensure supply of quality power with proper voltage to consumers when power flows through the Distribution System.
233. As per the bi-lateral Agreement that existed between NALCO & GRIDCO, NALCO was required to pay three times of the rate at which it supplies surplus power to GRIDCO. In such a case, NALCO would now be required to pay Rs.8.25 (Rs.2.75X3) per Unit for emergency energy drawal. But the Commission was gracious enough to allow Rs.6.40 per Unit for NALCO instead of Rs.8.25 per Unit.
234. Further, it may be appreciated that GRIDCO has all along stood with NALCO to supply adequate back-up power as & when necessary even by procuring high cost power through U.I. (Unscheduled interchange) ranging from Rs.8.00 to Rs.16.00 per Unit when the State was reeling under acute power crisis. Otherwise, NALCO would have been compelled to stop its production with consequential loss of export commitment, profit & market share etc.
235. The CTU (Central Transmission Utility i.e. PGCIL) & the STU (State Transmission Utility i.e. OPTCL) which are responsible for evacuation of power from all the Generating Stations. GRIDCO will follow up with the STU / CTU for evacuation of power as per the need of the State.
236. As per the performance review of GRIDCO, the outstanding dues of DISCOMs payable to GRIDCO as on 30.09.2011 are as given in the table below. However, these figures are provisional and include outstandings on account of Power Purchase, Loan, NTPC Bonds, IBRD Loan dues etc. GRIDCO has been taking up continuously with the DISCOMs for the settlement of its dues.

Table - 24
Outstandings of DISCOMs payable to GRIDCO as on 30.09.2011
(Provisional)

(Rs. Cr.)

WESCO	NESCO	SOUTHCO	Sub-Total	CESU	Total
1028.63	1101.616	877.65	3007.90	2472.77	5480.67

237. The recasted PPA with OPGC has been filed before the Commission for approval and is expected to be finalized very soon.
238. M/s. Global Energy Pvt. Ltd. has been issued with Intra State Trading Licensee vide OERC Order dated 18.09.2010 to trade energy upto maximum 50 MU per month inside the State of Odisha. GRIDCO has appealed against this Order before the Hon'ble ATE which is pending for hearing/admission. Besides, another two Applicants namely M/s. Mittal Processor Pvt. Ltd. and M/s. Oricon Equipment Pvt. Ltd have filed Applications for grant of Intra-State Trading Licensee before the Commission which is now sub-judice.
239. Instead of carrying out Load Regulation by SLDC, Real Time Management of the available power is being resorted to in the State in a phased manner with minimal inconvenience to the public at large. Despite various difficulties, GRIDCO with all available resources at its end is ensuring maximum availability of power to the State and such genuine barest requirement projected by GRIDCO in its ARR for FY 2012-13 should be considered by the Commission taking a rational view to safeguard the interest of the consumers and at the same time ensuring commercial and financial viability of GRIDCO, Generators, Transmission Utilities, SLDC and Distribution Companies.

VIEWS OF GOVERNMENT OF ODISHA (Para 240 to 255)

Advance Subsidy by the State Government U/S 65 of the Act:

240. There has not been any need for subsidy from the Government as the Commission has been prudently fixing the tariff by balancing the interest of all classes of consumers. The same practice may be continued.

Cross Subsidy in Tariff

241. Cross subsidy should be calculated based on the average (overall) cost of supply as per the amended provision of Regulation 7(C)(iii) of the OERC (Terms and Condition of tariff Determination) Regulation 2004 and road map to reduce cross subsidy to $\pm 20\%$ by 2015-16 as recommended by FOR in their meeting held on 09.07.2011 to be adopted.

Keeping in abeyance the up valuation of assets, moratorium of debt services etc.

242. The suggestions of the Commission to keep the support of Govt. in the matter of keeping the effect of upvaluation of assets of GRIDCO/OPTCL and OHPC, allowing the moratorium on debt services to the State Govt. till the sector turns around and not allowing ROE to GRIDCO/OPTCL and OHPC till the sector becomes viable on cash basis has not been agreed to by the Govt. in Finance Deptt. However steps have been taken in regard to other recommendations of the Commission in their letter No.4440 dt.19.07.2010 and the proposal will be placed before the cabinet for approval after which required notification will be issued.

Purchase of Renewable Energy as per OERC Regulation:

243. The Govt. is seized of matter and the Govt. through the offices the EIC, OREDA and GRIDCO are doing the best possible to meet the RPO obligations as mandated under various Rules. Government is confident that the State would fulfil the RPO Obligation. It may be noted that GRIDCO, in its ARR & BSP Application for FY 2012-13, has

proposed to procure about 1134 MU of Renewable Energy from various sources which is likely to go up further with passage of time.

Mandatory Purchase from Renewable sources

244. State Govt. signed 36 MoUs with private developers for installation of around 484 MW Small Hydro Electric Projects. Out of these, 3 nos. of SHEP of capacity 57 MW (Middle Kolab, Lower Kolab and Samal Barrage) have been commissioned and supplying power to the State.

In the meantime the WR Deptt. have allowed taking up 10 Nos. of MOU signed for Small Hydro Electric Projects(SHEP) in river Kolab for a period of 20 years with a condition that these developers should not claim any loss in the event of construction of Middle Kolab Project. The process of according administrative approval for acquiring private land through IDCO for the 24MW lower Baitarani SHEP has been initiated to save time.

Action to mitigate the Power Deficit Situation in the State:

245. The State Govt. has taken decisive actions to tackle the power deficit being encountered in the State like:
- A number of IPPs are coming up in the State who will contribute to the State share of power either free of cost or at nominal rates which would go a long way in easing the deficit scenario. For example, GRIDCO has proposed to procure 3556.92 MU from the various IPPs including 40 MU from M/s. Arati Steels Ltd. and 42.69 MU from M/s. Maa Durga Thermal Power Co. Ltd. @175 P/U during FY 2012-13 as tabulated below:

**Table - 25
Power Procurement from IPPs & Cost during FY 2012-13**

Sl. No.	Name of IPPs	Energy drawal proposed for FY 2012-13 (MU)	Rate (P/U)	Cost (Rs. Cr.)
1	Arati Steels	40.00	175.00	7.00
2	Sterlite Energy (P) Ltd	2612.57	275.00	718.46
(A)	SubTotal	2652.57	273.49	725.46
3	M/s. Ind-Barath Energy (Utkal) Ltd.	71.15	209.00	14.87
4	M/s. GMR Kamalanga Energy Ltd.	790.52	309.00	244.27
5	M/s. Maa Durga Thermal Power Co. Ltd.	42.69	175.00	7.47
(B)	Sub Total	904.35	294.81	266.61
	Total (A+B)	3556.92	278.91	992.07

- Similarly, drawal from CGPs has been harnessed optimally to counter the deficit scenario. As a matter of fact, to alleviate the deficit during FY 2009-10 and FY 2011-12, Section-11 was invoked to draw surplus power from CGPs;

- Although Section-11 was not invoked during FY 2010-11 for maximization of drawal from CGPs., it was at the behest of the Government initiative that the CGPs continued to extend their supportive role in injecting maximum surplus power to the State Grid to ease the deficit and the Government as a quid-proquo measure, has already obtain the approval of Cabinet to consider such injection as CGPs' self consumption towards determination of their CGP Status so that they do not lose on account of the benefit of exemption from payment of Electricity Duty and at the same time being eligible to get the favourable OERC approved rate from GRIDCO.
- Besides, GRIDCO has done its best to maximize drawal through UI/PEX to bridge the shortage.

Injection of surplus power by the CGPs and determination of the CGP status due to such supply:

246. In order to ease the power supply situation that involves the matters of public interest so crucially, the Government, as of now, has been considerate towards the CGPs as these plants extended timely help by injecting their surplus power to the State Grid and accordingly, treat such injections as self-consumption by CGPs themselves so that they do not lose the CGP Status and the consequent benefit of Electricity Duty exemption and also the favourable OERC approved rates from GRIDCO.
247. Drawal from CGPs is dependent upon several factors like drawal of cheaper hydropower which otherwise is dependent upon vagaries of monsoon, availability of power from the State pool or the Central Pool, availability of coal & its prices, power from IPPs, the price trends and the general trend of overall energy demand etc., for which nothing can be foretold now. However, the Govt. is committed to ensure adequate power supply to the State consumers in promoting socio-economic development and facilitating industrialization of the State.
248. Considering the above situation and possible procurement, the Commission may decide the rate of procurement of power from the CGPs. The Govt. may further bank upon the CGPs for support in case the deficit situation continues to prevail during FY 2012-13.

Exploiting the Captive Sources

249. The Commission may take suitable action by providing competitive prices (tariff) for harnessing surplus power from CGPs within the stipulations of Act and policies. Keeping in view the support provided by the Govt. to the CPPs under the IPRs especially relating to the exemption from payment of electricity duty on their self consumption and also the interest of the DISCOMs.

However considering the exigencies of the situation the State Govt. may invoke the power available under section 11 (1) of the Electricity Act 2003 to provide adequate power supply to the general consumers of the State.

The companies at the time of establishing the CGP are being given Govt. support in a number of aspects under the various IPRs. The most important of such Govt. support is the exemption from payment of electricity duty on their captive consumption. Since the electricity duty which is being exempted is public revenue, the CGP price should not be so high as to overload the consumers in the shape of increase in BSP of GRIDCO. Hence

the Commission may fix a tariff for CGP power so that the GRIDCO is not unnecessarily burdened and the effect is not ultimately transferred to the consumers in the form of higher RST.

Provision & Funding of CAPEX:

250. The Government is committed to provide adequate funding support to the CAPEX Programme of the DISCOMs through the Nodal Agency, GRIDCO, as envisaged. In addition to the release of the first tranche amounting to Rs. 205 Crore, the Govt. in Energy Department has made a provision of Rs.162 Crore in FY 2011-12 and Rs.300 Crore in the Budget of FY 2012-13 towards the CAPEX Programme.

Capacity Addition

251. State Govt. have signed 29 MoUs with IPPs for setting up of Thermal Power Plants having capacity of 37440 MW out of which state share would be 6141 MW. One unit of 600 MW of Sterlite Energy has been commissioned during Aug, 2010 and other 3 units (600x3) are expected to be commissioned during the year 2011-12.

Similarly M/s Aarti Steel Ltd. has commissioned 50 MW in March, 2010. Besides GMR Kamalanga Energy Ltd.(1050 MW), Jindal India Thermal Power Ltd.(1200MW), Monnet Power Company Ltd.(1050MW), Ind Barath Energy (700MW) and Maa Durga Thermal Power Company(60 MW) have progressed well for commissioning their projects by end of 2012.

Revised Design Energy of the Hydro Station of OHPC

252. The Hydro Power Stations of OHPC have been supplying power to the State at cheaper rate. Most of the plants are old. The design energy envisaged during commissioning stage has come down in many cases. A detailed study has been done by the OHPC through experts. The Commission may examine this and take decision in the matter of revision of design energy of the Hydro stations.

Viability Gap funding for OPTCL

253. A budget provision of Rs.300 crore in a period of 5 years is being provided to OPTCL from 2011-12 in the form of equity funding for construction of grid substation and associate transmission lines in backward and inaccessible areas to improve the quality of supply of power.

Implementation of Intra-state Availability Based Tariff (ABT)

254. Implementation of Intra-state Availability Based Tariff (ABT) may avoid over drawl by DISCOMs and piling of outstanding dues of DISCOMs to GRIDCO but also helps for grid stability; however the general consumer should not suffer from power regulation or voltage fluctuation on account of implementation of ABT.

The Commission may take appropriate steps in regard to the implementation of ABT. Tariff should be done in phases in FY 2012-13 & 2013-14 keeping in view the demand and supply position in the State. The DISCOMs should not resort to overdraw without intimation to GRIDCO/SLDC. All the stake holders should abide by the direction of the Commission for implementation of the ABT Regulation.

With regard to charging of differential tariff, the Govt. is of the opinion that the Commission being the expert body, may arrive at a prudential decision on the matter.

Constitution of separate Company for SLDC.

255. As the State Govt. have not yet constituted/established a body like Company/ Authority/Corporation under the Electricity Act 2003 till today the transmission utility is operating the SLDC. However sufficient reinforcing has been made to ensure functional autonomy to SLDC.

OBSERVATIONS OF THE STATE ADVISORY COMMITTEE (SAC) (Para 256 to 277)

256. The State Advisory Committee (SAC) constituted under Section 87 of Electricity Act, 2003 met on 29th February, 2012 to debate and deliberate on the Annual Revenue Requirement and Tariff application for the FY 2012-13 of the utilities namely OHPC, GRIDCO, OPTCL, SLDC, CESU, NESCO, WESCO and SOUTHCO. The Committee inter alia discussed the following issues.

Impact of BSP on Retail Tariff for the year 2012-13

257. Retail tariff is dependent on the cost of hydro generation by OHPC, cost of thermal generation by OPGC, NTPC and other Central Generating Stations, cost of power procurement by GRIDCO from these stations including CGPs, cost of transmission by OPTCL, expenditure required to be incurred by SLDC and the cost of distribution of the distribution companies. Even if the cost of distribution by the distribution companies is kept unchanged, the Retail tariff is bound to increase if there is increase in the cost of generation, cost of power procurement and cost of transmission and SLDC charges.
258. OHPC has proposed 71.93 paise per unit for 2012-13 compared to 68.01 paise approved for 2011-12 (rise 5.76%). GRIDCO has proposed 410.98 paise for 2012-13 against 231.65 paise approved for 2011-12 (rise 77.41%). OPTCL has proposed 54.68 paise towards transmission charges for 2012-13 while 25.00 paise was approved for 2011-12, the proposed rise for 2012-13 being 18.70%. The four distribution companies taken together have proposed revenue requirement for 2012-13 at Rs.9777.25 crore against Rs.7056.53 crore approved for 2011-12 representing a rise of 38.53%. This works out tariff per unit on the average 619.96 paise per unit for 2012-13 compared to 404.31 paise per unit approved for 2011-12 representing a rise of 53.45%. The proposal of the DISCOMs is, however, based on the existing BST of GRIDCO and Transmission charges approved for the year 2011-12.

**Table – 26
Summary of ARR & Tariff Proposals for FY 2012-13**

Name of Licensee/Generator	OHPC*	GRIDCO**	OPTCL	SLDC	DISCOMs ***
Appr. ARR for 11-12 (Rs. Cr)	382.18 (387.97)	5952.92	572.50	8.8031	7056.53
Props. ARR for 12-13 (Rs. Cr)	404.22 (412.23)	9835.54	1330.46	10.474	9775.25

Name of Licensee/Generator	OHPC*	GRIDCO**	OPTCL	SLDC	DISCOMs***
% Rise Proposed	5.77 (6.25)	65.22	132.39	18.98	38.53
Approved Tariff (P/U) for 11-12	68.01 (65.96)	231.65	25.00	0.39	404.31
Proposed Tariff for 2012-13 (P/U)	71.93 (70.09)	410.98	54.68	0.43	619.96
% Rise Proposed	5.76 (6.26)	77.41	118.72	10.26	53.45

- (*) In case of OHPC the figures in the bracket includes the share of Machkund. The average proposed tariff of OHPC for FY 2012-13 is 70.09 p/u (including Machkund share of power), a 6.26% rise over the current year average tariff of 65.96 p/u.
- (**) The proposed ARR of GRIDCO is based on existing tariff of OHPC.
- (***) The proposed ARR of DISCOMs is based on existing BSP of 231.65 P/U, Transmission Tariff of 25 P/U & SLDC Charges of 0.18 P/U.
259. The Members of the SAC suggested that Commission should make a prudent check and approve the tariff keeping in view the power purchase cost by GRIDCO and overall interest of the consumers as has been done by the Commission in the previous years. For 2011-12 while the revenue requirement of DISCOMs was projected at Rs.7875.09 crore, the Commission allowed Rs.7056.55 crore after rigorous scrutiny and keeping in view the tariff impact on the consumers.
260. The major component of retail tariff is power purchase cost by the distribution companies payable to GRIDCO which in turn purchases power from different generating companies. Earlier about 57-60% of the requirement was being met from low cost hydro power and about 40% was being met from relatively costly thermal power. With rising in demand and decline in generation from hydro power because of scanty rainfall and silting of reservoir, now about 24% is being met from hydro power and 76% being met from relatively high cost thermal power. With rise in cost of coal, the power cost is also increasing from year to year. For the year 2010-11 Commission had approved purchase of thermal power from central sector at 243.54 paise/unit but because of rise in coal cost and other reasons GRIDCO has purchased at 309.19 paise/unit. For 2011-12 against rate of purchase of power from central thermal stations approved by the Commission for 2011-12 at 331.05 paise per unit GRIDCO has paid at an average rate of 357.89 paise per unit upto Sept. 2011. When there is rise in cost of purchase power, increase in tariff cannot be avoided if other factors remain the same. However, after taking into account the realistic debt servicing liabilities by GRIDCO for incurring loan to meet the power purchase cost and bare essential expenditure requirement of distribution companies for payment of salary, repair and maintenance, the Commission may fix the tariff keeping in view the overall interest of the consumers and the statutory provision under Sections 61, 62, 65 & 86 of the Electricity Act, 2003 read with para 8.3.2 of the Tariff Policy, 2006 and Para 5.5.2 of the National Electricity Policy, 2005.

261. It is seen that while Commission approved purchase of 20154.00 MU and 22477.00 MU by the DISCOMs from GRIDCO for 2010-11 and 2011-12, the DISCOMs have actually purchased 21132.02 MU and 16103.93 MU (upto December,2011) respectively. The higher quantum of power purchase by DISCOMs has necessitated GRIDCO to purchase additional quantum of power at a rate substantially higher than the rate approved by the Commission which may be seen from the following table.

Table – 27
Statement of Revenue Approved by OERC vis-à-vis Actual

Sl No.	Particulars	2010-11		2011-12			2012-13
		Approval	Actual (Prov.)	Proposal	Approval	Actual (upto Dec'11)	Proposal
1	Quantum of power purchase by GRIDCO(MU)	21003.75	22868.95	23689.07	23489.18	17575.26	24887.58
2	Power purchase cost of GRIDCO (Rs in crore)	3666.83	4371.54	5082.37	4940.30	3690.81	6780.91
3	Avg. power purchase cost of GRIDCO (P/U)	174.58	191.16	214.54	210.32	210.00	272.46
4	Quantum of power purchase by DISCOMs (MU)	20154.00	21132.02	22755.20	22477.00	16103.93	23931.85
	CESU	6420.00	7076.81	-	7791.00	5520.61	8532.67
	NESCO	5112.00	5076.94	-	5323.00	3785.78	5469.18
	WESCO	6244.00	6422.63	-	6630.00	4677.59	6500.00
	SOUTHCO	2368.00	2555.64	-	2733.00	2119.95	3430.00
5	Revenue Billed to DISCOMs (Rs. in crore)	3431.22	3597.28	6926.91	5206.80	3595.50	9866.62
6	Avg. BSP (P/U)	170.25	170.23	304.41	231.65	223.27	412.28
	CESU	157.00	-	-	219.00	-	-
	NESCO	195.00	-	-	262.00	-	-
	WESCO	194.00	-	-	262.00	-	-
	SOUTHCO	90.00	-	-	135.00	-	-
7	Transmission Cost (Rs. in crore)	480.93	519.72	1573.69	572.50	-	1330.46
8	Avg. Transmission Charge (P/U)	23.50	-	68.68	25.00	-	54.68
9	Total DISCOMs					Actual (upto Sept' 11)	
10	Quantum of power sold by DISCOMs (MU)	15676.55	13099.14	-	17597.37	6763.18	15767.41
11	Revenue Billed (Rs. in crore)	-	4912.58	-	-	2946.73	-
12	Avg. RST (P/U)	320.58	375.03	-	404.01	435.70	-
13	Distribution Loss (%)	22.22	38.34	32.95	21.71	38.28	34.69
14	Collection Efficiency (%)	98.00	93.06	98.34	99.00	91.89	97.53
15	AT & C Loss (%)	23.77	42.62	34.06	22.49	43.29	36.30

262. It has been suggested that if the DISCOMs exceed the quantum of power purchase approved by the Commission, the DISCOMs should pay the actual cost of excess

quantum of power purchase by GRIDCO and the excess expenditure incurred by the DISCOMs should not be recovered from the consumers. It was, however, clarified that the purchase of power over the quantum approved by the Commission may arise due various reasons like increase in load of the existing consumers, addition of new consumers and also due to higher loss. Since Commission is taking the truing up exercise based on the norms fixed in the Long Term Tariff Strategy (LTTS) and the business plan orders it is not necessary to put such a blanket conditions because the expenditure allowed to the DISCOMs on normative basis/efficiency parameters have to be factored into the tariff recoverable from the end users/consumers.

Requirement of Govt. Subsidy

263. At present, BPL families are paying at the rate of Re.1 per unit for consumption upto 30 units per month. While the tariff for irrigation pumping is 110 paise and allied agricultural activities at 120 paise, in case of domestic consumer consuming 50 units per month the existing tariff is 140 paise per unit. As per para 5.5.2 of the National Electricity Policy, a minimum level of support may be required to make the electricity affordable for consumers of very poor category. Consumers below poverty line who consume below a specified level, say 30 units per month, may receive special support in terms of tariff which are cross subsidized. Tariff for such designated group of consumers will be at least 50% of the average (overall) cost of supply and the balance 50% of the average cost of supply is to be paid by the State Govt. as subsidy as per Section 65 of the Electricity Act, 2003. It was suggested that as per Section 61(g), the Commission is required to fix the tariff which would reflect the cost of supply of electricity and accordingly after prudent check, the Commission should determine tariff in accordance with provision of Section 61, 62, 65 and 86 of the Electricity Act, 2003, para 8.5.2 of the Tariff Policy, 2006 and para 5.5.2 of National Electricity Policy based on the determination cost of supply. If the State Govt. wants any category/categories of consumers are to be supplied electricity at a concessional rate, the State Govt. should provide the subsidy as per the Section 65 of the Electricity Act, 2003. Hence, the Commission without being influenced by the State Govt. should fix the tariff in accordance with the statutory provisions of Sections 61, 62, 65 & 86 of the Electricity Act, 2003 read with para 8.3.2 of the Tariff Policy, 2006 and para 5.5.2 of the National Electricity Policy, 2005 and it is up to the State Govt. to decide for providing subsidy to different categories of consumers and in that case the subsidy is to be paid by the State Govt. in advance as stipulated under Section 65 of the Act.
264. The State Govt. should realize that power is the main infrastructure for developing the overall economy of the state sector and to strengthen reform. If the Govt. wants to subsidize tariff they may do so instead of getting it done through OERC. The fairness of the Commission must be felt by the consumers, the members emphasized.

Reduction in Distribution and AT&C Loss:

265. Some of the SAC members pointed out that if the present level of distribution loss and AT&C loss is reduced there may not be any rise in tariff; rather the existing level of tariff may be reduced. The distribution loss or AT&C loss shown by the distribution companies or the distribution loss projected by the distribution companies for fixation of tariff are not being accepted by the Commission. It was clarified that the Commission all along has

been adopting the normative level of distribution loss, collection efficiency and AT&C loss already approved for the respective years of the Business Plan. For example, while the actual distribution loss of the four DISCOMs taken together for 2009-10 was 37.24% and they had projected distribution loss of 35.60% for 2010-11 in their ARR filing, the Commission while fixing the tariff for 2010-11 approved distribution loss of 22.22% but not the projected distribution loss of 35.60%. Similarly, though the actual distribution loss for 2010-11 of the four DISCOMs taken together was at 38.34% and DISCOMs had projected 32.95% for 2011-12 in their tariff filing, the Commission while determining tariff for 2011-12 have allowed distribution loss at 21.71% as approved in the Business Plan for the said year. If the distribution loss projected by the distribution companies at 32.95% would have been accepted by the Commission the tariff for 2011-12 would have been 477.47 paise per unit against 404.01 paise approved for 2011-12. On the other hand taking into account the actual distribution loss of 2010-11 at 38.34% and by reducing it 3% if the tariff would have been calculated for 2011-12 then tariff for the said year would have been 492.77 against 404.01 paise approved for 2011-12. Hence, the inefficiency of the distribution companies to achieve the distribution loss target fixed by the Commission is not being factored into the tariff fixation and the Commission has been fixing the tariff on normative basis keeping in view the efficiency parameters. As such even though four DISCOMs taken together have projected the distribution loss at 37.24% for 2012-13 against 38.28% for 2011-12 upto September, 2011, the Commission while fixing tariff would take into consideration the normative distribution loss at 21.20% approved in the Business Plan for the year 2012-13, it was clarified by the Commission.

Issues Relating to DISCOMs:

266. For scrutiny of the authenticity of data, information furnished by the distribution companies they should furnish their balance sheet along with ARR application. The ARR projected by the distribution companies should not be accepted by the Commission without proper scrutiny.
267. The arrear electricity dues pertaining to the defaulting consumers which have really become unrecoverable should be taken into account while allowing bad debt for determining the ARR. It was clarified that the Commission is not accepting the bad debts submitted by the distribution companies. The difference between 100% and 99% of the amount billed is being assumed by the Commission as bad debt i.e. 1% reflecting non-collection of current electricity bills is being taken as bad debts, not the unrecoverable amount projected by the distribution companies which is much more than the amount allowed by the Commission on a normative basis. For example, while the distribution companies projected bad and doubtful debts of Rs.102.56 crore for 2011-12 the Commission approved only Rs.43.77 crore. For 2012-13 the DISCOMs have projected Rs.147.62 crore towards bad and doubtful debts, but only Rs. 52.79 Cr. is allowed.
268. While fixing the tariff the Commission should take into account the recommendation of Kanungo Committee and the State Govt. being 49% shareholder should play its role effectively by providing both administrative and budgetary support as has been done in AP, West Bengal, Maharashtra, etc.
269. At present GRIDCO under the instruction of the State Govt. is instructing the distribution companies to effect power cut in different areas without prior notice to the consumers.

This is in violation of Section 23 of the Electricity Act, 2003 which empowers the Commission to regulate the power supply. If any distribution company is resorting to unauthorized power cut MD/CEO of the concerned distribution companies should be personally held liable.

270. Some of the Members of SAC expressed their concern and anxiety that if the distribution companies were to collect the arrears which have piled upto Rs.3763.70 crore as on 31.3.2011 and Rs.4002.59 crore as on 30.9.2011, there may not be any occasion for any rise in tariff. It was clarified that the tariff for a financial year is fixed taking into account the revenue requirement for the said year after prudent check. If the revenue assessed to meet that revenue requirement is not collected during that year, the distribution companies fail to meet the required revenue expenditure on different items like repair and maintenance, interest payment, Return on Equity, depreciation etc. If any amount is collected out of the arrears of the previous years this should be used by the distribution companies to meet the past deferred liabilities and this would not affect the tariff for the ensuing financial year. However, the Commission reemphasized the need for taking effective steps for not only collecting the outstanding arrears but also ensuring 100% collection of the current bills for which there is urgent need to ensure 100% billing of the energy consumed and issuance of 100% bills to the consumers. There should not be any addition to the existing level of arrears in a financial year. The members of the SAC were informed that the Commission is contemplating to involve the Members of the SAC, other consumer organizations etc., in settling the arrear electricity bills in a transparent manner by organizing CONSUMER MELA in different areas of the distribution companies.
271. The Distribution companies are showing expenditure in installation of new transformer, up-gradation of transformers, installation AB cables, replacement of defective meters etc. They must come out with the result of such investment.
272. The distribution companies are not adhering to the directions of the Commission issued from time to time for compliance in different matters. Though the Commission has disposed off a number of cases under Section 142 of the Electricity Act, 2003, no penalty have been imposed on the distribution licensees for their acts of omission, commission or failure. Strict penal action should be taken against the licensees for their failure to comply with the direction of the Commission.
273. Most of the times there is no response from the toll free numbers given by the DISCOMs. The distribution companies have submitted that they have already installed toll free number to receive complaint from consumers and follow up the same for smooth redressal.. It was clarified that all the four DISCOMs must ensure that the toll free number should be accessible for 7X24 hours and it is totally unacceptable that on holiday or odd hours there would be no response from the toll free number.
274. The monitoring committee appointed by the Commission from among the Members of the SAC through their field visit and intensive monitoring have shown the result in the Balikuda section of CESU, Kamarda section of NESCO, Nuagaon section of WESCO and Kanishi section of SOUTHCO. Such pilot project should be replicated in other areas. Members of the Monitoring Committee constituted by the Commission should be

assigned with the job and all logistic support should be provided to them for their effective monitoring and supervision.

275. The implementation of CAPEX programme should also be monitored and overseen by the Committee of the SAC appointed by the Commission.
276. There should be political, administrative and police support for disconnection of power to the defaulting consumers and for taking deterrent action against those involved in theft of electricity. The Consumers must pay tariff for quality power supply by the distribution company.
277. The Commission reiterated that it would be just and fair to all stake holders of the power sector to see that while the interest of the consumers is protected by providing services at reasonable and affordable rates, at the same time the viability and sustainability of the power utilities also need to be ensured because a financially handicapped utility cannot be expected to provide quality supply of power.

COMMISSION'S OBSERVATIONS & ANALYSIS OF GRIDCO's PROPOSAL (Para 278 to 549)

Legal Status of GRIDCO Ltd. and Nature of its Application

278. 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 Odisha 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 Odisha. 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.
279. The legal existence of GRIDCO as a trader owes its origin to its incorporation as a Government Company under the Companies Act, 1956, with effect from 20.04.1995, with the main objective of engaging in the business of procurement, transmission and bulk supply of electric energy. With the enactment of the Reform Act 1995, effective from 01.04.1996, GRIDCO was given some additional powers and functions under S.13 of the said Act. Thereafter under OER(Transfer of Assets, Liabilities, Proceedings and Personnel of GRIDCO to Distribution Companies) Rules,1998 framed under S.23(5) of the Reforms Act,1995, the distribution function of GRIDCO was hived off and vested in four distribution Companies namely WESCO, NESCO, SOUTHCO and CESCO (now CESU) registered under the Companies Act, 1956. GRIDCO thereafter functioned as a Govt. Company engaged in bulk supply and transmission under a licence issued by the Commission under S.15 (1) of the Reforms Act, with effect from 01.04.1997. Neither the word "supply" nor the word "bulk supply" had been defined in the Reforms Act, but the

aforesaid Bulk Supply and Transmission Licence, 1997 issued to GRIDCO, indicated that, apart from transmission business, its business consisted of procuring electricity in bulk and supplying the same to the four DISCOMs and not to consumers. For the bulk supply business GRIDCO entered in to several long term PPAs with generators and long-term Bulk Supply Agreements (BSAs) with the four DISCOMs. After coming into force of the Act on 26.05.2003 this supply business of GRIDCO fitted in with the definition of “trading” introduced for the first time in S.2(71) of the Act, with the a restriction in its aforesaid licence that it could not sell directly to consumers. In 2005, by virtue of Transfer Scheme OER (Transfer of Transmission Related Activities) Scheme, 2005 under S.131 (4) of the Act, the transmission business was hived off from GRIDCO because of 3rd Proviso to S.41 & 1st Proviso to S.39 of the Act. Thus what remained with GRIDCO was the business of trading in electricity. Ordinarily, GRIDCO would have been required to take a trading licence under S.14(c) of the Act, but because of the 5th Proviso to S. 14 of the Act, GRIDCO shall be deemed to be a licensee under the said Act. The Proviso runs thus:-

Provided also that the Government company or the company referred to in sub-section (2) of Section 131 of this Act and the company or companies created in pursuance of the Acts specified in the Schedule, shall be deemed to be a licensee under this Act.

GRIDCO shall be deemed to be a licensee under the above Proviso because it is a Government company and also because it is a company created in pursuance of the Reforms Act, which has been specified in the Scheduled to the Act and not because a company referred to in sub-section (2) of the S. 131 of the Act. The 5th Proviso to S. 14 of the Act speaks of deemed “licensee under the Act” it does not speak of intra-State or inter-State licensee in particular. Therefore, GRIDCO as a deemed licensee would be deemed to be a licensee under this Commission as well as CERC. This justifies GRIDCO’s purchase from Kahalgaon, Farakka, Chukha, Teesta and Tala power plants for delivery within Odisha. Though under the 5th Proviso to Sec.14 of the Act, GRIDCO has become a deemed licensee, yet 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 Odisha. This satisfies the definition of trading in Sec. 2(71) of Act. Therefore GRIDCO’s position under the 5th Proviso to Sec. 14 of the Act is doubtlessly that of a deemed trading licensee, carrying on trading of electricity in bulk.

280. 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 pleaded out that the single buyer model is against the spirit of the Act and adversely affects the consumers. In this price-fixing proceeding, the Commission has to set price in the situation as it stands now and therefore it refrains from addressing this larger issue. The Commission however, holds that even after coming into force of the Act, the position of the GRIDCO as a (deemed)

trading licensee continues to hold good, even though its trading operations on the basis of PPA's and BSA's may arguably be questioned as anti-competitive and violative of S.60 of the Act and Ss.3(1) and 4(1) of the Competition Act, 2002 warranting a reference under S.21(1) of the said Act. As to this latter question, the Commission expresses no opinion, inasmuch as the question has not been specifically raised and the Commission has not had the advantage of hearing arguments on that score. The Commission proceeds on the footing that GRIDCO has indubitably a legally valid existence as a trader and the present factum is that the DISCOMs procure their power solely from GRIDCO.

281. There is a significant distinction between activities and operations of GRIDCO as a trader, and the legal existence of GRIDCO. The Commission rejects the contention that GRIDCO can have no legal existence as a trader because S.131(2) & (4) of the Act speak of transferees being generating company, transmission licensee or distribution licensee and not trading licensee. S. 131 deals only with transfer and vesting of properties, interests, rights and liabilities in the process of reorganization of electricity industry. The provision does not deal with creation of entities like traders, which is provided for elsewhere in the Act, namely S.14, S.2(71), S.79 (1)(e) and S.86 (1)(d) of the Act. It is true that under S.131 properties, interests, rights and liabilities cannot be transferred to trading licensees but it is incorrect to suggest that Govt. company existing at the time of commencement of the Act, whose business activity satisfies definition of trading in S.2(71) cannot be a deemed licensee under the 5th Proviso to S.14 of the Act.
282. However, the single buyer model has put GRIDCO in a dominant position, indeed a monopolistic position, so far as supply to the DISCOMs of Odisha is concerned. By virtue of S.60 of the Act, GRIDCO is under an obligation to refrain from abusing its dominant position. In particular, GRIDCO has to refrain from exploiting scarcity situation in the State arising from inability of generating companies to supply adequate power to GRIDCO under their PPAs. Where, in such a situation, GRIDCO chooses to purchase power de hors the PPAs from open market, it has to do so prudently and following merit order dispatch principle. Also in taking such decision GRIDCO has to weigh the possibility of over-burdening the tariff payable by the consumers of Odisha as against reasonable power regulation. It would be proper for GRIDCO to present facts before the Commission and seek Commission's directions under S.23 of the Act. In this connection Commission's Order dated 14.01.2010 in Case No.01/2010 regarding Power Regulation Protocol may be referred to. If it is established that GRIDCO has not taken such steps and arbitrarily purchased power at high cost, the Commission would be within its rights not to allow such costs to be passed on to consumers.
283. 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 (for which the Commission has no power).
284. 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 Odisha. 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 for selling power to any other entity except the four DISCOMs.

285. GRIDCO has filed application under S.86 (1)(b) of the Act and prayed for fixation of its selling price qua the present distribution companies by virtue of the subsisting Bulk Supply Agreement and has filed its ARR along with the application. The DISCOMs in their tariff application vide Case Nos.93,94,95 & 96 of 2011 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 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 analyzed and not in the context of fixing a general tariff for GRIDCO.
286. In the process of re-organization of electricity industry, GRIDCO as a trading licensee could not be a transferee of the liabilities either of erstwhile OSEB or of erstwhile GRIDCO functioning as a distribution or transmission company vide S.131 of the Act. Therefore, it has been contended that GRIDCO as deemed trading licensee now is not entitled to consideration of past losses, securitization of arrear dues and other related costs indicated in its application. On deeper analysis it transpires that these past losses, securitization of liabilities and other related costs etc. are a mirror reflection or virtual image of what in reality are the liabilities of DISCOM's and are actually being serviced by DISCOMs. The past losses, securitization of liabilities, etc are actually being serviced by DISCOMs. These liabilities can be classified as follows:
- 1) Liabilities already incurred by GRIDCO as on 01.04.1999 when its distribution business was transferred to DISCOMs. These are arrears on account of power purchase payable to generators and incurred by GRIDCO in the course of its distribution business. These liabilities could not be transferred to DISCOMs as they refused to accept them and hence have remained with GRIDCO even after it became a deemed trading licensee subsequently.

- 2) Securitised liabilities of DISCOMs after 01.04.1999 up to date. These are NTPC-III and NTPC-IV Bonds, OHPC Bonds, NALCO-I, NALCO-II Bonds, Power Bonds I & II, OPGC- I Bonds. These bonds are being serviced by DISCOMs through GRIDCO on the basis of back- to-back arrangement, though there has been default on the part of the DISCOMs because of their inability to generate sufficient reserve.
 - 3) Other liabilities of DISCOMs being liquidated through GRIDCO on the basis of back-to-back arrangement. These are loans from financial institutions, like REC, PFC & World Bank etc.
287. When distribution function of GRIDCO was transferred to four DISCOMs under OER (Transfer of Assets, Liabilities, Proceedings and Personnel of GRIDCO to Distribution Companies) Rules,1998, vide Clause3(3), the distribution-related liabilities except accumulated losses incurred by GRIDCO in its erstwhile distribution business up to that date (classified under (1) above) was also transferred to the said DISCOMs. From that date onwards further distribution related liabilities were / are being incurred directly by the DISCOMs. Thereafter, when transmission function of GRIDCO was transferred to OPTCL under OER (Transfer of Transmission Related Activities) Scheme, 2005, GRIDCO became a pure trader under the Act and naturally the distribution liabilities could not be, nor was, incurred by GRIDCO. But GRIDCO as a trader has been the sole bulk supplier of DISCOMs on account of existing BSAs. As such, GRIDCO has had the vital responsibility of maintaining steady supply of power to DISCOMs without any interruption. For discharging this responsibility and for ensuring smooth trading activity qua DISCOMs, GRIDCO has entered into arrangement with DISCOMs to serve as conduit for liquidation of liabilities already incurred up to the date of separation (i.e. 31.03.1999) and also being incurred thereafter by DISCOMs through back-to-back payment arrangements (classification (2) and (3) above) such as escrow mechanism under bulk supply agreement, loan agreement and subsidiary project implementation agreement, so that the revenues realized by DISCOMs are paid to respective creditors such as generators and financial institutions (REC, PFC, World Bank etc.) through GRIDCO. Though the creditors are nominally creditors of GRIDCO, the liabilities are serviced by DISCOMs and security for such liabilities are also held by DISCOMs and in that sense the creditors are in truth and substance creditors of DISCOMs, especially because GRIDCO has no asset of its own. GRIDCO, in the interests of its smooth trading activity, is merely providing a mechanism for assured payment to DISCOMs' creditors. The Commission has recognized this arrangement as a legally valid activity of GRIDCO, ancillary to its trading activity, and has allowed the liabilities to be reflected in the application of GRIDCO, so that sums payable to the creditors can be smoothly recovered from DISCOMs, through escrow mechanism.

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 its letter No.DIR(T)-389/11/2132 dated 18.11.2011 had directed OPGC to file its ARR and tariff application in respect of Ib Thermal Power Station for the FY 2012-13 in terms of Section-62 read with Section-86 of the Electricity Act 2003

in the specified tariff filing formats by 30.11.2011. OPGC vide its letter No.2679 dated 30.11.2011 intimated the Commission that they reiterate their position communicated on the subject in previous years. OPGC vide its earlier letter no.319 dated 02.02.2009 on determination of tariff for the FY 2009-10, had indicated that OPGC is a generating company in terms of Section-2 (28) of the Act and selling power not to a licensee but to a trader -GRIDCO, hence it is not required to submit the Annual Revenue Requirement before this Commission. Further, GRIDCO being the bulk supplier/trader is all along procuring the power from OPGC and submitting the Annual Revenue Requirement which have been considered and approved by the Commission.

290. In the aforesaid letter dated 30.11.2011, OPGC has also indicated that in view of the above, OPGC may not be required to file any further information for determination of generation tariff of Ib Thermal Power Station for the FY 2012-13. In this letter, it has been further indicated that since the procurement power from OPGC by GRIDCO is governed by the PPA, the required information are already available with GRIDCO and Commission has noted the same while considering the ARR of GRIDCO.
291. OPGC did not file its ARR and Tariff application with the Commission for the year 2012-13 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 Odisha 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 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. The matter rest on the bilateral contract between OPGC and GRIDCO including provisions relating to parameters of tariff calculation.
292. In order to resolve the dispute between GRIDCO and OPGC regarding tariff for power purchase from Unit I&II, the Govt. of Odisha 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 Odisha 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 Odisha 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.*
293. OPGC vide its letter No.319 dated 02.02.2009 has informed the Commission that after due consultation with Govt. of Odisha 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.
294. The Commission has to determine the power procurement price of DISCOMs, which in the situation of a Single-Buyer-Model prevailing in Odisha 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 Odisha, GRIDCO is functioning as a mere conduit, and the only conduit, for supply of power from OPGC to DISCOMs of Odisha. 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 Odisha 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. Even after Commission's aforesaid Letter dated 27.11.2008, the OPGC has not been filing tariff applications under S.64(1) of the Electricity Act,2003 albeit at the risk of no revision of tariff. In this piquant situation, the Commission has been invoking its power under S.86 (1) (b) of the Electricity Act,2003 and setting the procurement price of GRIDCO for purchasing power from OPGC. While thus setting the procurement price under S.86(1)(b), the Commission has thought it prudent to provisionally apply the parameters of tariff-setting as per S.61(a) and (b) of the Electricity act,2003 and proceed on the information made available to it by the other contracting party namely GRIDCO for calculating its fixed cost, variable charges and Year-end Charges. The Commission is further of the view that nothing in the said PPA repugnant to S.61 and S.62 and other provisions of the Electricity Act,2003 can be given effect to. Even though OPGC has

taken the stand before the Supreme Court of India that its PPA dated 13.08.1996 with GRIDCO subsists, the Commission is of the view that the parameters of tariff shall, after coming in to force of the Electricity Act,2003, be governed by S.61 of the said Act, in particular by the principles and methodologies specified by the CERC (Vide S.61(a)).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.

295. The Commission makes it clear that it is not entitled to set tariff *suo motu* in the absence of a tariff application from the generating Company (i.e.OPGC) under S.64 (1). If there is no application the existing tariff continues in force. OPGC has to make a tariff application under S.64(1) of the Electricity Act,2003 , supported by ARR and expected annual revenue, if it wants any change in the existing tariff for sale of electricity to consumers. Incidentally the tariff determined by the Commission could also become procurement price of GRIDCO. At present, for want of tariff filings by OPGC, the Commission is merely determining the price at which GRIDCO is to purchase power from OPGC. Since no tariff is being set for for OPGC for sale of power to consumers, the procurement price of GRIDCO could be much lower than what would have been the tariff of OPGC for sales to the consumers.
296. On detailed scrutiny and examination of the Annual Revenue Requirement and Bulk Supply Price Application of GRIDCO for FY 2012-13, 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 2012-13

297. The Commission, for determination and approval of the ARR of GRIDCO for FY 2012-13 continues to follow the same principles as in the previous year. For the purpose of tariff setting for FY 2012-13, the Commission has followed the principles laid down in its terms and conditions for determination of tariff and continues to be guided by the provisions of the Tariff Policy as well as other statutory notifications and directives, while giving due considerations to the complexities of the Odisha Power Sector.
298. 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 truing-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 2012-13 using the following principles.
299. The cost of power purchase for GRIDCO, which constitutes more than 80% of the total cost structure of GRIDCO has been considered on a merit-order basis, with state hydro generation and state thermal generation being computed based on the generation plan submitted by the OHPC and OPGC to GRIDCO, and the cost being considered as per norms of the PPA/CERC guidelines. Availability from the Eastern Region CGSs has been considered as per the allocation of shares in these stations and the applicable CERC tariff. The drawal from IPPs, CGPs and Cogeneration Plants have been considered as proposed by the GRIDCO.

300. All the liabilities of the DISCOMs payable to GRIDCO are in a back-to-back arrangement with various lenders and financial institutions 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 during the previous years. The servicing cost (corresponding interest charges on these liabilities) forms a part of the BSP and is being paid by GRIDCO
301. Following the separation of the transmission business and given to OPTCL along with related assets, liabilities and personnel w.e.f 01.04.2005, GRIDCO does not possess any assets on its books. It continues however to carry the burden of past liabilities, accumulated 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, recognized 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 our earlier order, to avoid a huge additional burden being passed on to the retail consumers, the Commission has provided for the servicing a substantial part of these liabilities from the non-core activities of GRIDCO, namely earnings from export of power which now stand highly limited, and from earnings from un-scheduled interchanges.
302. The Commission has scrutinised in detail the energy requirement proposed by the DISCOMs for FY 2012-13. Based on the energy availability, the Commission is of the view that after drawal of power from all state-owned generating stations both Thermal and Hydro, the state's share from central generating stations, and drawal from IPPs, Renewable and captive sources, some surplus energy will be available after meeting the State demand for FY 2012-13, which has been calculated on normative loss basis. The quantum of surplus energy may be reduced in case of poor hydrology and/or projected drawal from CGPs/Co-generation plants or central sector power not materializing as estimated on normative basis.
303. 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 recent months the earnings of GRIDCO on account of trading and UI charges have reduced to almost nothing due to drastic reduction of hydro generation on account of monsoon failure, as well as less generation in thermal generating stations due to non-availability of adequate fuel. Further due to increased State Demand for Power, the situation of surplus power scenario in the supply front has practically vanished. In fact, GRIDCO has overdrawn 304.81 MU under UI, 23.49 MU through power banking mechanism upto September, 2011 during the current FY 2011-12 to meet the power requirement of the State.
304. The Commission in its Order dtd. 14.03.2008 in Case No. 72/2007 has formulated a policy on harnessing of surplus power from Captive Generating Plants. Further, the Commission in its order dt.28.02.2009 on CGP pricing had stated that in order to encourage the CGPs/Co-generating plants to fully utilize their bottled up capacity and to enable GRIDCO to access power from different sources including CGPs/Co-generating plants to meet the demands in the State and make available a good quantum of power for trading and revenue earned from trading to be used to bridge the gap left in the ARR, the price of surplus power from CGP/Co-generation plant has been determined so that GRIDCO is not required to purchase power at a higher cost through UI or trading route.

305. Further, the Commission in its Order dtd. 23.11.2010 in Case No. 117 & 118 of 2010, has fixed the price of procurement of power from CGPs and Co-generate Plants for meeting the demand of the state which was made applicable w.e.f. 10.11.2010 and would continue till 31.03.2011. However, since no further order has been issued by the Commission in this regard, the above price fixed for procurement of surplus power from CGPs and Co-generation Plants vide OERC Order dtd. 23.11.2010 in Case No. 117 & 118 of 2010 will continue until further order issued by the Commission. The Commission has not yet disposed of the Case No.99, 100 & 101 of 2011 filed by M/s. JSL, CCPPO and M/s.Nava Bharat Ventures Ltd. respectively for increasing the rate of purchase of surplus power by GRIDCO from CGPs and Co-generating plants. However, in case of any revision of price for sale of surplus power from CGPs and Co-generation plants by the Commission for FY 2012-13, the revised price shall be applicable for procurement of surplus power by GRIDCO from CGPs and Co-generation plants and any deviations/adjustment in revenue due to such price revision will be considered while taking up the approval of ARR of GRIDCO for FY 2013-14.

Quantum of Power Purchase

306. GRIDCO as a deemed trading 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.
307. The estimate for purchase of power for a financial year is worked out in accordance with the following principles laid down in Regulation 5(4) of OERC (Terms and Conditions of Determination of Tariff) Regulations, 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.*
308. GRIDCO Ltd. as well as DISCOMs have submitted the ARR for FY 2012-13 to the Commission for approval. The figures filed by GRIDCO and DISCOMs in their ARR for 2012-13 on quantum of energy drawl by DISCOMs from GRIDCO are examined and estimated depending upon the quantum of drawl of power based on present trend and

additional load growth during FY 2012-13 for EHT and HT industries. The load growth for LT consumer may be met through loss reduction by distribution companies.

309. The Distribution Companies have furnished projections for FY 2012-13 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.
310. The quantum of power to be purchased for the FY 2012-13 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. 93/2011 (CESU), 94/2011 (NESCO), 95/2011 (WESCO) and 96/2011 (SOUTHCO) by following the guidelines of the Regulations quoted above. The Commission approves the quantum of power to be purchased for the FY 2012-13 relating to CESU, NESCO, WESCO and SOUTHCO as 8236 MU, 5306 MU, 6496 MU and 3047 MU respectively totaling to 23085 MU.
311. The Commission has approved 3.80% towards transmission loss in the OPTCL system for the FY 2012-13. The details of transmission loss have been furnished in the tariff order for OPTCL for the FY 2012-13 in Case no 92 of 2011.
312. GRIDCO shall purchase power from the generators and at inter-state points from outside sources while for transmission charges, OPTCL will bill its 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 2012-13 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.
313. After having determined the quantum of power purchase for 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 100 MU for 2012-13 after considering the submission of NALCO and actual drawal of CGPs during the past years. The detailed requirement of power purchase for use within the State is projected in the table below:

Table – 28

Purchase of Power by GRIDCO for State Use for FY 2012-13

(Figures in MU)

Name of the DISCOMs	Commission's Approval for 2011-12	GRIDCO's Proposal in ARR 2012-13	DISCOM's Proposal for 2012-13	Commission's Approval for 2012-13
CESU	7791.00	8532.67	8500.30	8236.00
NESCO	5323.00	5469.18	5710.65	5306.00

Name of the DISCOMs	Commission's Approval for 2011-12	GRIDCO's Proposal in ARR 2012-13	DISCOM's Proposal for 2012-13	Commission's Approval for 2012-13
WESCO	6630.00	6500.00	6500.00	6496.00
SOUTHCO	2733.00	3430.00	3430.00	3047.00
TOTAL DISCOMs	22477.00	23931.85	24141.15	23085.00
CGP	100.00	10.00		100.00
TOTAL SALE	22577.00	23941.85		23185.00
Transmission loss at EHT in MU (DISCOMs Purchase only)	912.18 (@ 3.90% Transmission loss)	945.73 (@ 3.80% Transmission loss)		911.88 (@ 3.80% Transmission loss)
Total Purchase	23489.18	24887.58		24096.88

314. The Commission is approving the energy drawal for FY 2012-13 after considering the projections made by DISCOMs and hence there should not normally be any variations from the approved drawal. The licensees should limit their drawal to the approved quantum of energy by reducing Distribution Loss. The licensees must also try to stick to the annual energy drawal as approved by the Commission.

Simultaneous Maximum Demand (SMD) in MVA

315. GRIDCO in its filing submitted that the average Simultaneous Maximum Demand (SMD) of DISCOMs during first six months for FY 2011-12 is 3304.85 MVA per month. However, the DISCOMs in the presentation on 31.10.2011 made before the Commission indicated much higher SMDs at 4102.251 MVA for FY 2012-13. Similarly, on November, 25 & 26, 2011, the DISCOMs intimated GRIDCO the revised combined SMDs of 4008 MVA per month which is shown in the table below.

Table - 29

Projection SMDs made by DISCOMs for FY 2012-13

DISCOMs.	SMD (MVA per Month) (As per the DISCOMs' Presentation made on 31.10.2011 before OERC)	SMD (MVA per Month) (As per the DISCOMs' Intimation on 25th/26 th Nov' 2011 to GRIDCO)
CESU	1385.16	1400
NESCO	950.00	948
WESCO	1217.091	1100
SOUTHCO	550.00	560
TOTAL	4102.251	4008

316. GRIDCO, however, did not consider both the above projections of SMDs made by the DISCOMs which are considered to be extremely high in comparison with the actual occurring in the distribution system, hence, not realistic. In order to make the projection of SMD more pragmatic, GRIDCO considered the highest SMD of each DISCOM occurring during the first six months for FY 2011-12 as the SMD of each DISCOM for FY 2012-13. Based upon said premise, the total SMDs for FY 2012-13 is projected as **3412.43 MVA** which is shown in the Table below:

Table – 30

Projection of SMD of DISCOMs for FY 2012-13 (MVA per Month)

DISCOMs	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Average SMD of each DISCOMs during 1st Six months of FY 2011-12	Projection of SMDs for FY 2012-13 considering the highest SMD of each DISCOM during first six months
CESU	1193.22	1152.43	1174.1	1147.51	1135.74	1161.43	1160.74	1193.22
NESCO	833.76	809.20	818.45	761.45	801.16	784.81	801.47	833.76
WESCO	887.40	904.61	943.79	938.59	892.60	915.71	913.78	943.79
SOUTHCO	439.88	425.06	426.93	439.54	441.65	400.11	428.86	441.65
TOTAL	3354.26	3291.3	3363.27	3287.09	3271.15	3262.06	3304.86	3412.43

317. Bulk Supply Price (BSP) 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 in their ARR filing have projected a higher maximum demand keeping in view the up-coming load growth on account of rural electrification under RGGVY and BGJY. The monthly demand of DISCOMs for the period from April'11 to Jan'12 is furnished in a table as under:

Table - 31

Demand in MVA during 2011-12 (upto Jan' 12)

	CESU	NESCO	WESCO	SOUTHCO	ALL ODISHA
Apr-11	1,193.22	833.76	887.40	439.88	3,354.26
May-11	1,152.43	809.20	904.61	425.06	3,291.30
Jun-11	1,174.10	818.45	943.79	426.93	3,363.27
Jul-11	1,147.51	761.45	938.59	439.54	3,287.09
Aug-11	1,135.74	801.16	892.60	441.65	3,271.15
Sep-11	1,161.43	784.81	915.71	400.11	3,262.06
Oct-11	1,167.90	753.17	902.31	443.49	3,266.87
Nov-11	1,098.17	737.80	901.09	446.20	3,183.25
Dec-11	903.14	722.00	901.85	429.39	2,956.38
Jan-12	942.93	756.18	817.46	444.73	2,961.30
AVERAGE (4/11 to 1/12)	1,107.66	777.80	900.54	433.70	3,219.69

318. It is observed from the above table that the summation of billing demand has fluctuated from months to months and has reached a peak of 3363.27 MVA during June, 2011. The billing demand recorded in January, 2012 (2961.30 MVA) is even lower than that of June, 2011 (3363.27 MVA) by about 401.97 MVA. However, the sum of the maximum demand of each DISCOMs comes to 3416.97 (CESU-1193.22 + NESCO-833.76 + WESCO-943.79 + SOUTHCO-446.20) during the period April, 2011 to January, 2012.
319. The Commission analysed the demand pattern of DISCOMs during the current FY 2011-12 and observed that the SMD of the DISCOMs has been reduced from what was approved by the Commission for the FY 2011-12. After recasting the estimated requirement of power, it is observed that due to rural electrification and load growth, there may be an additional requirement of about 1167.36 MU by the DISCOMs during FY 2012-13. Thus, for meeting this additional demand of 1167.36 MU, the additional MVA requirement has been worked out to 148.07 MVA. So, the Commission has estimated the Demand of the DISCOMs for FY 2012-13 taking the maximum demand during April, 2011 to January, 2012 plus the demand on account of additional load growth during FY 2012-13. But in case of WESCO, it is observed that the total demand comes to 967.43 MVA which is much lower than the approval of 2011-12. So, the Commission has taken the demand as projected by the WESCO which is lower than the OERC approval for 2011-12. Accordingly, the total estimated demand approved by the Commission works out to 3697 MVA for DISCOMs, the details of which are given in the table below.

Table - 32
Demand in MVA 2012-13

DISCOMs	OERC Approval for 2011-12	Proposal by DISCOMs for 2012-13	Proposal by GRIDCO for 2012-13	Actual avg SMD during 4/11 to 01/12	Maximum SMD during 4/11 to 01/12	Additional Load growth as estimated for 2012-13 (MU)	Additional load growth converted to MVA at 0.9 power factor	Maximum SMD during 4/11 to 01/12 + Additional load growth	OERC Approval for 2012-13
CESU	1237.00	1400.74	1193.22	1107.66	1193.22	613.25	77.78	1271.00	1271.00
NESCO	846.00	920.00	833.76	777.80	833.76	114.55	14.53	848.29	851.00
WESCO	1133.00	1100.00	943.79	900.54	943.79	186.35	23.64	967.43	1100.00
SOUTHCO	432.00	565.00	441.65	433.70	446.29	228.21	28.95	475.14	475.00
ALL ODISHA	3648.00	3985.74	3412.43	3219.69	3416.97	1142.36	144.90	3561.86	3697.00

Note : For estimation purpose Diversity Factor is taken as unity.

320. Taking into account the SMD in different months of 2011-12 and the additional load projected by the DISCOMs the SMD for 2012-13 has been fixed at 3697 MVA, within which the DISCOMs should operate subject to an overdrawal of maximum 10% in a month. There is penal provision for drawal exceeding the prescribed demand limit (refer Para 535).

Purchase of Power from Different Generating Stations

State Hydro

321. GRIDCO's proposal and Commission's approval for 2012-13 for various stations of OHPC are given in the table below, the details of which have been dealt in Case No.90/2011 for determination of tariff and revenue requirement of OHPC, where the Commission has considered the existing design energy of OHPC power stations for the purpose.

Table – 33

Drawal from State Hydro Stations (in MU)

Source of Generation	FY 2011-12	FY 2012-13	
	Commission's Approval	GRIDCO's Proposal	Commission's Approval
OHPC (Old Stations)	3676.86	3667.19	3676.86
Upper Indravati	1942.38	1944.36	1942.38
Machkund	262.50	262.50	262.50
Total Hydro	5881.74	5874.05	5881.74

322. The design energy of Machkund Power Station is 525 MU. Considering Odisha share of 50% towards energy drawal from this station, the Commission approves an availability of 262.50 MU from Machkund. Commission desires that the State can draw at least 50% of Machkund generation every day. GRIDCO/OPTCL and SOUTHCO should co-ordinate to maximise the drawal from Machkund.

Talcher Thermal Power Station (TTPS)

323. 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. The net energy availability to GRIDCO has been projected at 2957.32 MU at a normative plant availability of 82.0% with adjustment of Auxiliary Consumption of 10.50 % as per CERC norms applicable from April, 2009 onwards. The NTPC will get full capacity charge at a normative plant availability of 82.0% and any deviation from normative plant availability will attract lower capacity charge or incentive payment. Taking into account the Plant availability of 82.0% & Auxiliary Consumption of 10.50%, the Commission approves the net drawl of 2957.32 MU from TTPS for the FY 2012-13.

IB Thermal Power Station of OPGC

324. Odisha Power Generation Corporation (OPGC) owns IB Thermal Power Station with an installed capacity of 2x210 MW. OPGC, in its generation plan for FY 2012-13 submitted to GRIDCO, had projected a net Energy sent out of 2864.824 MU based on target generation of 3194.239 MU & PLF of 86.82%. However, GRIDCO in its ARR submission has projected net drawal of 2864.824 MU from OPGC taking into account the PLF of 86.82% with Auxiliary Consumption of 10.31%. As per the power purchase agreement signed between GRIDCO and OPGC the auxiliary consumption is to be taken as 9.50%. Hence, the Commission approves a net drawl of 2890.82 MU from OPGC for FY 2012-13 considering 86.82 % PLF as proposed by GRIDCO and 9.50% auxiliary consumption as per PPA. (For 2011-12 approved drawal was also 2892.49 MU).

Captive Generating Plants (CGPs) and Captive Co-generation Plants

325. GRIDCO in its filing has submitted that GRIDCO is committed towards harnessing surplus power from various CGPs and Co-Generation Plants of the State considering maximum 49% of the generation capacity at 85 % PLF. In view of the quantum of power procured from 29 Nos. of CGPs and Co-generation Plants during the first six months of FY 2011-12, most of the CGPs and Co-generation Plants are supplying power either below 5 MW or within 50 MW. Based on the average monthly injection by each of the CGPs and Co-generation Plants during the first six months of FY 2011-12, GRIDCO proposes to draw 1743.24 MU from different CGPs and Co-generation Plants (1121.28 MU from CGPs and 621.96 MU from Co-generation Plants). For FY 2011-12 approval drawl from CGP was 603.79 MU and from Co-generation plants it was 512.46 MU.
326. Further, in complying to a query, GRIDCO has submitted that as intimated by M/s Jindal Steel & Power (JSPL), it may export around 100 MW of additional power to the State from its 2nd unit (135 MW) which is going to be commissioned by the end of the current Financial Year. However, GRIDCO may procure 578.16 MU of power from M/s JSPL at an average of 66 MW (49% of 135 MW) round the clock (RTC) for the year 2012-13 and the procurement cost of such power shall be Rs.178.27 Crore. (at the average rate of Rs. 3.08 per Kwh). Further, in an additional submission GRIDCO has submitted that M/s Bhusans Power & Steel Ltd. have applied for grant of Co-generation status of its CGP. Based on the capacity of its WHR as well as AFBC boilers, it is expected that the said CGP would supply 43.80 MU of Co-generation power out of its total export of 122.64 MU. Considering the above submission, the details of projected drawl from CGPs and Co-generation Plants for FY 2012-13 are indicated in the Table below.

Table – 34

Projected drawl from CGPs and Co-generation Plants for FY 2012-13

Sl. No.	CGPs/ Co-generation Plants	Installed Capacity (MW)	Energy drawl during 2010-11 (MU)	Energy drawl during the 1st six months of 2011-12 (MU)	Energy drawl proposed for FY 2012-13 (MU)	Energy proposed form Co-Genration FY 2012-13 (MU)
1	NALCO, Angul	1200.00	6.890	15.660	30.660	
2	IMFA, Choudwar	108.00	47.563	1.684	4.380	
3	HINDALCO	367.50	56.224	10.149	21.900	
4	RSP	220.00	20.285	9.461	17.520	
5	NBVL, Meramundali	95.00	176.714	59.428	118.260	
6	VAL, Jharsuguda	1215.00	690.362	85.257	170.820	
7	Jindal Stainless Ltd., Duburi	250.00	906.282	76.175	153.300	
8	Narbheram Power & Steel	8.00	11.073	4.030	8.760	
9	Bhusan Power & Steel Jharsuguda	376.00	112.803	60.479	122.640	43.800

Sl. No.	CGPs/ Co-generation Plants	Installed Capacity (MW)	Energy drawl during 2010-11 (MU)	Energy drawl during the 1st six months of 2011-12 (MU)	Energy drawl proposed for FY 2012-13 (MU)	Energy proposed form Co-Generation FY 2012-13 (MU)
10	Rathi Steel & Power	20.00	13.854	6.455	13.140	4.380
11	Maheswari Ispat	24.00	10.530	4.093	8.760	
12	Odisha Sponge Iron	36.00	40.380	4.823	8.760	8.760
13	NINL	62.50	73.951	50.492	100.740	100.740
14	Arati Steel	40.00	85.372	46.351	91.980	26.280
15	Tata Sponge	26.00	126.224	49.435	100.740	100.740
16	SMC Power	33.00	50.155	6.029	13.140	4.380
17	Pattnaik Steel & Alloys	15.00	34.290	8.339	17.520	8.760
18	IFFCO	110.00	38.874	16.016	30.660	17.520
19	VISA Steel	50.00	24.572	101.160	201.480	201.480
20	VAL, Lanjigarh	90.00	20.239	13.155	26.280	26.280
21	Shyam Metalics & Energy	30.00	118.280	24.998	48.180	26.280
22	Bhusan Steel	110.00	129.627	44.428	87.600	65.700
23	Sree Mahavir Ferro Alloys.	13.60	18.346	3.444	8.760	4.380
24	Action Ispat	37.00	24.563	8.350	17.520	8.760
25	Aryan Ispat	18.00	62.056	24.223	48.180	17.520
26	Maithan Ispat	30.00		5.882	13.140	
27	Jindal Steel & Power	135.00		113.936	805.92	
28	MSP Metalic	25.00		12.237	26.280	
29	Jain Steel & Power	8.00		2.069	4.380	
	TOTAL	4752.60	2,899.509	868.238	2321.400	665.760

327. The Commission scrutinized the proposal and the additional submissions of GRIDCO. It is observed that GRIDCO proposes to procure a total quantum of 2321.40 MU from CGPs & Co-generation Plants, out of which 665.76 MU is Co-generation power and balance 1655.64 MU is CGP power. Based on the requirement of the state to be met by the DISCOMs, the Commission approves the drawal of 696.10 MU from CGPs and the total projected availability of 665.76 MU from Co-generation Plants (in view of the Co-generation purchase obligation) to be purchased by GRIDCO for the FY 2012-13 for the purpose of state consumption. However, the present approval shall not be a limiting factor for drawl of power from CGPs and Cogeneration plants by GRIDCO to meet the demand of the State. GRIDCO may purchase excess power from CGPs and Co-generation plants over the approved quantum for state consumption in case of excess state demand or shortfall in drawal from other sources than the approved quantum.

However, GRIDCO shall inform the Commission in case of such excess drawl of power for the state use. Further, the Commission also directs GRIDCO to purchase the available surplus power from CGPs and Co-generation plants and also negotiate with other CGPs & Co-generation Plants for harnessing more power for trading purposes after meeting the state demand subject to commercial viability.

Renewable Energy

Small Hydro Sources:

328. GRIDCO has submitted to procure around 300 MU of renewable power from small hydro sources that would be available to GRIDCO during FY 2012-13 as given in the table below.

Table – 35

Proposed Drawal from Small Hydro Sources for FY 2012-13

Sl. No.	Name of the SHEPs	Installed Capacity (MW)	Energy drawal during the 1st six months of 2011-12 (MU)	Proposed Energy procurement for FY 2012-13 (MU)
1.	Meenaskhi Small Hydro	37	119.419	150.00
2.	SAMAL Small Hydro	20	40.64944	150.00
	Total		160.06844	300.00

329. The generation from these SHEPs depends on the flow from the Kolab and Rengali respectively. Considering quantum of power procured during FY 2010-11 & the first 6 months of FY 2011-12, GRIDCO expects to draw around 300 MU from these two stations during FY 2012-13.
330. The Commission allows GRIDCO to purchase 300 MU of renewable energy from these two SHEPs for consumption in the state during FY 2012-13.

Bio-mass Energy:

331. GRIDCO proposes to procure renewable energy of 122 MU during FY 2012-13 from Bio-mass Plant developed by M/s. Shalivahan Green Energy Limited at Nimidha in the District of Dhenkanal & the Commission approves the same.

Solar Energy:

332. GRIDCO proposes to procure 13 MU from 8 Nos. of Solar PV Projects of 1 MW capacities each under Rooftop PV and Small Solar Power Generation Programme (RPSSGP) in the State. Besides, GRIDCO has signed Power Sale Agreement (PSA) with NTPC Vidyut Vyapar Nigam Limited (NVTNL) to procure solar power bundled with thermal power from the unallocated quota of the Upcoming Coal Based NTPC Stations through 'New Grid connected Solar Power Project' Scheme under Phase-1 of Jawaharlal Nehru National Solar Mission (JNNSM). 20 MW Solar capacities have been allocated to GRIDCO in the said scheme which is expected to be available during January 2012 and GRIDCO has expected to procure 16 MU under the scheme during FY 2012-13. Further,

GRIDCO has also executed PPA with NTPC on 26.04.2011 to procure 10 MW of power from 2 Nos. of Solar PV projects of 5 MW each (Dadri Solar PV project of U.P. & Faridabad Solar PV Project of Haryana) which is expected to be available during FY 2012-13 and GRIDCO has expected to procure 17 MU from the sources during FY 2012-13. Thus, GRIDCO proposes to procure a total of 46 MU of Solar power during FY 2012-13 as given in the Table below:

Table - 36
Proposed Drawal of Solar Power During FY 2012-13

Sl. No.	Solar RE Sources	Energy Proposed for FY 2012-13 (MU)
1	8 Nos. of Solar PV projects of 1 MW each under RPSSGP	13
2	20 MW from NVVN through 'New Projects' scheme under JNNSM	33
	Total	46

333. The Commission approves the above proposal of GRIDCO to procure 46 MU from Solar RE Sources. Thus, the total procurement of Renewable Energy during FY 2012-13 from Solar, Bio-mass & Small Hydro Sources comes to 468 MU. The procurement of energy from Co-generation Plants has been approved at 621.96 MU. Hence, the total estimated power procurement for the purpose of RPO comes to 1089.96 MU as indicated in the Table below:

Table - 37
Proposed Drawal from Renewable Energy Sources during FY 2012-13

Sl. No.	RE Sources	Energy Proposed for Procurement during FY 2012-13 (MU)	% of the total estimated drawl of DISCOMs (%)
A.	Non-Solar RE		
(i)	Small Hydro Electric Project (SHEP)	300.00	1.30
(ii)	Energy from Bio-mass	122.00	0.53
	Sub-Total (Non-Solar)	422.00	1.83
B.	Solar RE	46.00	0.2
C.	Total (Solar & Non-Solar)	468.00	2.03
D.	Energy from Co-Generation Plants	665.76	2.88
E.	Total Energy for RPO	1133.76	4.91

(*) Total purchase of DISCOMs has been estimated to 23085 MU.

Renewable Purchase Obligation (RPO)

334. In its application GRIDCO has submitted that they are willing to purchase the required quantum of Renewable Energy consisting of Solar & Non-Solar Energy in order to fulfill

its Renewable Energy Purchase Obligation (RPO), but availability of such energy has become a constraint. As a result, GRIDCO in order to fulfill the RPO mandate may be required to purchase Renewable Energy Certificates (REC), if any which would entail a much higher cost to GRIDCO as per the prevailing market price. GRIDCO prays the Commission to allow such additional costs in the ARR & BSP for FY2012-13.

335. In its additional submission on 16.01.2012, while complying with the queries of the Commission, GRIDCO has submitted that in order to fulfill its obligations of RPO under the Co-generation head, they are in conversation with the CGPs having provisions for Co-generation facilities to harness procurement of co-generation power. However, even with the best efforts, GRIDCO is likely to fall short of by around 366 MU (988 MU-622 MU) in meeting the procurement target under the Co-generation power. Notwithstanding all the difficulties to meet the RPO, GRIDCO will strive its best to meet the shortfall arising out of less procurement from Co-generation sources through Non-Solar Sources. After adjusting the surplus RPO of 72 MU (Estimated Availability of 422 MU of Non-Solar Energy – the required Non-Solar RPO of 350 MU during FY 2012-13), GRIDCO, in effect, will be left with shortfall by around 294 MU of energy from Co-Generation sources. GRIDCO, therefore, prays the Commission to carry forward the same for adjustment in the next FY i.e. 2013-14 as it can ill afford to any additional cost on this account.
336. GRIDCO has further submitted that there will be a short fall of 12 MU of Solar Power to the SPO during current FY 2011-12. GRIDCO, therefore, prays the Commission to allow them for carrying over this shortfall of 12 MU to the next Financial Year i.e. FY 2012-13. Considering the estimated availability of 46 MU of Solar Power during FY 2012-13 against the requirement of 38 MU of SPO, GRIDCO, in effect, will have a shortfall of only 4 MU towards the SPO during FY 2012-13. Thus, taking into account the Forbearance Price of Solar RECs as Rs.13.40/kWh during FY 2012-13, GRIDCO will have to bear Rs.5.36 Crore (Rs.13.40x4MU) for the purchase of the Solar RECs towards the estimated shortfall quantum of 4 MU of Solar RPO. Further, in case of less power availability from the above mentioned solar sources; the cost to GRIDCO may further go up proportionately beyond the above estimation of Rs.5.36 Crore. GRIDCO, therefore, submits before the Commission to kindly factor this additional cost of Rs.5.36 Crore in the power procurement cost as in the ARR of GRIDCO for the FY 2012-13.
337. The above submission of GRIDCO has been scrutinized and it is observed that as per the Renewable and Co-generation Purchase Obligation and its Compliance Regulations, 2010, the RPO of solar, non-solar and co-generation for the FY 2012-13 are 0.15%, 1.40% and 3.95% respectively in terms of energy consumption in the State. The total power procurement of all the four DISCOMs for state consumption has been estimated to 23085 MU and the quantum of power purchase by GRIDCO from solar, non-solar and co-generation has been estimated to 46 MU, 422 MU and 665.76 MU respectively for the year 2012-13 based on the availability. Hence the RPO percentage estimated to 0.2%, 1.83% and 2.88% in respect of purchase of power by GRIDCO from solar, non-solar and co-generation respectively for the FY 2012-13. From this estimation, it is observed that GRIDCO may fulfill the RPO in case of solar and non-solar power purchase and falls short by 1.07% (3.95 – 2.88) in case of power purchase from renewable sources. When translate to energy this shortfall of 1.07% comes to 246.10 MU (911.86 – 665.76).

Therefore, the Commission directs GRIDCO to explore the possibilities of purchasing more surplus power from the CGPs having co-generation facilities by discussing with them. Regarding carry over of the quantum of excess solar power purchase during FY 2012-13 towards adjustment of shortfall during FY 2011-12 and the excess co-gen power purchase during FY 2011-12 towards adjustment of shortfall during FY 2012-13 shall be dealt separately after end of the year.

Independent Power Producers (IPPs)

GRIDCO in its ARR application for FY 2012-13 has proposed to procure 2652.57 MU from the existing IPPs like M/s Sterilite Energy Limited (SEL) and M/s Ararti Steels Limited (ASL). Out of 2400 MW (4x600 MW) of M/s. SEL, three generating Units with capacity of 1800 MW have been commissioned so far. The State has got a share of 25% at total cost and 7% at variable cost from M/s. SEL. Until all the Units are commissioned, the Unit No.2 is dedicated to the State & connected to the STU i.e. the OPTCL System. However, due to constraint in the Transmission Line, GRIDCO is not able to draw more than 350 MW. Hence, GRIDCO proposes to procure about 2612.57 MU of energy (equivalent to about to GRIDCO's Share of 350 MW of power at 85% PLF from M/s. Sterilite Energy Ltd. during FY 2012-13. With regard to M/s. ASL, only one Unit of 50 MW capacity has been commissioned. No Coal Block / Linkage has been allocated to ASL, resulting in high cost of generation for which GRIDCO is not inclined to procure the entire generation from ASL. However, GRIDCO proposes procure its share of 12% from ASL at variable cost which is taken as 40 MU for FY 2012-13 at a PLF of 85% and Auxiliary Consumption of 10%. Thus, GRIDCO proposes to procure 2652.57 MU of energy from the existing IPPs of M/s. Sterilite Energy Ltd. and M/s. Arati Steels Ltd.

338. GRIDCO has further stated that it has executed Power Purchase Agreements (PPAs) with some other IPPs, which are in various stages of implementation. Out of which the following IPPs are expected to be commissioned during 2012-13.

Table – 38

Status of IPPs to be commissioned during FY 2012-13

Sl. No.	NAME OF IPPS	Unit No.	LOCATION	Capacity (MW)	Odisha Share (MW)	Expected date of Commissioning
1.	M/s. Maa Durga Thermal Power Company Ltd., Cuttack	1	Tangi, Cuttack	30	3.6	Mar.-Apr.' 2012
		2	- do -	30	3.6	May 2012
2.	M/s. Ind-Barath Energy (Utkal) Ltd.	1	Sahajbahal, Jharsuguda	350	42	Jul.-2012
		2	- do -	350	42	Sept.-2012
3.	M/s. GMR Kamalanga Energy Ltd., Bengaluru	1	Kamalanga, Dhenkanal	350	87.5	May-2012
		2	-do-	350	87.5	June-2012

GRIDCO expects to draw a total of 904.35 MU from the above up-coming IPPs during FY 2012-13 i.e., M/s. Ind-Barath Energy (Utkal) Ltd. (71.15 MU), M/s. GMR Kamalanga Energy Ltd. (790.52 MU) and M/s. Maa Durga Thermal Power Company Ltd. (42.69 MU), considering 85% PLF and Auxiliary consumption of 9%. Based on above projections, GRIDCO hopes to procure a total of 3556.92 MU from the IPPs during FY 2012-13 as given below:

Table - 39
Procurement from during FY 2012-13

Sl. No.	Name of IPP	Energy drawal proposed for FY 2012-13 (MU)	Remarks
(i)	M/s. Arati Steels Ltd. & M/s. Sterilite Energy Ltd.	2652.57	State Share of 12% power at variable cost from M/s. Arati Steel Ltd. & State Share of 25% from M/s. Sterilite Energy Ltd. at the Generation Cost considering the evacuation constraint.
(ii)	M/s. Ind-Barath Energy (Utkal) Ltd., M/s. GMR Kamalanga Energy Ltd. & M/s. MTPCL	904.35	Supply of power considered from: <ul style="list-style-type: none"> ➤ M/s. IBEUL: 1st Unit- For 3 months, ➤ M/s. GKEL: 1st Unit- For 9months, 2nd Unit- For 5 months & 3rd Unit-For 2months ➤ M/s. MTPCL: 1st Unit-For 12months. 2nd Unit-For 9months
Total		3556.92	

339. The Commission considered the above proposal of GRIDCO and approves 3556.92 MU to be purchased by GRIDCO from aforesaid IPPs during the FY 2012-13 for consumption in the state. However, depending on the requirement, cost and availability, GRIDCO may purchase more quantity of energy from these IPPs. In fact, GRIDCO may draw the full quantum of power from the IPPs as State's share as per the PPA and may like to have export earning after meeting the State's requirement.

Power Purchase from Central Generating Stations

Transmission Loss:

340. The constituents of power utilities of the Eastern Region share the losses occurring in the Central Transmission System. In the ARR filling for 2012-13, GRIDCO has projected different percentage of transmission loss in the Eastern Region Power System in respect of power procurement from different Central Generating Stations. The loss percentage considered by GRIDCO while calculating the net drawal by GRIDCO from different Central Generating stations is given in the table below.

Table - 40

Percentage of System Loss proposed by GRIDCO for Central Stations

Name of power stations	Loss percentage (%)
TSTPS Stage-I	2.29
TSTPS Stage-II	3.515
FSTPS	2.575
KHSTPS Stage-I	2.58
KHSTPS Stage-II	2.575
Chhuka	2.29
Tala	2.29
Teesta-V	2.58

341. In replying to the queries of the Commission on estimation of different transmission loss towards drawal of power from different generating stations and actual loss in the Central Transmission System for the year 2010-11 and 2011-12, GRIDCO submitted that the Central Electricity Regulatory Commission (CERC) vide its Order dated 29.06.11 has notified the Point of Connection (PoC) Charges and Transmission Losses in accordance with the CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010. In the aforesaid Notification, Hon'ble CERC mentioned the applicable PoC loss slabs for different injection and withdrawal zones. As per the Clause-7 of the said Order, the average slabs for each Region shall be applied based on last week's actual Regional Losses. The actual Regional Losses for various Generating Zones as well as Injection Zones are calculated by NLDC / ERLDC and displayed in the respective websites. Based on the weekly data, the Average Total Loss in percentages (%) has been calculated by summing the Generation Zone Losses and GRIDCO's withdrawal loss%. The Weighted Average Loss in % has been calculated considering the allocation of GRIDCO from various Generating Stations with respect to the Installed Capacity. As desired, GRIDCO submitted that the weighted average of actual loss in the Central Transmission System for the year 2010-11 is computed to the tune of 2.37% and that of for the period from 01.07.2011 to 04.12.2011 during the year 2011-12 is 2.60%.
342. Further, in another reply to the queries of the Commission GRIDCO has submitted that they have filed an appeal before the Hon'ble High Court of Odisha against the CERC Regulations dated 15.06.2010 related to the introduction of PoC system of levy of transmission charge by PGCIL. Further, they have indicated that PGCIL has filed a transfer petition before the Hon'ble Supreme Court of India praying therein for transfer of all the PoC related cases pending before the Hon'ble High Court of Odisha and some other states' High Court to the Hon'ble High Court of Delhi and Hon'ble Supreme Court has directed PGCIL to file the copy of Writ Petition filed by them in the High Court of Delhi & ordered to stay of further proceedings in all the respective High Courts.
343. The Commission observed that the scheduled PoC loss in the eastern regional system as displayed in the ERLDC website for the period from 04.07.2011 to 05.02.2012 is varies from 2.0% to 1.0% for Odisha injection and 1.7% to 0.7% for Odisha withdrawal. The weighted average Central Transmission Loss for GRIDCO drawal for the period from 01.07.2011 to 04.12.2011 comes to 2.60% based on PoC method as against Commission's approval of 2.3% in the ARR for 2011-12. Higher loss in ER system has

an 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. This kind of loss variation is on account of the nature and quantum of power flow in the system. Since, the Central Electricity Regulatory Commission's (CERC) Order dated 29.06.11 on Point of Connection (PoC) Charges and Transmission Losses in accordance with the CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 is sub-judice, pending the final decision on the above matter, the Commission provisionally accepts the Central Sector loss of 2.37% for FY 2012-13 based on the average of actual loss in Central Transmission System for FY 2010-11. The Commission, however, noted with concern that, mainly due to change of principle (POC method against actual regional loss) the loss percentage of some of the power station specifically TSTPS Stage-II worked out to be very high, almost 1% higher than other central generating power stations, even though Talcher Stage-II is in Odisha and situated at a major load centre. Theoretically transmission loss for Talcher STPS for Odisha should have been 'NIL' as Odisha draws power through AC interconnection line between Talcher Stage-I & Stage-II, there appears to be no valid technical reason why there will be differential transmission loss between Talcher Stage-I & Stage-II for Odisha. The losses in HVDC line from Talcher Stage-II to Southern Region should not have been burderned to Odisha. The Commission desires that GRIDCO may take up this matter suitably at CERC and other regional and legal forum.

Central Generating Stations (CGSs)

344. Odisha 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 Accounts (REA) prepared by the Eastern Regional Power Committee.
345. GRIDCO in its filing stated that Considering the the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, Chapter-4, "NORMS OF OPERATION", Clause-26, GRIDCO proposes a Normative Annual Plant Availability Factor (NAPAF) of 85% for the NTPC Stations for FY 2012-13. The projection of net power procurement from the Central Thermal Generating Stations (CGSs) of Eastern Region for FY 2012-13 is estimated as 6032.60 MU considering the allocated share of GRIDCO, NAPAF of 85%, Auxiliary Consumption as per the CERC Tariff Regulation, 2009 and the Central Sector Transmission Loss specific to each of the Stations, as per the Point of Connection (PoC) Methodology. The details of power procurement from each of the Central Thermal Generating Stations (CGSs) as projected by GRIDCO are given in the Table below:

Table - 41**Availability of Power from Central Generating NTPC Stations**

Central Thermal Stations	Installed Capacity (MW)	Aux. Cons (%)	NAPAF (%)	Net availability (ESO) (MU)	GRIDCO Share (%)	Ex-bus Availability (MU)	Central Tr. Loss %	GRIDCO share after C.S. Trans. Loss (MU)
TSTPS Stg-I	1000	6.50	85	6,962.01	31.80	2,213.92	2.29%	2,163.22
TSTPS Stg-II	2000	6.50	85	13,924.02	10.00	1,392.40	3.52%	1,343.46
FSTPS	1600	6.93	85	11,087.99	13.63	1,511.29	2.58%	1,472.38
KhSTPS Stg-I	840	9.00	85	5,691.72	15.24	867.31	2.58%	844.98
KhSTPS Stg-II	1500	6.50	85	10,443.02	2.05	214.08	2.58%	208.57
TOTAL				48,108.75		6,199.01		6,032.60

346. The Commission observed that as per CERC Tariff Regulations 2009, the availability from the CGSs at 85% PLF would entitle them for recovery of full capacity charge. If the normative availability is not achieved by any station there would be reduction in their fixed cost. The Commission accepts the GRIDCO's proposal for considering NAPAF of 85% of the central thermal power stations for FY 2012-13. Considering the Central Sector transmission loss @ 2.37% provisionally as stated earlier and NAPAF of 85%, the details of GRIDCO's drawl from Central Thermal Stations, approved for the FY 2012-13 are given in table below:

Table - 42**Drawal From Central Thermal Generating Stations for FY-2012-13**

Central Thermal Stations	Installed Capacity (MW)	Aux. Cons. (%)	Availability considering 85% PLF & Auxiliary Consum. (MU)	GRIDCO Share (%)	GRIDCO Share (MU)	Approved estimated Share excluding Central Sector Transmission Loss of 2.37% (MU)	GRIDCO's proposal excluding Central Sector Transmission Loss (MU)
TSTPS -I	1000	6.50	6962.01	31.80	2213.92	2161.45	2,163.22
TSTPS -II	2000	6.50	13924.02	10.00	1392.40	1359.40	1,343.46
FSTPS	1600	6.94	11087.09	13.63	1511.17	1475.36	1,472.38
KhSTPS -I	840	9.00	5691.72	15.24	867.42	846.86	844.98
KhSTPS - II	1500	6.50	10443.02	2.05	214.08	209.01	208.57
TOTAL	6940		48107.86		6198.99	6052.08	6,032.60

Central Hydro Generating Stations

347. **Chukha:** Odisha has been assigned a share of 15.19% from ER allocation of 270 MW of Chukha Hydro Power Station, Bhutan. Drawl from Chukha has been projected by GRIDCO at 270.07 MU for FY 2012-13 considering the average drawal of last 6 years

i.e. from FY 2005-06 to 2010-11. After deducting central sector loss of 2.29%, the net availability to GRIDCO is projected at 263.0 MU for the FY 2012-13.

348. The Commission scrutinized the proposal of GRIDCO and observed that the drawal of GRIDCO from Chukha was 278.49 MU for the FY 2010-11 and during 2011-12 upto September, 2011, it comes to 174.52 MU. It is also known that the generation from Chukka during summer is very high and during winter it is generally very low. The Commission had approved a drawal of 273.36 MU from Chukka during 2011-12 and the same is expected to be achieved by the end of the year. So the Commission approves the drawl from Chukha hydro station at 279.53 MU for FY 2012-13 considering the average drawal of last 5 years i.e. from FY 2006-07 to 2010-11. After deducting the Central Loss of 2.37%, the net drawal of GRIDCO comes to 272.90 MU for FY 2012-13.
349. **TALA:** GRIDCO has an allocated share of 4.25% i.e 43.35 MW from Tala HEP having installed capacity of 1020 MW (6X170 MW). GRIDCO proposed to draw 147.79 MU of energy from Tala HEP during FY 2012-13 by averaging previous 4 years drawal i.e. from 2007-08 to 2009-10. After deducting Central Sector Loss of 2.29%, the net availability to GRIDCO is projected as 143.0 MU during FY 2012-13.
350. The Commission accepts the proposal of GRIDCO for estimated drawal of 147.79 MU and considering central sector transmission loss of 2.37 %, approves the net drawl of 144.29 MU from Tala HEP for FY 2012-13.
351. **TEESTA:** GRIDCO in its ARR submitted that the annual design energy of Teesta-V HEP (510 MW) situated in Sikkim is 2572.67 MU. Considering 12% free energy to Home State & 1.2% of Auxiliary Consumption, the annual saleable energy of the project is 2236.78 MU. Considering the share of GRIDCO as 23.4% from the saleable energy, GRIDCO proposes to procure 510.0 MU of energy during the year 2012-13 after deducting the Central Sector loss of 2.58% as shown in the table below.

Table - 43

Design Energy	(MU)	2572.67
Energy considering 1.2% Auxiliary Consumption (MU)		2541.80
Annual Saleable Energy available after 12% free energy for home state (MU)		2236.78
GRIDCO Share (%)		23.4
Availability (MU)		523.41
After deducting Central Transmission Loss @ 2.58% (MU)		509.93
Proposed drawal for FY 2012-13 (MU)		510.00

352. The Commission scrutinized the proposal of GRIDCO with reference to Regional Energy Account (REA) prepared by ERPC. It is observed that the GRIDCO is entitled to get a share of 20.59% on the total generation less auxiliary consumption. So the Commission estimates a drawal of 523.36 MU considering the share of 20.59% on design energy of 2541.80 MU less auxiliary consumption of 1.2%. After considering the central sector transmission loss of 2.37% Commission approves the net drawl of 510.95 MU from Teesta HEP during FY 2012-13.
353. The details of GRIDCO's proposal & Commission's approval for drawal of power from Central Sector Hydro stations are given in the table below.

Table - 44

GRIDCO's Drawal from Central Hydro Stations during FY 2012-13

Central Generating Stations other than NTPC Stations.	Installed Capacity (MW)	GRIDCO Share of installed capacity (%)	GRIDCO Share of installed capacity (MW)	GRIDCO Proposed drawal for FY 2012-13 after applicable C.S. loss (MU)	Commission's approval for FY 2012-13 after C.S. loss of 2.37% (MU)
Chukha HEP	4*84=336 MW (ER Allocation is 270MW)	15.19	41.013	263.00	272.90
Tala HEP	6*170 = 1020	4.25	43.350	143.00	144.29
Teesta-V HEP	3*170=510	20.59	105.019	510.00	510.95
TOTAL				916.00	928.14

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

354. A summary of GRIDCO's proposal for purchase of power from different generating stations and the Commission's approved quantum of purchase for FY 2012-13 is given in the table below:

Table – 45

Quantum of Power Purchase from Various Sources for FY 2012-13

(Figures in MU)

Sources of Purchase	Commission's Approval for State Drawl for 2011-12	GRIDCO's Proposal for 2012-13	Estimated Availability for 2012-13	Commission's Approval for State Drawl for 2012-13
OHPC (OLD)	3676.86	3667.19	3676.86	3676.86
Indravati	1942.38	1944.36	1944.36	1942.38
Machhkund	262.50	262.50	262.50	262.50
HYDRO (Odisha)	5881.74	5874.05	5883.72	5881.74
OPGC	2892.49	2864.82	2890.82	2890.82
TTPS	2957.32	2957.32	2957.32	2957.32
IPPs	3357.12	3556.92	3556.92	3556.92
CGP	603.79	1121.28	1655.64	696.10
Co-Generation Plants	512.46	621.96	665.76	665.76
Small Hydro (RE)	300.00	300.00	300.00	300.00
Bio-mass (RE)		122.00	122.00	122.00
Solar (RE)		46.00	46.00	46.00
TOTAL ODISHA	16504.92	17464.35	18078.18	17116.66
Chukha	273.36	263.00	272.90	272.90
TALA	143.16	143.00	144.29	144.29
TEESTA	511.32	510.00	510.95	510.95

Sources of Purchase	Commission's Approval for State Drawl for 2011-12	GRIDCO's Proposal for 2012-13	Estimated Availability for 2012-13	Commission's Approval for State Drawl for 2012-13
HYDRO(Central)	927.84	916.00	928.14	928.14
TSTPS-I	2163.00	2163.22	2161.45	2161.45
TSTPS -II	1360.38	1343.46	1359.40	1359.40
FSTPS	1476.42	1472.38	1475.36	1475.36
KHSTPS-I	847.47	844.98	846.86	846.86
KHSTPS -II	209.16	208.57	209.01	209.01
Thermal (central)	6056.42	6032.61	6052.08	6052.08
TOTAL EREB	6984.26	6948.61	6980.22	6980.22
From other Sources		474.62		
TOTAL GRIDCO PURCHASE	23489.18	24887.58	25058.40	24096.88

Power Procurement Cost

355. 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 station based on the relevant rules, regulations and documents available.
356. 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.

OHPC Stations

357. OHPC has submitted the application for approval of its Annual Revenue Requirement and Tariff of its individual power stations separately for the FY 2012-13 in terms of Section-62, 64 and 86 of the Electricity Act, 2003 which has registered as Case No.90/2011. The tariff approved for OHPC Stations in the said case will be considered for determination of the power procurement cost of GRIDCO in respect of all stations of OHPC.
358. Accordingly, the cost of power purchase from each of the power stations of OHPC is given in the table below:

Table – 46

Cost of Power Purchase from OHPC Stations for FY 2012-13

Name of the Power Station	Quantum of Power Purchase for 2012-13 (MU)	Approved Average Tariff for 2012-13 (P/U)	Cost of Power Purchase for FY 2012-13 (Rs. Cr.)
Burla	677.16	92.87	62.89
Chipilima	485.10	52.47	25.45
Balimela	1171.17	73.82	86.45

Name of the Power Station	Quantum of Power Purchase for 2012-13 (MU)	Approved Average Tariff for 2012-13 (P/U)	Cost of Power Purchase for FY 2012-13 (Rs. Cr.)
Rengali	519.75	72.79	37.83
Upper Kolab	823.68	36.73	30.25
Upper Indravati	1942.38	79.26	153.96
Total	5619.24	70.62	396.83

Machhkund Hydro Electric Project

359. OHPC has proposed for approval of a rate of 30.51 P/U for purchase of power of Machhkund Power Station for the year 2012-13 for the energy drawl of 262.50 MU. Odisha has to pay its share of O & M charges for the energy drawl from Machakund upto 30% and @ 8 paise/unit for the drawl beyond 30% and upto 50%. With this principle, the cost of Machakund power has been projected at 30.51 P/U against the approval of 22.06 P/U for FY 2011-12.
360. The Commission has taken into consideration the net amount payable by Odisha towards O&M expenses for the year 2010-11 (actual) on account of 30% share which is of the order of Rs.6.414 crore. Allowing an escalation of 5.72% per annum for the years 2011-12 and 2012-13, O&M expenses come to Rs. 7.17 crore. Taking power purchase cost of Rs. 0.84 crore towards purchase of power beyond 30% and upto 50% @ 8 paise/unit, total cost comes to Rs. 8.01 crore. Hence, the rate per unit of Machakund power comes to 30.51 paise for the year 2012-13 considering energy drawl of 262.50 MU. Accordingly, the procurement cost of Machakund Power by GRIDCO estimated to be Rs.8.01 crore for an approved energy drawl of 262.50 MU.

Talcher Thermal Power Station (TTPS)

361. 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).
362. **Fixed Cost:** GRIDCO submitted that NTPC has filed petition (No-184/2009) for revision of fixed charges for the period from 2004 to 2009 and also filed petition (No-304/2009) for fixation of tariff as per the CERC Regulations for the period 2009-14. Both the petitions are now pending at CERC for adjudication. Considering the petition filed by NTPC, GRIDCO in its ARR application has projected the fixed cost of TTPS at Rs.381.69 cr. for 2012-13. The fixed cost per unit of energy from TTPS at normative PLF of 82% and auxiliary energy consumption of 10.5% works out to 129.066 P/U for the proposed drawal of 2957.32 MU for FY 2012-13. GRIDCO has indicated that the projected Annual Fixed Cost of Rs.381.69 Crore considered in the ARR Application without prejudice to their right to contest the same before the CERC on valid grounds.
363. After scrutiny of all the submissions of GRIDCO in this regard, the Commission observed that CERC in its Order dtd. 11.01.2010 has revised the fixed cost of TTPS to Rs.200.88 crore for FY 2008-09. The submission of NTPC before CERC for revision of the fixed cost of TTPS for the FY 2004-09 as per the CERC Regulations, 2004 and determination of fixed charges of TTPS for the FY 2009-14 as per the new CERC

Regulations, 2009 are yet to be finalized by CERC. Hence, the Commission provisionally approves the fixed cost of TTPS at Rs.200.88 crore for the FY 2012-13 as per the latest approval of CERC vide order dated 11.01.2010.

364. **Variable Charges:** GRIDCO has stated that as per the latest CERC order in consonance with CERC Regulations, 2004, NTPC is presently claiming the base variable charge for TTPS @ 46.05 P/U. CERC has not yet come out with any rate to be applicable for 2009-14 tariff periods. GRIDCO has indicated that this rate of 46.05 P/U has been contested by NTPC in CERC forum and matter continued to be sub-judice as of now and it is expected that the rate may move upwards considering the present cost of Coal & Oil. Considering the present petition filed by NTPC for TTPS before CERC for the FY 2009-14, GRIDCO has requested the Commission to approve a higher rate of such charges for TTPS at the time of approving the ARR of GRIDCO for FY 2012-13 after a comprehensive analysis of fuel cost of various Thermal Stations. Since, the variable cost of TTPS has not yet been revised by CERC, after scrutiny of the above proposal of GRIDCO; the Commission accepts the variable cost of TTPS @ 46.05 P/U for the FY 2012-13 as being claimed by NTPC at present.
365. **FPA:** GRIDCO in its ARR submitted that the average Fuel Price Adjustment (FPA) Charge as claimed by TTPS for first six month of FY 2011-12 comes to 54.473 P/U. However, taking into account the ever-increasing trend of cost of fuels, GRIDCO has considered 20% escalation over and above the monthly highest FPA of 63.05 P/U and thus, proposes 75.66 P/U towards FPA for FY 2012-13. The details are tabulated below:

Table – 47

Fuel Price Adjustment (FPA) OF TTPS (P/U)

Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Average of six months	Monthly highest FPA	GRIDCO proposal for FY 2012-13 considering 20% escalation on 63.05 P/U
63.05	59.71	48.14	55.49	51.49	48.71	53.01	63.05	75.66

366. GRIDCO has further stated that due to short supply of linkage coal / indigenous coal, TTPS is also depending on costlier imported coal & thus, the above mentioned FPA charges may likely to increase further in future which may be allowed to be recovered through the tariff.
367. The Commission scrutinized the proposal of GRIDCO and approves the FPA charges of 63.61 P/U for FY 2012-13 considering 20% escalation over 53.01 P/U i.e., the average of FPA charges claimed by NTPC during the period from April, 2011 to November, 2011 in respect of TTPS.
368. **Year-end Charges:** GRIDCO has projected the year-end charges of TTPS to the tune of Rs.20.13 crore for the FY 2012-13 based on the actual charges paid by GRIDCO during 1st six months of the FY 2011-12, which includes electricity duty, charges towards water/pollution cess, UI overdrawal and incentive. GRIDCO has claimed Rs.6.66 crore towards Electricity duty, Rs.0.12 crore towards water/pollution Cess charge, Rs.4.16 crore towards UI overdrawal and Rs.9.19 cr. towards incentive for FY 2012-13. The Commission on examination of the claims approves (i) Electricity duty of Rs.6.66 crore

calculated @ 20 paise/unit on auxiliary consumption of the generation at 82% PLF, (ii) Water/Pollution Charge / Cess of Rs.0.12 crore. The claim for UI overdrawl is not being allowed in the tariff since the possibility of overdrawl or underdrawl can not be predicted at this moment and also the claim towards incentive of Rs.9.19 cr. is not being allowed because it cannot be assessed at the beginning of the year whether there will be excess generation beyond the PLF of 82% for the FY 2012-13. Thus, the year-end charges approved for 2012-13 comes to Rs.6.78 crore. The year-end charges proposed by GRIDCO and approved by the Commission for the FY 2012-13 is shown in the table below:

Table – 48
Year-End Charges of TTPS

(Rs. in crore)

ITEM	OERC approval for FY 2011-12	GRIDCO's Proposal for FY 2012-13	OERC approval for FY 2012-13
Electricity duty@ 20P/U	6.94	6.66	6.66
Water Cess / Charge	0.12	0.12	0.12
UI overdrawl	0.00	4.16	0.00
Incentive	0.00	9.19	0.00
Total (Rs. Crore)	7.06	20.13	6.78
ESO(MU)	2957.32	2957.32	2957.32
Per unit cost P/U	2.39	6.81	2.29

369. After taking into account all the above estimated cost, the approved tariff for TTPS power comes to 179.87 p/u (180.50 p/u approved for 2011-12) comprising of fixed cost of 67.92 p/u, variable charges of 46.05 p/u, FPA of 63.61 p/u and year end charges of 2.29 p/u.

Odisha Power Generation Corporation (OPGC)

370. OPGC has not filed its ARR application with OERC for the year 2012-13 under the same plea as it had maintained for the preceding years. The matter is sub-judice before the Hon'ble Supreme Court of India as OPGC has gone on appeal against the orders of the Hon'ble High Court of Odisha passed in OJC No.13338 of 2001. However, till the issue is settled, the per unit rate of energy drawal from OPGC for FY 2012-13 is provisionally estimated based on the parameters of subsisting PPA between GRIDCO and OPGC as well as the Notification issued by Govt. of Odisha dtd.21.06.2008, which is subject to change in accordance with court orders or otherwise.
371. **Fixed Cost:** GRIDCO has submitted that OPGC has furnished a statement of tariff calculation to GRIDCO for the FY 2012-13, wherein OPGC proposes the fixed cost at Rs.177.9157 cr. and variable cost at 134.99 p/u. OPGC has projected the tariff for FY 2012-13 considering blending of 3.8% imported coal. GRIDCO has worked out the tariff for OPGC by considering the normative auxiliary consumption of 9.5% on the station generation of 3194.239 MU as submitted by OPGC in its generation plan for 2012-13. The fixed cost of IB Thermal Power Station of OPGC for FY 2012-13 as proposed by GRIDCO is Rs.177.92 crore. In replying to the Commission's query GRIDCO further

submitted that the components of fixed cost considered for arriving at Rs.177.92 cr. are based on the norms fixed in the PPA signed with OPGC dtd.13.08.1996. After scrutiny, the Commission approves the estimated fixed cost of Rs.177.07 crore for the FY 2012-13 considering use of 100% indigenous coal and 8% escalation on the O&M expenses over FY 2011-12.

372. **Variable Charges:** GRIDCO has proposed variable charges in respect of IB Thermal Power Stations at 134.99 P/U for 2012-13. In replying to the Commission's query GRIDCO further submitted that the proposed variable cost of OPGC is as per the submission of OPGC wherein they have proposed to use blended coal in the ratio of 3.8 : 96.2 i.e. imported to linkage coal and the rate of oil and coal has been assumed with 10% escalation on actual price as on 31.10.2011. GRIDCO further submitted that till date OPGC has not used any imported coal for power generation as has been ascertained from OPGC. However, it is likely that OPGC is going to use imported coal shortly for power generation. After detailed scrutiny the Commission observes that due to lack of evidential document in support of use of imported coal or invoices in favour of purchase of imported coal, the Commission feels it appropriate to accept use of 100% indigenous coal. Accordingly, the variable charge is computed and it comes to 114.25 P/U for IB Thermal Power Stations for the FY 2012-13 considering 20% escalation on actual price as on 31.10.2011
373. **Year-end Charges:** GRIDCO has proposed year-end charges of Rs.56.79 crore on account of land tax, water cess, electricity duty, income tax, incentive payable to OPGC, Electrical Inspection Fees, SOC & MOC for SLDC, ERPC charges and cost of environmental protection equipment installation.
374. **Income Tax:** GRIDCO has claimed Rs.34.58 crore towards Income Tax payment for FY 2012-13. The Commission provisionally approves Rs.35.81 crore towards income tax payment for 2012-13 as proposed by GRIDCO subject to change after actual payments are made.
375. **Electricity Duty:** The Commission approves Electricity duty of Rs.5.75 crore @ 20 P/U on auxiliary consumption of the generation at 86.82% PLF.
376. **Incentive:** Incentive of Rs.7.59 crore is approved for generation over and above normative generation of 80% PLF for the year 2012-13 in line with the notification dtd.21.06.2008 of Govt. of Odisha regarding settlement of dispute of OPGC.
377. GRIDCO has claimed Rs.0.38 crore towards SOC and MOC of SLDC, Rs.0.15 crore towards ERPC charges and Rs.3.00 crore towards cost of environment protection equipment installation for the FY 2012-13 . The Commission approves these expenses to be included in the year-end charges.
378. Thus, the total estimated year-end charges approved for FY 2012-13 is Rs.56.79 crore which is shown in table below.

Table – 49
Year-end Charges of OPGC

(Rs. crore)

ITEM	OERC approval for 2011-12	Proposed year end charges for 2012-13	OERC approval for 2012-13
Income Tax	35.81	34.58	34.58
Water Cess & Water Charges	0.76	5.04	5.04
Tax and Cess on Land	0.13	0.13	0.13
Electricity duty @20P/U	5.76	5.75	5.75
Incentive	7.68	7.59	7.59
Electricity Inspection Fees	0.17	0.17	0.17
SOC and MOC of SLDC	0.38	0.38	0.38
ERPC Charges	0.15	0.15	0.15
Environment Protection Equipment Installation	0.70	3.00	3.00
Total	51.54	56.79	56.79

379. After taking into account all the above estimated cost, the approved price for OPGC power comes to 195.15 p/u (179.22 p/u approved for 2011-12) comprising of fixed cost of 61.25 p/u, energy charges of 114.25 p/u and year end charges of 19.64 p/u.

Captive Generation Plants (CGPs) and Co-generation Plants

380. GRIDCO submitted that the Commission in its order dated 23.11.2010 in Case no. 117/118 of 2010 have approved the rates of Rs.2.75/3.10/3.25 for CGPs / Co-generation Plants not availing any open access and Rs.2.75/3.00/3.20 for CGPs/ Co-generation Plants who have opted for supplying 60% and above of their surplus power to GRIDCO after availing Open Access upto 40% of their surplus power. It has been clarified by the Commission in its various orders that the rate of surplus power fixed for GRIDCO to procure power from CGPs/ Co-generation Plants is the upper limit and GRIDCO may negotiate an appropriate rate within/ below that limit if power is available from other sources at a rate lower than that rate. As such, GRIDCO had been procuring power @ Rs.2.75 (Flat)/ Unit from the CGPs/ Co-generation Plants from the month of November 2010 and onwards on the basis of Letter of Intent (LoI) to that effect issued by GRIDCO to the CGPs/ Co-generation Plants. However, to maximize the supply of surplus power by the CGPs/ Co-generation Plants, GRIDCO has offered to pay at the rate of the aforesaid slab price fixed by the Commission to all CGPs/ Co-generation Plants with effect from 16.11.2011. As such, GRIDCO proposes to procure 1743.24 MU of power at a cost of Rs.496.95 Cr. (including energy of 621.96 MU at a cost of Rs.176.03 Crore from Co-Generation Plants) during FY 2012-13 considering the aforesaid rate fixed by the Commission.
381. GRIDCO has further submitted to procure an additional quantum of 578.16 MU of power from M/s JSPL at the procurement cost of such power shall be Rs. 178.27 Crore. (at the average rate of Rs. 3.08 per Kwh). Further, to consider 43.80 MU as Co-generation

power out of its total export of 122.64 MU from M/s Bhusans Power & Steel Ltd. Considering the above submission of GRIDCO the total energy available from CGPs and Co-generation Plant comes to 2321.40 MU out of which 665.76 MU is Co-generation power and 1655.64 MU is towards the availability from CGPs..

382. GRIDCO has prayed the Commission to fix the procurement price first from the CGPs / Co-Generation Plants for FY 2012-13 if the Commission feels it necessary and then to incorporate the same in the ARR & BSP and also evolve a mechanism so that GRIDCO does not suffer from any deficit due to any midterm upward revision in the prices of power from such sources including any other sources later on.
383. The Commission scrutinized the above proposal of GRIDCO for procurement of surplus power from CGPs and Co-generation Plants. The Commission in its order dated 23.11.2010 in Case no. 117/118 of 2010 had stipulated the price of surplus power from CGPs and Co-Generating Plants w.e.f. 10.11.2010 as under.

Table - 50

Supply Quantum per Month	Supplying 100% surplus Firm Power to GRIDCO	Supplying 60% & above surplus Firm Power to GRIDCO and balance export through Open access.
Supply upto 7.3 MU per month (~ 10 MW Avg. and below)	Rs.2.75 per KWh	Rs.2.75 per KWh
Incremental energy above 7.3 MU/month and upto 36 MU/month (~ above 10 MW and upto Avg. 50 MW)	Rs.3.10 per KWh	Rs.3.00 per KWh
Incremental energy beyond 36 MU/month (above ~ 50 MW)	Rs.3.25 per KWh	Rs.3.20 per KWh
Any injection over the implemented schedule at a frequency of 50.20 Hz and above	Free Power to State Grid	Free Power to State Grid
who would supply inadvertent power/ infirm power within the Operating Frequency Band of 49.50 to 50.18 HZ	paid at the pooled cost of State hydel power which is 62.51 Paise/KWh for FY 2010-11	paid at the pooled cost of State hydel power which is 62.51 Paise/KWh for FY 2010-11

384. The Commission observed that the above revised price was applicable w.e.f. 10.11.2010 and would continue till 31.03.2011. The Commission has also clarified certain issues on CGP pricing mechanism in its order dtd. 29.08.2011 in case no. 22 of 2011. However, since no further order has been issued by the Commission in this regard, the above price fixed for procurement of surplus power from CGPs and Co-generation Plants vide OERC Order dtd. 23.11.2010 in Case No. 117& 118 of 2010 along with the clarifications made in the Order dtd. 19.08.2011 in Case No. 22/2011, will continue until further order is issued by the Commission. Hence, the Commission provisionally accepts the same procurement price of surplus power from CGPs and Co-generation Plants as was fixed in its aforesaid Order dtd.23.11.2010 for calculation of ARR of GRIDCO for the FY 2012-13. However, in case of any revision of price for sale of surplus power from CGPs and Co-generation plants by the Commission for FY 2012-13, the revised price shall be

applicable for procurement of surplus power by GRIDCO from CGPs and Co-generation plants and any deviations/ adjustment in revenue due to such upward price revision will be considered while taking up the approval of ARR of GRIDCO for FY 2013-14.

385. Out of the total availability of 2321.40 MU from CGPs and Co-generation Plants the Commission had already approved for purchase the total availability 665.76 MU of Co-generation power in view of the Co-generation Purchase Obligation and out of the balance availability of 1655.64 MU of CGPs power the Commission had approved 696.10 MU to be purchased by GRIDCO for State use. Considering the price fixed by the Commission in its Order dtd. 23.11.2010 and the rate proposed by GRIDCO, the cost of power purchase from CGPs comes to Rs.199.23 crore for the approved energy drawal of 696.10 MU at an average price of 286.21 P/U and the power procurement cost from Co-generation Plants comes to Rs.188.42 crore for the approved energy drawal of 665.76 MU at an average price of 283.02 P/U. The Commission approves the same for the FY 2012-13. Further, the Commission directs that changes, if any, due to the CGP pricing policy notified vide order dt.23.11.2010, the pricing shall be accounted for in the truing up exercise, if need arises, but payment to CGPs and Co-generating Plants shall not be held up on the ground that truing up is yet to be taken up.

Power Purchase from Renewable Sources

386. In its ARR for FY 2012-13, GRIDCO has projected to procure 150 MU from Meenakhi Small Hydro Electric Project and 150 MU from Samal Small Hydro Electric Project @ Rs.3.68 per unit during FY 2012-13. The total procurement cost of this 300 MU Renewable Energy amounts to Rs 110.40 crore.
387. The Commission in its Order dated 19.05.2011 in Case Nos.17 & 24 of 2011 have fixed Rs.3.68 per Kwh (inclusive of 4 Paise per Kwh as trading margin of PTC) towards procurement of power by GRIDCO from PTC in respect of drawal from Samal Barrage SHEP of M/s. OPCL and Lower Kolab & Middle Kolab SHEPs of M/s.MPL. Hence, the Commission accepts the proposal of GRIDCO and accordingly, the cost of power purchase from the said small hydel sources during FY 2012-13 comes to Rs.110.40 Cr. at the rate of 368.00 P/U for procurement of 300 MU as approved by the Commission.
388. GRIDCO has proposed to procure 122 MU of renewable energy from Bio-mass sources @ 487 p/u at a total cost of Rs.59.41 cr. The Commission vide its order dated 23.09.2011 in Case No.151 to 155 of 2010 has re-determined the tariff for procurement of power from Bio-mass sources. According to the said order of the Commission the tariff for bio-mass energy would be 501 p/u, if the benefit of accelerated depreciation is not availed and 480 p/u, if benefit of accelerated depreciation is availed. Energy availed by GRIDCO from bio-mass sources during FY 2012-13 will be paid by GRIDCO at this tariff as the case may be. However, for the purpose of computation of ARR of GRIDCO for FY 2012-13 the Commission considers the tariff of 501 p/u for Bio-mass energy. Accordingly, the Commission approves the proposal of GRIDCO to procure 122 MU from Bio-mass renewable sources at a cost of Rs.61.12 crore @ 501 p/u.
389. GRIDCO has proposed to procure 13 MU of energy from 8 nos. of 1 MW solar PV projects under Rooftop PV and Small Solar Power Generation Programme (RPSSGP) in the State at a cost of Rs.8.164 cr. with the rate of 628 p/u. Further, GRIDCO has signed agreement with NVVNL to procure solar power bundled with thermal power from the

un-allocated quota of the up-coming coal based NTPC stations through “New Grid Connected Solar Power Project” Scheme under phase – I of JNNSM. 20 MW solar capacity has been allocated to GRIDCO in this scheme. Hence, GRIDCO proposes to procure 33 MU of solar energy under this scheme @ 474 p/u with a cost of Rs.15.642 cr.

390. The Commission approves the above proposal of GRIDCO. Accordingly, the procurement cost of total 46 MU of solar power comes to Rs.23.81 cr. at an average rate of 517.52 p/u.

IPPs

391. GRIDCO has submitted that pursuant to the terms of PPA executed with M/s Sterlite Energy Ltd. and submitted with OERC for approval, the cost of power procurement by GRIDCO shall be at a rate as may be approved by OERC. Pending approval of the power procurement cost, GRIDCO has proposed for procurement of 2612.57 MU (considering supply of 350 MW at a PLF of 85%) from M/s Sterlite Energy Ltd. during the FY 2012-13 at a rate of 275 P/U which is the minimum price / rate proposed for surplus power from CGPs. Similarly, GRIDCO has proposed to procure 40 MU from M/s Arati Steels Ltd. towards state share of 12% which will entail a cost of Rs.7.00 cr. to GRIDCO at the variable cost of 175 p/u. Thus, the procurement cost of total 2652.57 MU from these two existing IPPs is estimated at Rs.725.46 crore.
392. Further, GRIDCO has proposed to procure power from three upcoming IPPs namely M/s.Ind-Barath Energy (Utkal) Ltd. (IBEUL), M/s.GMR Kamalanga Energy Ltd. (GKEL) and M/s. Maa Durga Thermal Power Company Ltd. (MTPCL) which are scheduled to be commissioned during the FY 2012-13.
- Pending approval of the power procurement cost, GRIDCO proposes a provisional rate of 175 P/U as variable cost towards State share (12%) of power from M/s.IBEUL. With addition of 34 P/U towards CTU transmission charges, the proposed rate becomes 209 P/U. Thus, the power procurement cost to GRIDCO will be around Rs. 14.87 Crore for proposed procurement of 71.15 MU from M/s.IBEUL @ 209 P/U during FY 2012-13.
 - Similarly, pending approval of the power procurement cost, GRIDCO proposes a provisional rate of 275 P/U towards State share (25%) of power from M/s.GKEL. With addition of 34 P/U towards CTU transmission charges, the proposed rate becomes 309 P/U. Thus, the power procurement cost to GRIDCO will be around Rs. 244.27 Crore for proposed procurement of 790.52 MU from M/s.GKEL @ 309 P/U during FY 2012-13.
 - Similarly, GRIDCO proposes a provisional rate of 175 P/U towards State share (12%) of power from M/s. MTPCL. Thus, the power procurement cost to GRIDCO will be around Rs. 7.47 Crore for proposed procurement of 42.69 MU from M/s. MTPCL @ 175 P/U during FY 2012-13.
393. GRIDCO has further submitted that the rate of 275 / 175 P/U for procurement of energy from IPPs is projected as per prevailing provisional price. The Commission may kindly go into the details of determining the realistic procurement prices of power from such sources and evolve a mechanism for pass through of any additional cost through the ARR & BSP of the year so that GRIDCO does not suffer from cash crunch on account of low

BSP for being carried over to the later year/s. Thus, the summary of the details of the present proposal is as given in the Table below:

Table – 51

Power Procurement from IPPs & Cost during FY 2012-13

Sl. No.	Name of IPPs	Energy drawal proposed for FY 2012-13 (MU)	Rate (P/U)	Cost (Rs Crore)
1	Arati Steels	40.00	175.00	7.00
2	Sterilite Energy (P) Ltd	2612.57	275.00	718.46
(A)	SubTotal	2652.57	273.49	725.46
3	M/s. Ind-Barath Energy (Utkal) Ltd.	71.15	209.00	14.87
4	M/s. GMR Kamalanga Energy Ltd.	790.52	309.00	244.27
5	M/s. Maa Durga Thermal Power Co. Ltd.	42.69	175.00	7.47
(B)	SubTotal	904.35	294.81	266.61
	Total	3556.92	278.91	992.07

394. Pending the finalization of the tariff for the aforesaid IPPs, the Commission considered the submissions of GRIDCO and provisionally accepts the price of 275 P/U and 175 p/u in case to case basis as proposed by GRIDCO for procurement of power from these IPPs during FY 2012-13. Accordingly, the power procurement cost for the approved drawal of 3556.92 MU from the said IPPs comes to Rs.992.06 crore at an average rate of 278.91 p/u. The Commission provisionally approves the same for the FY 2012-13 till the finalization of tariff of these IPPs by the appropriate Commission. Further, the Commission directs that deviations/adjustment in revenue, if any, after finalization of tariff shall be accounted for in the truing up exercise, if need arises.

Central Hydro Generating Stations

395. **Chukha:** GRIDCO has stated that the procurement cost of power from Chukha for FY 2012-13 has been calculated based on the rate fixed by MoP/GOI, which is 155 P/U w.e.f. 01.04.2008. Further, it comes to 159 P/U including trading margin @ 4 paise/unit which is to be paid to PTC India as Nodal Agency. GRIDCO has, therefore, proposed a rate of energy charges at 162.73 paise/unit for 2012-13 including Central Transmission Loss of 2.29%. Thus, the power purchase cost of 263 MU from Chhuka Hydro Station @ 162.73 P/U has been worked out by GRIDCO to Rs.42.80 crore for FY 2012-13.

396. The Commission scrutinized the application of GRIDCO and approves the rate of 162.86 paise/unit considering the central transmission loss @ 2.37% for the power procurement from Chukka for FY 2012-13. So the cost for Chukka power comes to Rs.44.44 crore for the approved drawal of 272.90 MU for FY 2012-13. The details are given in Table below.

Table – 52

	GRIDCO's Proposal for FY 2012-13	Commission's Approval for FY 2012-13
Net Energy Drawal (MU)	263.00	272.90
Energy Charge (P/U)	159.0	159.0
Energy Charge incl. Tr. Loss (P/U)	162.73 (C.T.L. of 2.29%)	162.86 (C.T.L. of 2.37%)
Cost of Chukka Power (Rs. Crore)	42.80	44.44

397. **TALA:** GRIDCO has scrutinized that the procurement cost of both primary and secondary energy from TALA for FY 2012-13 has been calculated @ 180 P/U based on the agreement signed between MoP/GOI, and Royal Govt of Bhutan on 28.07.2006. Further, it comes to 184 P/U including trading margin @ 4 paise/unit which is to be paid to PTC India as Nodal Agency. GRIDCO has also to bear the expenditure on account of central transmission losses in the PGCIL network. GRIDCO has, therefore, proposed a rate of 188.31 P/U for 2012-13 considering Central Transmission Loss of 2.29%.
398. Further, in an additional submission on 09.02.2012, GRIDCO submitted that the Base Energy Rate for procurement of power from Tala Hydro Electric Project has been revised from 184 P/U (inclusive of 4 P/U towards Trading Margin of PTC) to 202 P/U (inclusive of 4 P/U towards Trading Margin of PTC) with effect from November 2011 as per the Clause 1.0 (24) & 4.0 of the Power Sale Agreement signed with PTC on dated 27.09.2006. As per the above mentioned Clauses, the Base Energy Rate / Tariff will be increased by 10% in every 5 years within the tenure of the Loan Repayment. Taking 26th November 2006 as the Mean Date of first Operation Year of Tala Hydro Electric Project, the tariff applicable from December, 2011 is 202 P/U (180 P/U x 110% + 4P/U) inclusive of 4 P/U towards PTC Trading Margin. Considering the above, the procurement cost of the estimated at Rs. 29.56 Crore for 143 MU of energy from Tala inclusive of Central Sector Transmission Loss of 2.29%.
399. Submission of GRIDCO was examined. The average rate per unit of TALA power is worked out to 206.90 P/U considering central transmission loss of 2.37% for FY 2012-13. The total cost of Tala power comes to Rs.29.85 crore for the approved drawal of 144.29 MU for FY 2012-13 and the same is approved by the Commission. The details are given in Table below.

Table – 53

	GRIDCO Proposal for 2012-13	Commission's Approval for 2012-13
Net Energy Drawal MU	143.00	144.29
Energy Charge (P/U)	202.00	202.00
Energy Charge incl. Tr.Loss (P/U)	206.73 (C.T.L. of 2.29%)	206.90 (C.T.L. of 2.37%)
Cost of Tala Power (Rs. In Crore)	29.56	29.85

400. **TEESTA:** GRIDCO has stated that CERC vide its Order dated 05.01.2010 fixed tariff @ 150.00 P/U on the scheduled saleable energy, which is applicable from the date of Commercial Operation. Considering 2.58% of Central Sector Transmission Loss, the tariff is estimated to 153.97 P/U. Thus, the estimated power purchase cost for 510 MU from Teesta-V HEP comes to Rs.78.53 Crore for FY 2012-13.
401. Further, GRIDCO in its filing Dt.09.02.2012 has submitted that the Hon'ble Central Electricity Regulatory Commission vide their order dated 05.12.2011 in petition no. 82 of 2011 has approved the generation tariff of Teesta-V Hydro Electric Projects for the period from 01.04.2009 to 31.03.2014 and fixed the annual fixed charges for the FY 2012-13 at Rs. 468.2982 Crore for Teesta Power Station. Accordingly NHPC has billed for such additional arrear fixed charges of Rs. 75.59 Crore the retrospectively from FY 2009-10.
402. After due scrutiny, the Commission approves the rate of Teesta Power based on CERC order dated 05.12.2011 and calculate the average rate per unit of Teesta power which comes to 214.44 P/U inclusive of central transmission loss of 2.37% for FY 2012-13. The cost of Teesta power comes to Rs.109.57 crore for the approved drawal of 510.95 MU during FY 2012-13. The details are given in Table below.

Table – 54

	GRIDCO Proposal for FY 2012-13	Commission's Approval for FY 2012-13
Net Energy Drawal MU	510.00	510.95
Annual Fixed Cost for 2012-13 as per CERC order dated 05.12.2011		468.2982
Energy Charge (P/U)	150.00	209.36
Energy Charge incl. Tr. Loss (P/U)	153.97 (C.T.L. of 2.58%)	214.44 (C.T.L. of 2.37%)
Cost of Teesta Power (Rs. In Crore)	78.53	109.57

Central Sector Thermal Power Stations:

403. GRIDCO in its ARR filing stated that Hon'ble CERC have finalised the Terms and Conditions of Tariff Regulations, 2009 for the 5-year period starting from April 01, 2009 to March 31, 2014. NTPC has submitted its applications for approval of tariff for different Stations. Pending finalization of tariff, Hon'ble CERC approved 95% of tariff projection made by NTPC. Accordingly, GRIDCO considers it prudent to take the Fixed Cost as approved by Hon'ble CERC vide its Order Dt.06.07.2011. However the CERC Orders are provisional subject to finalisation of tariff of different Stations by the Hon'ble Central Commission. The considered AFCs for different Stations are based on 95% of the Annual Fixed Costs applied by the NTPC in their Tariff Applications.
404. GRIDCO is to pay about Rs.509.59 Crore as Capacity Charge (Fixed Charge) towards its share from NTPC Stations at normative availability of 85% irrespective of the drawal from these Stations during FY 2012-13. The apportionment of Fixed Costs has been made as per the share of GRIDCO from Central Thermal Stations. With inclusion of

Central Transmission Loss (CTL), the projected Fixed Cost applicable to GRIDCO for its share of energy drawal from different Stations are shown in the Table below:

Table – 55

Projected Fixed Cost of NTPC-ER Central Thermal Stations for FY 2012-13

Central Thermal Stations	Annual Fixed Cost considered by GRIDCO for FY 2012-13 (Rs. Cr.)	GRIDCO Share (%)	F.C. share of GRIDCO for FY 2012-13 at Normative PLF of 85% (Rs. Cr.)	GRIDCO's Proposed drawal for FY12-13 after C.S. Loss of (MU)	Fixed Cost (P/U)
TSTPS –I	551.7790	31.80	175.47	2163.22	81.11
TSTPS –II	1101.5915	10.00	110.16	1343.46	82.00
FSTPS	873.6172	13.63	119.07	1472.38	80.87
KhSTPS-I	525.0464	15.24	80.01	844.98	94.70
KhSTPS-II	1214.0620	2.05	24.89	208.57	119.33
TOTAL	4266.10		509.59	6032.60	84.47

405. The Commission observed that tariff determination for a future year involves various assumptions and principles to arrive at the individual ARR components 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 thermal stations provisionally based on Orders already issued by CERC for these stations. Hence, the Commission accept the proposal of GRIDCO.
406. **Fixed Cost:** Tariff of Central Thermal Generating Stations is governed by CERC tariff notifications. Based on the CERC order Dt.06.07.2011, the fixed cost applicable for 2012-13 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 stations is shown in table below:

Table – 56

Fixed Cost of Central Thermal Stations for 2012-13

Name of Power Station	Fixed cost approved by CERC for 2012-13 (Rs. In Cr.)	GRIDCO share in %	GRIDCO's proposal for its share of Fixed Cost (Rs. In Cr.)	GRIDCO's proposal including Central Tr. Loss (P/U)	Commission's approval of Fixed Cost for 2012-13 (Rs. In Cr.)	Estimated energy Drawal after Central Tr. Loss of 2.37% (MU)	Commission's approval including Central Tr. Loss of 2.37% (P/U)
TSTPS –I	551.779	31.80	175.47	81.11	175.47	2161.45	81.18
TSTPS –II	1101.592	10.00	110.16	82.00	110.16	1359.40	81.04
FSTPS	873.617	13.63	119.07	80.87	119.07	1475.36	80.71
KhSTPS- I	525.046	15.24	80.02	94.70	80.02	846.86	94.49
KhSTPS-II	1214.062	2.05	24.89	119.33	24.89	209.01	119.08

407. **Energy Charge Rate (ECR):** GRIDCO stated that the method of calculation of Energy Charges Rates of Central Sector Stations (CGS) has undergone change from FY 2009-10. Previously, the Variable Charges or Energy Charges of CGS Stations included both the Charges towards Coal and Secondary Fuel Oil (SFO) and the same were recovered in two components such as; (i) Base Energy Charges and, (ii) Fuel Price Adjustment Charges (FPA). However, this concept has been changed with the implementation of CERC Tariff Regulations 2009-14. As per the new Regulation, monthly Energy Charges are being recovered on actual basis and it includes only the Coal Expenditures. Since, such recovery is on actual expenditure basis and there is no concept of Base Energy Charges as well as FPA. Further, the SFO expenditures are no more recovered in variable charges on monthly basis. Now SFO Expenditures are included in the Annual Fixed Cost. However, at the year-end, there is an Annual FPA towards actual SFO expenditures. GRIDCO has adopted the revised concept of calculation of Energy Charge Rate (ECR) based on new CERC Regulation while projecting its drawal from various NTPC-ER Stations. GRIDCO in its ARR application has proposed 30% escalation in ECR over the average ECR of first six months of FY 2011-12, considering the actual % of escalation of NTPC stations between April, 2011 to September, 2011 which is given below:

Table – 57

Energy Charge Rate (ECR) of NTPC Stations

Central Thermal Stations	Actual Cumulative ECR of 1st six month of FY 2011-12 (Rs./Unit)	Projection for FY 12-13 (30% hike over cumulative ECR of 1st six month of 2011-12) (Rs./Unit)
TSTPS Stage-I	2.25	2.92
TSTPS Stage-II	2.23	2.91
FSTPS	3.69	4.80
KhSTPS Stage-I	2.91	3.78
KhSTPS Stage-II	2.69	3.50

408. Further, GRIDCO submitted that the increase in ECR is attributable to abnormal hikes in the prices of coal which in fact is the consequence of decontrol of coal price by the Govt. of India. Coal India took the advantage of de-control policy of the Govt. and resorted to determine coal prices driven by market imperatives in place of the Cost plus concept in a bid to earn abnormal profit. As the coal prices are passed on to the beneficiaries by the Generators, resulting in increase of cost of power. GRIDCO sought for information under RTI Act-2005 on dtd. 28.04.2011 from M/s. Coal India Ltd. (CIL). On 1st Sept'2011, M/s. Coal India Ltd. submitted the replies to its queries which stated that the pricing of coal is completely decontrolled and CIL had been fixing the price of raw coal produced by its subsidiary companies including NEC with approval of its Board and the pricing of raw coal so fixed from time to time is based on:

- To offset the impact of increase in input cost for production of coal due to the upward movement of AICPI and WPI and revision of wages cost.
- Import parity pricing for higher grades of non-coking coal.

- *Market Driven Price* forming the benchmark for fixing the coal price for supply to deregulated sector.

On receipt of the above reply, GRIDCO again sought for information on details of calculation of fixation of 'F' & 'G' grade coal of MCL and of other subsidiaries along with the copy of the decision of Board of M/s. CIL in respect of decision of price hikes under the RTI Act. Till date, the reply from CIL is awaited.

409. As per CERC (Terms and Conditions of Tariff) Regulations, 2009 notified on dated 19.01.2009, the Energy Charge shall cover the primary fuel cost and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on Ex- Power Plant basis, at the Energy Charge rate of the month. The landed cost of fuel for the month shall include price of fuel correspondence to the grade and quantity of fuel inclusive of royalty, taxes, and duties as applicable, transportation cost and for the purpose of computation of Energy Charge shall be arrived at after considering normative transit and handling losses.
410. Actual bills submitted by NTPC to GRIDCO are scrutinized and it is observed that the Price of coal have increased substantially without much increase in GCV. The details price of coal and GCV as per bill served by NTPC to GRIDCO for the period from April, 2011 to December, 2011 are given in the table below:

Table – 58
Price of Coal & GCV value of CGSs

MONTH	FSTPS			KSTPS-I			KSTPS-II	TSTPS-I			TSTPS-II
	Price of Coal Rs/MT	GCV of Coal KCAL/ Kg	ECR P/U	Price of Coal Rs/MT	GCV of Coal KCAL/ Kg	ECR P/U	ECR P/U	Price of Coal Rs/ MT	GCV of Coal KCAL/ Kg	ECR P/U	ECR P/U
Apr-11	4,604.98	3,943.0	306.64	2,602.96	2,782.0	256.00	241.68	2,033.30	3,199.2	164.19	164.19
May-11	5,007.44	3,606.0	364.60	2,407.54	2,801.0	235.20	222.00	2,257.65	3,046.5	191.40	191.40
Jun-11	5,422.42	3,697.0	385.10	2,956.87	2,625.0	308.20	290.95	2,661.05	2,980.7	230.60	230.60
Jul-11	5,126.72	3,606.0	373.28	2,768.62	2,638.0	287.19	271.10	3,089.99	3,054.9	261.30	261.30
Aug-11	5,163.89	3,460.0	391.85	3,224.31	2,885.0	305.80	288.60	3,165.22	2,964.4	275.80	275.80
Sep-11	5,226.87	3,490.0	393.20	3,737.38	2,980.0	343.20	323.90	3,023.10	3,127.1	249.75	249.75
Oct-11	4,309.53	3,591.0	315.10	3,477.11	3,050.0	311.95	294.47	3,134.59	2,963.4	273.27	273.27
Nov-11	3,865.72	3,338.0	304.07	2,428.61	2,777.0	239.31	225.89	2,331.97	2,943.6	204.66	204.66
Dec-11	3,402.86	3,332.0	268.10	2,178.60	2,651.0	224.90	212.30	1,902.70	2,906.2	169.10	169.10
Jan-12	3,993.88	3,359.0	312.20	2,566.40	2,742.0	256.10	241.80	1,781.40	3,020.5	152.40	152.40
Avg. from 4/11 to 01/12	4,612.43	3,542.2	341.40	2,834.83	2,793.1	276.80	261.30	2,538.10	3,020.7	217.20	217.20

411. From the above table it is found that the ECR for FSTPS are varied from 268.10 p/u to 393.20 p/u, for KhSTPS-I, it varies from 224.90 p/u to 343.20 p/u, for KhSTPS-II, it varies from 212.30 p/u to 323.90 p/u, for TSTPS-I, it varies from 152.40 p/u to 275.80 p/u and for TSTPS-II, it varies from 152.40 p/u to 275.80 p/u for the period from April, 2011 to January, 2012. It is observed that the ECR have varied inconsistently. Hence it is difficult to assess the actual ECR for the ensuing year 2012-13.
412. The wide variation in ECR in recent times was due to the use of imported / high cost coal by NTPC for power generation in its Plants. Considering the above, the Commission estimated the ECR for FY 2012-13 taking 10% escalation over actual average ECR for

the period from April,2011 to January, 2012 to meet the variations as against an escalation of 30% proposed by GRIDCO as indicated in Table below.

Table – 59

Energy Charge Rate (ECR) of CGSs for 2012-13

(Figs in Paise/Unit)

Stations	GRIDCO's proposal with 30 % hike over Avg. ECR of 1st six months	Actual Average ECR for the period from Apr,11 to Jan,12 (excluding central Tr. Loss)	Approval of the Commission with an escalation of 10% over actual Avg ECR for the period from Apr, 2011 to Jan,2012 (excluding central Tr. Loss)	Approval of the Commission including central Tr. Loss of 2.37%
TSTPS –I	292.22	217.20	238.97	244.77
TSTPS –II	290.55	217.20	238.97	244.77
FSTPS	480.15	341.40	375.56	384.67
KHSTPS – I	377.91	276.80	304.46	311.85
KHSTPS – II	349.86	261.30	287.40	294.37

413. In case of any further variation in ECR during 2012-13 over and above 10% assumed by the Commission, the same may be recovered in accordance with the procedure and guidelines outlined in Appendix-7 read with the Regulations 60 of the OERC (Conduct of Business) Regulations, 2004. This would be over and above the normal tariff applicable. Alternatively such additional expenditure would be considered while determining the tariff for FY 2013-14.
414. **However, the Commission feels that the rise in fuel cost of thermal generating station is a great concern for the power sector of the country. As per the CERC norm, fuel cost is a pass through item, hence proper due diligence and cost control by the project authority becomes paramount importance for the consumer satisfaction point of view. The maximization of generation for earning incentive should have been the least priority for any model generator like NTPC. Therefore, it is necessary that GRIDCO and other Eastern Region Utilities should ask NTPC to give detailed monthwise break up of the quantity and price of coal procured through administrative price mechanism, through e-auction and through import along with the transportation cost, so that the same could be analysed by the Utilities in detail for regular interaction with NTPC field managers for effective cost control. In view of this, the Commission vide its letter dtd.15.02.2012 had already asked GRIDCO to file a comprehensive petition before CERC with full fact and figures regarding Fuel Price Adjustment bills claimed by NTPC towards purchase of power from Eastern Regional NTPC Stations as it has a great adverse impact on the retail supply tariff for the consumers of the State.**
415. **Further, the Committee headed by Principal Secretary to the Prime Minister met on 1st February, 2012 and during the meeting it was agreed that coal India Ltd. will**

sign Fuel Supply Agreements (FSAs) with power plants that have entered into long-term PPAs with power distribution companies and have been commissioned / would get commissioned on or before 31st March, 2015. For power plants that have been commissioned upto 31st December, 2011, FSAs will be signed before 31st March, 2012. The FSAs will be signed for full capacity of coal mentioned in the Letters of Assurance (LoA) for a period of twenty years with trigger level of 80% for levy of disincentive and 90% for levy of incentive. In case of any shortfall in fulfilling its commitment under the FSAs from its own production, Coal India Ltd. will arrange for supply of coal through imports or through arrangement with State/Central PSUs who have been allotted coal blocks. The proposed course of action has been approved by the Prime Minister.

416. In view of the above, Commission observed that all the Central Sector Thermal Power Stations are eligible for full quantity of coal under FSA at Administered Price Mechanism (APM) rate. They need not resort to any e-auction or procure high cost imported coal for blending. NTPC is expected to take up effectively with its coal suppliers on this issue and any legal, technical and commercial arrangement with NTPC and fuel suppliers shall be settled by themselves and in no case the burden of high cost coal over and above the APM price should be passed on to the consumers. GRIDCO is directed to take up the matter with NTPC and raise the issues in regional fora, if necessary, with CERC so that the variable cost of coal should be invariably passed on to the consumers with APM rate only.
417. **Year-end Adjustment Charges (YEA):** GRIDCO had proposed the year-end adjustment charges of central generating stations for FY 2012-13 to the tune of Rs. 12.877 crore with the projected CS loss. Further, in complying to the Commission's queries for details on YEA, GRIDCO on 16.01.2012 submitted the revised YEA charges proposal of Rs.13.32 Cr. for FY 2012-13 in line with the actual for FY 2010-11 as shown in the table below:

Table – 60

Year End Charges (YEA) Proposed for FY 2012-13 (Rs. Cr.)

Central Generating Stations	FPA due to Secondary fuel oil for FY 2010-11	Water/ Pollution Cess for FY 2010-11	Electricity Duty for FY 2010-11	Total YEA for FY 2010-11	C. S. Loss projected for FY 2012-13 (%)	Projection for FY 2012-13 with C.S. Loss
TSTPS –I	2.22	0.13	3.22	5.58	2.29%	5.70
TSTPS –II	1.40	0.05	1.67	3.12	3.52%	3.23
FSTPS	1.99	0.88	0.00	2.87	2.58%	2.95
KhSTPS –I	1.31	0.06	0.00	1.37	2.58%	1.41
KhSTPS –II	0.02	0.01	0.00	0.03	2.58%	0.03
Total	6.94	1.13	4.89	12.97		13.32

418. The Commission scrutinized the above proposal of GRIDCO and accepted the Year End Charges of Rs. 12.97 Cr. for the FY 2012-13 which is at the level of the actual Year End

Charges for the FY 2010-11. Accordingly, the year-end charges approved by the Commission including central transmission loss are given in the table below.

Table – 61

Year End Charges Approved for the FY 2012-13

Central Generating Stations	FPA due to Secondary fuel oil (Rs. Crore)	Water/ Pollution Cess (Rs. Crore)	Electricity Duty (Rs. Crore)	TOTAL (Rs. Crore)	Gross Energy drawal MU)	Rate excluding loss (P/U)	Rate including loss (P/U)
TSTPS –I	2.22	0.13	3.22	5.58	2213.92	2.52	2.58
TSTPS –II	1.40	0.05	1.67	3.12	1392.40	2.24	2.30
FSTPS	1.99	0.88	0.00	2.87	1511.17	1.90	1.95
KhSTPS –I	1.31	0.06	0.00	1.37	867.42	1.58	1.62
KhSTPS –II	0.02	0.01	0.00	0.03	214.08	0.14	0.14
Total	6.94	1.13	4.89	12.97	6198.99		

Transmission Charge for PGCIL System

419. GRIDCO in its ARR application submitted that Transmission charges of PGCIL are being determined applying the norms and principles laid down by CERC from time to time. As per the previous practice, PGCIL Transmission Charge was levied applying the weighted average of percentage share allocation of the constituents on the fixed cost of PGCIL that is known as Postage Stamp Method / Uniform Sharing Method.
420. CERC vide its Order dtd 15.06.2010 have notified a Regulation known as CERC (Sharing of Inter State Transmission Charges and Losses) Regulation, 2010 which shall be commenced from 01.07.2011 and shall remain in force for 5 years from the date of commencement unless reviewed earlier or extended by the CERC. According to this Regulation, PGCIL Charges shall be levied applying a new methodology known as Hybrid Methodology, which shall be sensitive to distance, direction as well as quantum of power flow using load flow studies. The sharing of Inter-State Transmission System (ISTS) Charges shall be based on the technical and commercial information provided by various customers to the evaluating agency known as Implementing Agency which shall calculate the point of connection charges for every customer (such as generator or demand customer) using the aforesaid method. The Point of Connection (PoC) charges shall be Rs/MW/Month. Subsequently, CERC Vide its Order Dtd. 29.06.11 have furnished the Slab PoC Rates for NEW Grid & SR Grid as well as the PoC Loss Slabs for the NEW Grid as well as the SR Grid. These have been specified in clause 11(4), (5), (6), (7) of the Regulation Dtd. 15.06.2010 as given below.

The **first part** of the CTU bill shall recover charges for use of the transmission assets of ISTS Licensees based on the Point of Connection methodology;

The **second part** of the bill shall recover charges for Additional Approved Medium Term Open Access;

The **third part** of the bill shall be used to adjust any variations in interest rates, FERV, rescheduling of commissioning of transmission asserts as allowed by the Commission for any ISTS Licensees;

The fourth part of the bill shall be a Deviation bill which shall charge the Designated Customer for deviation from the sum of the Approved withdrawal/injection,

421. Accordingly, PGCIL served its first bill based upon PoC on 03.08.2011 amounting to Rs.15,62,15,730/- as per the approved PoC Rates by CERC in the Order Dtd. 29.06.2011. In the aforementioned bill, GRIDCO has been billed at the approved injection / drawal PoC Rates for its Long Term Access. PGCIL is also furnishing the deviation bills as per the provision mentioned in the Regulation which is the Transmission Charges basically UI in nature & can not be predicted by GRIDCO at any point of time. Hence GRIDCO has not considered the payables / receivables on account of Deviation Bills. The Third Part of Bill has not yet been received by GRIDCO and expected to be received at any point of time. Considering the variation in MAT Rate from 11.33% considered earlier to 19.931% applicable now, GRIDCO has already paid Rs 5.96 Crore for variation in the MAT Rate. Hence, GRIDCO proposes Rs.6 Crore on account of variation in the interest rates for the ensuing Year.
422. GRIDCO have received a total of Short-Term Open Access Charges amounting to Rs. 4.51 Crore for the months of July-11 & Aug-11. Considering the uncertainty in earning the revenue, GRIDCO proposes Rs.4.51 Crore to be received for the ensuing year 2012-13. GRIDCO has paid an amount of Rs 7,99,28,752/- towards ULDC Charges from April, 2011 to October, 2011 (for period of 7 months). Accordingly, GRIDCO proposes to pay an amount of Rs 13.702 Cr. for the ensuing year 2012-13.
423. With the above facts, the Transmission Charges payable by GRIDCO for ensuing year comes to Rs.202.66 Crore. Considering energy drawal of 6199.01 MU from Central Sector and allowing 2.64% of CTU loss, the per unit PGCIL Transmission Charge including loss comes to 33.578 P/U or say 34 P/U.

Table – 62

Projected PGCIL Transmission Charges for 2012-13		GRIDCO's Projection for FY 12-13 (Rs. Cr)
Transmission charge payable by GRIDCO for 2012-13 towards First Bill		187.459
Year End Charges proposed		6.00
ULD and Communication Charges		13.702
less: allocable to short term customers		4.51
Net amount payable by GRIDCO towards Transmission Charges		202.66
Energy drawal by GRIDCO	(MU)	6199.010
PGCIL Transmission Charge	(P/U)	32.69
Transmission Loss %		2.64
PGCIL Transmission Charge including loss		33.578
	(P/U)	

424. Further, in the compliance to Commission's queries on ARR, GRIDCO submitted on dated 16.01.2012 that due to implementation of new regulation of CERC, which has been implemented from 01.07.2011, the monthly transmission charges have been hiked to about Rs.5 Crore/month with an annual impact of Rs. 60 Crore. Considering the sharp increase in monthly transmission charges under the new PoC regime, GRIDCO has filed an appeal before the Hon'ble High Court of Odisha vide Writ Petition © No. 29250 of 2011 against order of CERC with a prayer,
- To declare the afore-said CERC Regulation dtd 15.06.2010 related to the introduction of PoC System of levy of Transmission Charge by the PGCIL, as illegal and ultravires of the Electricity Act, 2003 and;
 - To stay the operation of imposition of Power Regulation on GRIDCO (in the event of failure for part or full payment of the new Transmission Charge) by the PGCIL as it will result in untold suffering to the people of the State.
425. Apart from GRIDCO, Power Entities in other States like West Bengal and Bihar etc have also moved similar Petitions like that of GRIDCO in their respective State High Courts praying for relief as has been prayed for by GRIDCO before the Hon'ble Odisha High Court. It is worthwhile to mention here that PGCIL vide its letter dtd 20.10.2011 had proposed imposition of Regulation of Power on GRIDCO due to part / non-payment of the revised new PoC Charges. Now, it is learnt that a Transfer Petition has been filed by the PGCIL, before the Hon'ble Supreme Court of India praying therein for transfer of all the PoC related Cases pending before the Hon'ble High Court of Odisha, Cuttack, the High Court of Kolkata (PoC related Case filed by WBSEDCL) and the High Court of Patna (PoC related Case filed by the BSEB to the Hon'ble Delhi High Court where a similar Case has been filed.
426. It is further submitted that the Hon'ble Supreme Court of India have also directed PGCIL to file the copy of the Writ Petition filed by them in the High Court of Delhi and ordered stay of further proceedings in the all respective High Courts such as the High Court of Odisha, the High Court of Kolkata and the High Court of Patna.
427. The Commission observed that the tariff for central transmission system is fixed by the principles and norms lay down by the CERC from time to time. CERC has finalized the Terms and Conditions of Tariff Regulations, 2009 for the period of 5-year starting from April 01, 2009 to March 31, 2014. Further, CERC vide their order dated 15.06.2010 have notified CERC (Sharing of Interstate Transmission Charges and Losses) Regulations 2010" in which CERC has formulated a new methodology for levying transmission charge which would be sensitive to distance, direction and quantum of power flow in conformity with National Tariff Policy and vide order on dt.29.06.2011, CERC has determined the PoC rates and Transmission losses in accordance with Regulation 17(2) of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulation,2010 which was applicable w.e.f from 01.07.2011. The above Order of CERC is Sub-Judice at different High Courts and Hon'ble Supreme Court of India.
428. Pending finalization of Court cases, the Commission feels it prudent to consider the PGCIL transmission charges based on the old practice of Postage stamp Method for the purpose of computation of the ARR of GRIDCO for FY 2012-13. Accordingly Commission considered provisionally the last bill raised by PGCIL to GRIDCO for the

month of June, 2011 based old method of computation of transmission charges for Central Sector Generating Stations. In the said bill PGCIL has claimed Rs.780.858 crore as annual fixed cost towards transmission charges of regional transmission system and Rs.14.831 Crore towards inter-regional transmission system for the whole region. Besides that PGCIL has also claimed an amount of Rs.4.876 crore towards Bi-lateral transaction of GRIDCO. Therefore, the Commission considers provisionally the same amount as fixed cost towards PGCIL transmission charges for FY 2012-13. Further, in the regional energy accounting prepared by ERPC, the availability of PGCIL regional transmission system is shown as 99.977%, Inter-regional transmission system as 99.9%.and Bi-lateral transaction as 100%. So the annual fixed cost for PGCIL transmission system taking the incentive into account for regional transmission system comes to Rs.796.63 Cr, for inter-regional transmission system comes to Rs. 15.12 Cr. and Rs.4.98 Cr. for bi-lateral transaction. During the year 2011-12 many transmission lines and sub-stations both in regional and inter-regional system has also brought into commercial operation. So, the Commission feels it prudent to give a rise of 12 % on total transmission charge based on the rise of 12 % on the actual transmission charges billed by PGCIL for June, 2011 over the OERC approved figure for the FY 2011-12. The details are given in the table below.

Table – 63

PGCIL Transmission Charges for FY 2012-13

	Commission's Approval for 2011-12	GRIDCO proposal for 2012-13 (based on PoC method)	Annual tariff claimed by PGCIL (as per June, 2011, dated 5.7.2011)	Commission's Approval for 2012-13
Annual Tr. Charge for Regional Transmission System (Rs. Crore)	710.375		780.858	
Annual Tr. Charge for Inter-Regional Transmission system chargeable to Eastern Region (Rs. Crore)	14.831		14.831	
Annual Tr. Charge for Bi-Lateral Transaction	2.151		4.876	
Total Annual Tariff			800.56	
Regional Transmission System including incentive (Rs. crore)	724.71		796.63	
Inter-Regional Transmission system chargeable to Eastern Region including incentive (Rs. crore)	15.13		15.12	
Annual Tr. Charge for Bi-Lateral Transaction including incentive	2.19		4.98	
Total annual tariff with incentive	742.03		816.73	
GRIDCO's Share form Regional Tr. System (Rs. crore)	102.15		112.29	
GRIDCO's Share form Inter-Regional	3.29		3.30	

	Commission's Approval for 2011-12	GRIDCO proposal for 2012-13 (based on PoC method)	Annual tariff claimed by PGCIL (as per June, 2011, dated 5.7.2011)	Commission's Approval for 2012-13
Tr. System (Rs. crore)				
Bi-Lateral Transaction (Rs. crores)	2.19		4.98	
Annual transmission charges payable by GRIDCO (Rs. Cr.)	107.63	187.459	120.563 (12.02% rise over OERC approval for 2011-12)	135.05 (a rise of 12.0% over June, 2011)

429. Hence, the Commission provisionally accepts the aforesaid amount of Rs. 135.05 Cr. and allows recovering the same in the tariff for FY 2012-13.
430. Considering the variation in MAT Rate from 11.33% considered earlier to 19.931% applicable now, GRIDCO has already paid Rs 5.96 Crore for variation in the MAT Rate. Hence, GRIDCO proposes Rs.6 Crore on account of variation in the interest rates for the ensuing Year. Hence, the Commission provisionally accepts the aforesaid claim of GRIDCO.
431. SLDC has implemented unified load despatch and communication scheme as a part of ULDC programme for the Eastern Region. GRIDCO has paid an amount of Rs 7, 99, 28,752/- towards ULDC Charges from April, 2011 to October, 2011 (for period of 7 months). Accordingly, GRIDCO proposes to pay an amount of Rs 13.702 Crs. for the ensuing year 2012-13. The Commission scrutinizes the bill for June, 2011 and provisionally accepts the claim of PGCIL of Rs.13.96 crore towards ULDC charges in the tariff for 2012-13.
432. GRIDCO submitted that GRIDCO have received an amount of Rs.4.51 Cr from the Short-Term Open access for the months of July,11 & Aug,11. Considering the uncertainty in earning the revenue, GRIDCO proposes Rs.4.51 Crore to be received for the ensuing year 2012-13. The Commission accepts the proposal of GRIDCO and considered an amount of Rs.4.51 Cr towards received from Short-Term Open access for 2012-13.
433. Taking all the above cost into account the Commission approves the PGCIL transmission charge payable by GRIDCO including the Central Sector Loss for the year 2012-13 comes to **21.56 P/U**. The details of total cost towards PGCIL transmission charges is indicated in the table below:

Table – 64

PGCIL Transmission Charges for FY 2012-13

	GRIDCO's Proposal	Commission's Approval
Annual transmission charges payable by GRIDCO (Rs. In Cr.)	187.459	135.05
GRIDCO's Share for Year end charge (Rs. crore)	6.00	6.00
ULD and communication charges	13.70	13.96
Less collected from short term customers	4.51	4.51
Total annual Transmission Charge Payable by GRIDCO for Central Transmission System (Rs. crore)	202.66	150.50
Net Energy Drawl by GRIDCO (MU)	6199.00 (Availability from Central Hydro not included by GRIDCO)	6980.22
PGCIL Tr. Charge including central loss (P/U)	33.58	21.56

434. Taking all the above cost into account the summary of power purchase from Central Generating Stations and its cost for GRIDCO approved for FY 2012-13 is given in the table below.

Table - 65

Generating Stations	Energy MU	Fixed Cost P/U	Energy Charge Rate P/U	FPA P/U	Year End charge P/U	Total rate P/U	Cost Rs. Crore	PGCIL Tr. Charge P/U	Total rate incl. PGCIL Tr. P/U
Chukka	272.90		162.86			162.86	44.44	21.56	184.42
Tala	144.29		206.90			206.90	29.85	21.56	228.46
Teesta	510.95		214.44			214.44	109.57	21.56	236.00
Sub total Hydro	928.14					198.11	183.87	21.56	219.67
TSTPS-I	2161.45	81.18	244.77		2.58	328.53	710.11	21.56	350.10
TSTPS-II	1359.40	81.04	244.77		2.30	328.10	446.02	21.56	349.66
FSTPS	1475.36	80.71	384.67		1.95	467.33	689.47	21.56	488.89
KHSTPS-I	846.86	94.49	311.85		1.62	407.96	345.48	21.56	429.52
KHSTPS-II	209.01	119.08	294.37		0.14	413.59	86.44	21.56	435.16
Sub Total Thermal	6052.08					376.32	2277.53	21.56	397.88
PGCIL Tr.charge for GRIDCO						21.56	150.50		
Total Central Sector (Thermal + Hydro)	6980.22					374.19	2611.90		
<i>NB:</i>	<i>The Rate are includes Transmission Loss of 2.37%.</i>								

435. Further, GRIDCO has projected an amount of Rs.3.15 crore towards payment of ERLDC fees and charges consisting of System Operation Charges (SOC) and Market Operation Charges (MOC) for the FY 2012-13. GRIDCO submitted that CERC vide its order dtd.18.09.2009 had framed Regulation on CERC (Fees and Charges of Regional Load Despatch Centres & Other Related Matters) Regulations, 2009 based on which ERLDC shall levy and collect fees and charges from the users towards its SOC and MOC. GRIDCO being the State Designated Entity under the Single Buyer Model has the Odisha Share allocation from the Central Sector Generating Stations in its favour and thus comes under the category of Distribution Licensee/ Buyers and hence, liable to pay the System Operation Charges & Market Operation Charge claimed by the ERLDC. The total projected SOC & MOC payable by GRIDCO to ERLDC is calculated as Rs.3.15 crore for the ensuing year 2012-13. The Commission approves the same and pass through in the tariff.
436. GRIDCO's proposal for the cost of power purchase from various generating stations and the Commission's approval based on least cost power purchase for the FY 2012-13 are given in the table below:

Table - 66
GRIDCO's Proposal & Commission's Approval for FY 2012-13

Generators	GRIDCO's PROPOSAL FOR FY 2012-13			COMMISSION's APPROVAL FOR FY 2012-13		
	Energy	Total Rate	Total cost	Energy	Total Rate	Total cost
	MU	P/U	Rs. Cr.	MU	P/U	Rs. Cr.
HYDRO (OLD)	3,667.19	64.44	236.31	3,676.86	66.05	242.87
Indravati	1,944.36	78.24	152.13	1,942.38	79.26	153.96
Machakund	262.50	30.68	8.05	262.50	30.51	8.01
Total Hydro	5,874.05	67.50	396.49	5,881.74	68.83	404.84
OPGC	2,864.82	229.69	658.02	2,890.82	195.15	564.14
TTPS (NTPC)	2,957.32	257.58	761.75	2,957.32	179.87	531.94
IPPs	3,556.92	278.91	992.06	3,556.92	278.91	992.06
CGPs	1,121.28	286.21	320.92	696.10	286.21	199.23
Co-Generation Plants	621.96	283.02	176.03	665.76	283.02	188.42
Small Hydro (RE)	300.00	368.00	110.40	300.00	368.00	110.40
Biomass Energy (RE)	122.00	487.00	59.41	122.00	501.00	61.12
Solar Energy (RE)	46.00	517.52	23.81	46.00	517.52	23.81
TOTAL STATE	17,464.35	200.34	3,498.89	17,116.66	179.71	3,075.96
CHUKHA	263.00	196.30	51.63	272.90	162.86	44.44
Tala HPS	143.00	240.21	34.35	144.29	206.90	29.85
Teesta-V	510.00	248.48	126.72	510.95	214.44	109.57
Total Central Hydro	916.00	232.21	212.70	928.14	198.10	183.87
TSTPS St-I	2,163.22	409.55	885.95	2,161.45	328.53	710.11
TSTPS St-II	1,343.46	408.50	548.80	1,359.40	328.10	446.02
FSTPS	1,472.38	596.33	878.02	1,475.36	467.33	689.47
KhTPS St-I	844.98	507.84	429.11	846.86	407.96	345.48

Generators	GRIDCO's PROPOSAL FOR FY 2012-13			COMMISSION's APPROVAL FOR FY 2012-13		
	Energy	Total Rate	Total cost	Energy	Total Rate	Total cost
	MU	P/U	Rs. Cr.	MU	P/U	Rs. Cr.
KhTPS St-II	208.57	502.92	104.89	209.01	413.59	86.44
Total Central Thermal	6,032.61	471.90	2,846.78	6,052.08	376.32	2,277.53
Total Central Sector	6,948.61	440.30	3,059.48	6,980.22	352.63	2,461.40
From other sources	474.62	450.00	213.58	-		
PGCIL Tr. Charge					21.56	150.50
ERLDC Charges			3.15		0.45	3.15
Other Cost towards SPO			5.80			
TOTAL GRIDCO	24,887.58	272.46	6,780.91	24,096.98	236.17	5,691.02

Rebate for Prompt Payment from the Generators

437. 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 is payable by GRIDCO to the generators.
438. 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.

GRIDCO Finance

439. The Annual Revenue Requirement for the financial year 2012-13 filed by GRIDCO includes an amount of Rs.4.88 cr. towards employees cost. An analysis of the employees cost under major head for 2012-13 along with the figure approved for 2011-12 is depicted in table below:

Table - 67

(Rs. Cr.)

	2011-12 (Approved)	2012-13 (Proposed)
Basic Pay	1.65	1.76
DA	0.91	1.27
HRA	0.25	0.21
Medical reimbursement	0.08	0.18
Others	0.62	0.84
Terminal benefit	0.70	0.62
Total	4.21	4.88

440. GRIDCO incurred Rs.3.31 cr. towards employees cost for the FY 2010-11 based on audited data filed with the Commission.
441. For determination of Basic Pay + GP, Commission in line with the orders of the last year relied on the data of actual salary drawn during last 5 months of the financial year 2011-12. GRIDCO in reply to query furnished the following data.

Table - 68

(Rs. Cr.)

Month of drawal	Basic Pay + GP
7/2011	0.12
8/2011	0.12
9/2011	0.13
10/2011	0.13
11/2011	0.13

442. Average drawal per month worked out to Rs.0.126 cr. approximately. Extrapolating the same for a period of 12 months and factoring in 3% of normal annual increment the projected Basic Pay + GP for 2012-13 works out to Rs.1.56 cr.
443. The present DA rate as notified by Govt. of Odisha is 58% with effect from 01.07.2011. In past there has been a periodic rise in DA with effect from 1st January and 1st July every year. Last time the incremental DA rate was 7%. With anticipated rise in DA @7% in 01.01.2012, 01.07.2012 & 01.01.2013 the annual average DA for the FY 2012-13 is evaluated at 72%.
444. In respect of other major expenditure such as medical allowance, HRA the following principle has been adopted.
- Medical reimbursement - 5% of Basic Pay + GP
House Rent Allowance - 15% of Basic Pay + GP, limiting to the claim made by licensees in their filing.
445. With the above principle the approved employees cost thus determined for 2012-13 is shown in table below:

Table - 69

(Rs. Cr.)

	2011-12 (Approved)	2012-13 (Proposed)	2012-13 (Approved)
Basic Pay + GP	1.65	1.76	1.56
DA	0.91	1.27	1.12
HRA	0.25	0.21	0.21
Medical Allowance	0.08	0.18	0.08
Others	0.62	0.84	0.70
Terminal benefit	0.70	0.62	0.62
Total	4.21	4.88	4.29

Commission thus approves an amount of Rs.4.29 crore towards employees cost as against an amount of Rs.4.88 crore proposed by licensee.

Repair and Maintenance

446. GRIDCO proposes an amount of Rs.0.25 cr. under the head repair and maintenance out of which 0.15 cr. is towards building repair and maintenance. Remaining 0.10 cr. is against vehicle repair, furniture repair and repair of office equipments. On scrutiny of the audited accounts for 2010-11, it is revealed that repair and maintenance expenses are booked only against Motor Vehicle & furniture and fixture.

447. The Commission therefore disallows the claim of Rs.0.15 cr. booked against building repair and maintenance and approves an amount of Rs.0.10 cr. only towards repair and maintenance of vehicle, furniture, fixture and office equipment for the FY 2012-13.

Administration and General Expenses

448. During financial year 2012-13, GRIDCO proposed an amount of Rs.3.89 cr. under the head Administrative and General expenses, inclusive of an amount of Rs.1.00 cr. towards license fees payable to OERC. The audited account for FY 2010-11 excluding license fee reveals an amount of Rs.2.13 cr. Factoring inflation over the audited figure (9.47% for 2011-12 & 8.87% for 2012-13), the Administrative & General expenses for 2012-13 works out to Rs.2.48 cr.
449. As regards license fee, the Commission has decided to revise the same from Rs.1.00 cr. to Rs.1.25 cr. with effect from 01.04.2012. Notification to this effect is to be issued soon.
450. Taking into account the revised license fees of Rs.1.25 cr., the A&G expenses for FY 2012-13 is approved at Rs.3.73 cr. (2.48+1.25)

ERLDC, NLDC & ULDC Fees

451. The proposed expenditure under this head is estimated at Rs.1.32 cr. for 2012-13, which Commission approves in line with the orders of the previous years.

Interest on Loan

452. GRIDCO claimed an amount of Rs.546.90 cr. under this head for the FY 2012-13. As submitted by GRIDCO the interest and financial charges are related to power purchase. The detailed statement is furnished in TRF-3. On scrutiny of the figures submitted by licensee, it is found that all the loans upto 31.03.2008 are inherited by GRIDCO at the time of demerger of GRIDCO into GRIDCO & OPTCL. After that the actual loans availed in different financial years are given as follows:

Table - 70

(Rs. Cr.)

Financial Year	Gross Amount of Loan availed
2008-09	300
2009-10	1212.77
2010-11	1640.71
2011-12	338.29

453. A table showing loan position of GRIDCO as on 31.03.2013 and interest claimed for 2012-13 is depicted below:

Table – 71

SI No	Particulars	Rate of Interest	OB as on 01-04-10	2010-11			2011-12			2012-13			Interest due for the year
			Principal	Principal			Principal			Principal			
				Addition	Repayment	CB as on 31-3-11	Addition	Repayment	CB as on 31-3-12	Addition	Repayment	CB as on 31-3-13	
A	upto 31-03-2008												
1	State Govt.(WCL)	13.00%	120.00	-	-	120.00	-	-	120.00	-	120.00	(0.00)	15.60
2	St.Govt (OPGC Adj.)	10.50%	42.54	-	-	42.54	-	-	42.54	-	34.81	7.73	4.47
3	NTPC (Govt.Bonds)	8.50%	827.16	-	-	827.16	-	-	827.16	-	441.15	386.00	76.49
4	Bond PF/99 (P.Trust)	8.00%	113.37	-	15.48	97.89	-	32.63	65.26	-	32.63	32.63	4.03
5	Union Bank of India- III	12.50%	48.17	-	14.31	33.86	-	14.29	19.57	-	14.29	5.29	1.63
6	Union Bank of India- IV	13.75%	64.69	-	16.70	47.98	-	16.67	31.32	-	16.67	14.65	3.26
7	Allahabad Bank - I	8.25%	3.55	-	3.55	-	-	-	-	-	-	-	-
8	Allahabad Bank - II	8.25%	28.43	-	10.72	17.71	-	10.72	6.99	-	6.99	-	0.21
9	Allahabad Bank - III	8.25%	19.19	-	7.14	12.05	-	7.14	4.91	-	4.91	-	0.16
10	Dena Bank - I		11.49	-	11.49	-	-	-	-	-	-	-	-
11	Dena Bank - II	8.25%	42.56	-	11.52	31.04	-	11.52	19.52	-	11.52	8.00	1.16
12	Andhra Bank-I	12.25%	21.20	-	7.14	14.05	-	7.14	6.91	-	6.91	-	0.45
13	Syndicate Bank-I_50cr	8.25%	19.99	-	10.00	9.99	-	9.99	-	-	-	-	-
14	Karnataka Bank		4.52	-	4.52	-	-	-	-	-	-	-	-
	Sub-total		1,366.84	-	112.58	1,254.27	-	110.09	1,144.17	-	689.88	454.29	107.46
B	Availed during 2008-09												
15	Uco Bank -I (200 cr)	12.50%	161.11	-	66.67	94.44	-	66.67	27.78	-	27.78	(0.00)	0.87
16	Uco Bank -II (100 cr)	12.50%	97.20	-	33.60	63.60	-	33.60	30.00	-	30.00	-	1.84
	Sub-total		258.31	-	100.27	158.04	-	100.27	57.78	-	57.78	(0.00)	2.71
C	Availed during 2009-10												
17	Union Bank STL- V	11.50%	100.00	-	0.00	100.00	-	-	100.00	-	18.33	81.67	10.62
18	Union Bank TL- VI	12.50%	199.79	-	36.95	162.83	-	40.20	122.63	-	40.20	82.43	13.03
19	Andhra Bank-II	11.50%	200.00	-	21.68	178.32	-	40.00	138.32	-	40.00	98.32	15.00
20	Karnataka Bank_II-100cr	12.50%	100.00	-	8.39	91.61	-	25.08	66.53	-	25.08	41.45	6.33
21	Canara -I_100 cr TL	12.00%	100.00	-	23.11	76.89	-	25.20	51.69	-	25.20	26.49	5.02
22	Canara -II_100 cr TL	12.25%	100.00	-	15.04	84.96	-	20.04	64.92	-	20.04	44.88	6.97
23	Kalinga GB -50 cr	12.00%	50.00	-	0.00	50.00	-	5.00	45.00	-	10.00	35.00	5.05
24	Karur Vbank_I - 50 cr	12.00%	50.00	-	-	50.00	-	4.17	45.83	-	10.00	35.83	4.94
25	Dena Bank - III	12.50%	100.00	-	-	100.00	-	1.67	98.33	-	20.04	78.29	10.92
26	Uco Bank -III (100 cr)	12.50%	99.99	-	-	99.99	-	2.80	97.19	-	33.60	63.59	9.82
27	Uco Bank -IV (200 cr)	12.50%	113.00	87.00	-	200.00	-	5.56	194.44	-	66.67	127.78	19.68
	Sub-total		1,212.77	87.00	105.17	1,194.61	-	169.71	1,024.89	-	309.16	715.73	107.40
D	Availed during 2010-11												

SI No	Particulars	Rate of Interest	OB as on 01-04-10	2010-11			2011-12			2012-13			Interest due for the year
			Principal	Principal			Principal			Principal			
				Addition	Repayment	CB as on 31-3-11	Addition	Repayment	CB as on 31-3-12	Addition	Repayment	CB as on 31-3-13	
28	Karur Vbank_II - 50 cr	11.50%	-	50.00	-	50.00	-	-	50.00	-	5.83	44.17	5.83
29	Union Bank STL- VII_10cr	12.00%	-	10.00	10.00	-	-	-	-	-	-	-	-
30	Union Bank- VII_100_2010-11	12.00%	-	100.00	-	100.00	-	-	100.00	-	-	100.00	11.50
31	Allahabad Bank - IV	12.00%	-	200.00	-	200.00	-	-	200.00	-	8.34	191.66	22.92
32	Syndicate Bank-II_200cr	11.50%	-	200.00	-	200.00	-	-	200.00	-	16.67	183.33	22.68
33	Canara -III_200 cr TL	10.40%	-	200.00	0.14	199.86	-	-	199.86	-	-	199.86	23.28
34	Canara_IV -100_2010-11	11.50%	-	100.00	-	100.00	-	-	100.00	-	-	100.00	11.55
35	Bank of India _100cr_I	11.50%	-	100.00	-	100.00	-	-	100.00	-	16.67	83.33	11.09
36	Bank of India _200cr_II	11.65%	-	200.00	-	200.00	-	-	200.00	-	27.80	172.20	22.75
37	Cental Bank_I - 100 cr	11.55%	-	100.00	0.01	99.99	-	-	99.99	-	14.63	85.36	11.44
38	IOB_I - 200_2010-11	10.25%	-	200.00	-	200.00	-	-	200.00	-	-	200.00	23.00
39	Andhra Bank_III_2010-11	11.75%	-	93.71	-	93.71	106.29	-	200.00	-	-	200.00	23.00
	Sub-total		-	1,553.71	10.14	1,543.57	106.29	-	1,649.86	-	89.94	1,559.92	189.05
E	Availed during 2011-12												
40	Union Bank TL-VIII	11.50%	-	-	-	-	132.00	-	132.00	-	-	132.00	15.18
41	Canara - V_100_2011-12	12.75%	-	-	-	-	100.00	-	100.00	-	-	100.00	12.75
42	Proposal for Sep-11 to Mar-12	12.00%	-	-	-	-	500.00	-	500.00	-	-	500.00	60.00
	Sub-total		-	-	-	-	732.00	-	732.00	-	-	732.00	87.93
	TOTAL (A+B+C+D)		2,837.93	1,640.71	328.15	4,150.49	838.29	380.07	4,608.70	-	1,146.76	3,461.94	494.54
D	Finance & Other Charges												
38	Int. on Average Overdraft p.m (LC)	12.00%											17.50
39	Guarantee Commission	0.50%											10.14
40	Rebate & other Finance Charges												-
41	Proposed interest on Securitised dues to OHPC	8.00%											24.72
E	Grand Total (A+B+C+D)		2,837.93	1,640.71	328.15	4,150.49	838.29	380.07	4,608.70	-	1,146.76	3,461.94	546.90

Loan during FY 2008-09

454. For the financial year 2008-09 GRIDCO availed loan of Rs.300.00 cr. to meet the deficit in cash flow attributable to unfavorable hydro position resulting in procurement of power at a higher cost. On this loan Commission had approved the interest impact in the ARR of FY 2010-11. (Para 455 of BSP order 2010-11) and in the ARR of FY 2011-12 (Para 461 of the BSP order 2011-12). In line with earlier orders, the Commission approves interest on the loan amount of Rs.300 cr. availed during 2008-09. Out of the original amount of Rs.300 cr. the outstanding loan amount as on 31.03.2012 is shown at Rs.57.78 cr. after making repayment. The interest impact proposed for 2012-13 is Rs.2.71 cr. Commission approves the same.

Loan during FY 2009-10

455. For the financial year 2009-10 GRIDCO availed loan of Rs.1213.00 cr. Commission in the BSP order for FY 2011-12 had given the reason for allowing interest on the loan of Rs.1213.00 cr. availed during 2009-10. The relevant para 455 to 456 of the order 2011-12 is quoted below:

“The audited account for the FY 2009-10 were scrutinized and it is found that GRIDCO during FY 2009-10 posted a loss of Rs.146.53 cr. after making a provision of Rs.1414.31 cr. towards regulatory asset. In note to the accounts GRIDCO stated that pursuant to OERC order dtd.20.03.2010 in Case No.144/2009 considering revenue requirement, the revenue gap of Rs.1414.31 cr. to be allowed to be recovered in future tariff determination over a period of 6 years with effect from 2010-11 for which the company has already incurred and accounted for the cost as “Regulatory Asset” and has carried forward the same under the head loans and advance (Schedule-9) to be adjusted against future tariff over a period of 6 years.

The Commission in its last tariff order addressed the following:

- 457 *The Cash flow statement submitted by GRIDCO for the FY 2009-10 (upto January, 2010) was examined. Abstract of the cash flow is depicted in table below:*

A.	Inflow	Amount (Rs. cr.)
1.	Revenue from DISCOMs excluding Transmission charges	2025.14
2.	Revenue from UI charges, trading, ICCL, NALCO	195.67
3.	Miscellaneous income	116.81
	Total:	2337.62
B.	Outflow	
1.	Power Purchase Bill	3067.77
2.	Employees Cost	2.99
3.	A&G expenses	8.08
4.	Interest	103.16
5.	Miscellaneous	6.63
	Total	3188.63
	Gap	(-)851.01
	Add opening cash balance	(-)64.11
	Net cash deficit	(-)915.12

- 458 *In FY 2009-10 of the BSP order (vide Para-444), Commission left a gap of Rs.637.39 crore which along with Rs.245.16 crore towards repayment of principal was added upto Rs.882.55 crore. The Commission had directed to bridge the gap through export earning, UI charges and other revenues. But real deficit position as seen from the cash flow is Rs.915.12 crore (upto January, 2010) without considering repayment of principal approved by the Commission in BSP order 2009-10. Thus, net cash deficit including the principal amount would tentatively be Rs.1160.28 crore by the end of January, 2010, which Commission*

treats as regulatory asset for the time being which may be revised after audited data are available. This amount will be amortised over a period of six years from now. Keeping the above facts in view, Commission feels it justified to allow the interest impact of Rs.82.31 crore due for the FY 2010-11 on the loan amount of Rs.900 crore proposed by GRIDCO.

The actual net cash deficit after the completion of the FY 2009-10 works out to Rs.1414.31 cr. which is exhibited in Annexure-I of the filing made by GRIDCO for the FY 2011-12. The relevant portion of the Annexure-I is reproduced below:

(Rs. Crore)	
Particulars	GRIDCO estimated Regulatory Assets in line with OERC consideration for FY 2009-10
Opening Balance	(64.11)
Cash Inflow from DISCOMs :	
WESCO	960.83
NESCO	599.39
SOUTHCO	161.13
CESU	698.31
Sub-Total	2419.67
From UI, Trading & Other:	
UI Charges	76.37
Trading	0.78
ICCL & Nalco	129.07
Sub-Total	206.22
From Other Source:	
OPTCL TC from DISCOMs	-
Loan	-
Misc.	140.19
OD Availed	-
Sub-Total	140.19
Total Cash Inflow	2766.07
Cash Outflow:	
Power Purchase	3720.60
OPTCL Wheeling Charge (DISTCOs, NALCO & ICCL)	-
Employees Cost	3.74
Admn. & General Expenses	10.03
Loan Repayment	245.16
Interest & Financial Charges	131.27
Misc	5.47
OD Paid	-
Total Cash Outflow	4116.27
Closing Balance	(1414.31)

In view of the above, Commission feels it is justified to approve Rs.1414.31 cr. as regulatory asset to be amortised over a period of six years from 2010-11. Hence Commission feels it prudent to allow interest on loan value of Rs.1213.00 cr. availed during 2009-10 to meet the shortfall in power purchase cost for the year 2009-10.”

In the light of the above observation Commission feels it justified to allow interest on loan value of Rs.1213.00 cr. On this account GRIDCO proposed interest of Rs.107.40 cr. during financial year 2012-13. Commission approves the same after due check.

Loan during FY 2010-11

456. During financial year 2010-11 GRIDCO availed an amount of Rs.1640.71 cr. to meet deficit in cash flow. The cash flow statement for the financial year 2010-11 filed by GRIDCO in its reply to query was examined. Abstract of the cash flow submitted by GRIDCO is depicted in the table below:

Table - 72

(Rs. Cr.)

A. Cash inflow	
Revenue from DISCOMs	3334.17
Revenue from UI & Trading	453.46
Total	3787.53
B. Cash Outflow	
Purchase of power for DISCOMs	4626.22
Purchase power (UI & Trading)	93.90
Loan repayment	328.15
Interest payment	244.98
Employees cost	3.96
A&G expenses	8.02
Miscellaneous Payment	32.50
Total	5337.73
C. Shortfall (A-B)	1550.20
D. Shortfall in opening balance	171.98
Total shortfall	1722.18

457. In order to finance the cash shortfall, GRIDCO borrowed an amount of Rs.1640.71 cr. during 2010-11. The audited accounts for the year 2010-11 was also scrutinized. Analysis of the loan obtained during 2010-11 was given below:

Table - 73

(Rs. Cr.)

1	Loan position as on 31.03.2011	4963.16
2	Loan position as on 31.03.2010	3556.73
3	Difference (Net loan during 2010-11)	1406.43
4	Less interest accrued and due included in net loan i.e. in item 3	93.68
5	Add repayment made during 2010-11 as per cash flow of 2010-11	328.15
6	Total loan availed (3-4+5)	1640.80

458. The main reason for shortfall in cash is due to the fact that the amount of revenue realized by GRIDCO from DISCOMs & from UI & Trading is nearby Rs.1,000 cr. less than the amount paid by GRIDCO to generators. In addition to above, the payment made by GRIDCO to financial institution towards debt services & other establishment cost accounted for nearly Rs.600 cr.
459. In view of above analysis and observation, Commission feels that GRIDCO has no option but to borrow money from financial institutions to discharge the current obligation of generators i.e. towards power purchase and to meet statutory obligation of debt services.
460. Hence Commission allows interest impact on the loan amount of Rs.1640.71 cr. as a pass through in the revenue requirement for the FY 2012-13. On this account GRIDCO proposed the interest of Rs.189.05 cr. Commission approves the same amount of 189.05 cr. towards interest for FY 2012-13.

Loan during FY 2011-12

461. In the financial year 2011-12 GRIDCO has availed Rs.338.29 cr. of loan till November, 2011 of the financial year and propose to avail another loan of Rs.500.00 cr. during remaining period of the financial year to meet the cash deficit.
462. The cash flow statement submitted by GRIDCO for the FY 2011-12 (position upto November 2011) was examined. Abstract of the cash flow submitted by GRIDCO is depicted below:

Table - 74

Cash Flow Statement FY 2011-12 (Upto November, 2011)

(Rs. Cr.)	
A. Cash inflow	
Revenue from DISCOMs	2819.21
Revenue from UI & Trading	270.81
Total	3090.02
B. Cash Outflow	
Purchase of power for DISCOMs	2984.23
Purchase power (UI & Trading)	31.48
Interest and finance charges	252.55
Loan repayment	243.53
Employees cost	1.42
A&G expenses	7.62
Miscellaneous Payment	21.00
Total	3541.83
C. Cash deficit for FY 2011-12	451.81

463. To meet the cash shortfall GRIDCO borrowed an amount of Rs.338.29 cr. during 2011-12 (upto November 2011). The Commission therefore allows interest impact on the loan amount of Rs.338.29 cr. as a pass through in the revenue requirement for 2012-13. On this account the interest claimed by GRIDCO amounting Rs.27.93 cr. is approved by the Commission for 2012-13. As regards propose loan of 500 crs as stated above the interest impact shall be considered in trueing up exercise.

464. Besides above, the status of loan as on 31.03.2008 is old loans inherited by GRIDCO at the time of demerger of GRIDCO into GRIDCO & OPTCL. In line with the orders of the Commission passed in earlier years, Commission allows interest on such loans excepting loans from State Govt. and Pension Trust Bond.
465. Regarding interest on loan due to State Govt., the Govt. of Odisha vide letter No.2404 dtd.21.03.2011 have given the following decision, in response to the suggestion of the Commission vide letter No.4440 dtd.19.07.2010. The extract of the letter is given below:
- “i) Moratorium on debt servicing by GRIDCO & OPTCL and OHPC to the State Government till the power sector turns around except the amount in respect of loan from the World Bank to the extent to the State Government is required to pay to Government of India.*
 - ii) Keeping in abeyance the effect of up-valuation of assets of OHPC and GRIDCO/OPTCL till the sector turns around.*
 - iii) The OHPC, GRIDCO & OPTCL shall not be entitled any RoE till the Sector becomes viable on cash basis.*
- (a) Government in Finance Department, after careful examination of the issues, has observed that “an open ended commitment by the State Government to extend these supportive measures would be undesirable. At the first stage these supports may be continued till 2012-13 after which a review should be made by the State Government and on that basis a view could be taken on the need for further extension of these measures”.*
466. The Commission vide letter No.JT(FN-175/02/2502 dtd.06.01.2012 requested the State Govt. to issue the amended notification as suggested by the Commission vide their letter No.4440 dtd.19.07.2010, so that this would appropriately be reflected while determining the annual revenue requirement of the DISCOMs for the year 2012-13. In absence of specific communication in this regard by 31.01.2012, the Commission would assume the extension of the benefit notified on 29.01.2003 and 06.05.2003 till the sector as a whole turn around.
- However, in the meantime the State Govt. in Energy Department vide letter No.LC-34/2012-2261 dtd.19.03.2012 has communicated as follows:
- “The suggestions of the Hon’ble Commission to keep the support of Govt. in the matter of keeping the effect of upvaluation of assets of GRIDCO/OPTCL and OHPC, allowing the moratorium on debt services to the State Govt. till the sector turns around and not allowing ROE to GRIDCO/OPTCL and OHPC till the sector becomes viable on cash basis has not been agreed to by the Govt. in Finance Deptt. However steps have been taken in regard to other recommendations of the Hon’ble Commission in their letter No.4440 dt.19.07.2010 and the proposal will be placed before the cabinet for approval after which required notification will be issued.”*
467. Since the State Govt. vide their letter No.2404 dtd.21.03.2011 have extended the benefits/concession as stipulated in the Notification No.1068 dtd.29.01.2003 read with Notification No.5302 dtd.06.05.2003 till 2012-13, the effect of up-valuation such as depreciation, return on equity and interest on State Govt. loan and Bond is not been taken into account for FY 2012-13.

468. In view of above, Commission does not consider interest on state Govt. loan as a pass through in the revenue requirement of GRIDCO for the financial year 2012-13. With the above observation, interest liability for 2012-13 proposed by GRIDCO and approved by Commission is depicted in the table below:

Table – 75

Sl. No.	Particulars	Rate of interest	2012-13	
			Interest due for the year as per the revised proposal of GRIDCO	Approval
A. Existing Loan as on 01.4.2008				
1	State Govt. (WLC)	13.00%	15.60	-
2	State Govt. (OPGC Adj.)	10.50%	4.47	-
3	NTPC (Govt. Bonds)	8.50%	76.49	70.40
4	Union Bank of India-III	12.50%	1.63	1.63
5	Union Bank of India-IV	13.75%	3.26	3.26
6	Allahabad Bank-II	8.25%	0.21	0.21
7	Allahabad Bank-III	8.25%	0.16	0.16
8	Dena Bank-II	8.25%	1.16	1.16
9	Andhra Bank-I	12.25%	0.45	0.45
10	Pension Trust Bond	8.00%	4.03	-
	Sub Total		107.46	77.27
B. Loan availed during FY 2008-09 to meet the Revenue Deficit				
11	Uco Bank-I (200 cr.)	12.50%	0.87	0.87
12	Uco Bank-II (100 cr.)	12.50%	1.84	1.84
	Sub Total		2.71	2.71
C. New Loan availed during FY 2009-10 to meet the Revenue Deficit				
13	Union Bank of India-V-100 cr.	11.50%	10.62	10.62
14	Union Bank of India-VI-200 cr.	12.50%	13.03	13.03
15	Andhra Bank-II-200 cr.	11.50%	15.00	15.00
16	Canara-I-100 cr.	12.00%	5.02	5.02
17	Canara-II-100 cr.	12.25%	6.97	6.97
18	Kalinga GB-50 cr.	12.00%	5.05	5.05
19	Kaur Vysya Bank-50 cr.	12.00%	4.94	4.94
20	Karnataka Bank-II-100 cr.	12.50%	6.33	6.33
21	Uco Bank III- 100 cr.	12.50%	9.82	9.82
22	Uco Bank IV- 113.00 cr. (Sanctioned Rs.200 cr.)	12.50%	19.68	19.68
23	Dena Bank III- 100 cr.	12.50%	10.92	10.92
	Sub Total		107.40	107.40

Sl. No.	Particulars	Rate of interest	2012-13	
			Interest due for the year as per the revised proposal of GRIDCO	Approval
D. New Loan availed during FY 2010-11 to meet the Revenue Deficit				
24	Uco Bank IV- 87.00 cr. (Sanctioned Rs.200 cr.)	12.50%	Included in item No.22	Included in item No.22
25	Bank of India-I-100 cr.	11.50%	11.09	11.09
26	Bank of India-II-200 cr.	11.65%	22.75	22.75
27	Central Bank-I-100 cr.	11.55%	11.44	11.44
28	Karur Vysya Bank-II-50 cr.	11.50%	5.83	5.83
29	Canara Bank-III-200 cr.	10.40%	23.28	23.28
30	Canara Bank-IV-100 cr.	11.50%	11.55	11.55
31	Syndicate Bank-II-200 cr.	11.50%	22.68	22.68
32	Allahbad Bank-IV-200 cr.	12.00%	22.92	22.92
33	Union Bank STL-VII 10 cr.	12.00%	-	-
34	Union Bank -VII 100 cr.	12.00%	11.50	11.50
35	Andhra Bank-III 93.71 cr. (Sanction loan Rs.200.00 cr.)	11.75%	23.00	23.00
36	IOB-I 200 cr.	10.25%	23.00	23.00
	Sub Total		189.05	189.05
E. Loan availed during FY 2011-12 (Upto November, 2011 to meet the Revenue Deficit				
37	Andhra Bank-III 106.29 cr. (Sanction loan Rs.200.00 cr.)	11.75%	Included in item No.35	Included in item No.35
38	Union Bank TL-VIII 132 cr.	11.50%	15.18	15.18
39	Canara Bank -V 100 cr.	12.75%	12.75	12.75
40	Proposal for Sept.'11 to Mar'12 500 cr.	12.00%	60.00	-
	Sub Total		87.93	27.93
F. Finance & Other Charges				
37	Interest on average over draft	12.00%	17.50	-
38	Guarantee Commission	0.5%	10.14	10.14
39	Proposed interest on securitized dues to OHPC	8%	24.72	-
	Sub Total		52.36	10.14
G.	Grand Total (A+B+C+D+E+F)		546.90	414.49

Pass through of arrear dues paid to be paid by GRIDCO during 2011-12

469. GRIDCO proposed expenses of Rs.634.96 cr. incurred/to be incurred till 2011-12 as a pass through in the ARR of 2012-13. The summary of proposed expenses claimed as a pass through is given in table below:

Table - 76

(Rs. Cr.)	
Outstanding Govt. Guarantee commission	34.34
Arrear payment to OHPC	2.19
Towards licensee fee for water cess	109.48
Arrear payment to OPGC	488.95
Arrear payment to NTPC-TTPS	634.96

470. Regarding Govt. guarantee commission, GRIDCO proposed an amount of Rs.34.34 cr. towards outstanding guarantee commission upto FY 2011-12. Every year in the revenue requirement the Commission allows guarantee commission under the head interest and finance charge. For the last year i.e. 2011-12 the guarantee commission allowed by the Commission was Rs.11.42 cr. Upto FY 2010-11, this issue has been taken care of in truing up exercise. Hence the amount of Rs.34.34 cr. as arrear upto 2011-12 claimed by GRIDCO as a pass through is not justified and disallowed by the Commission. Further, for 2012-13 we have already allowed Rs.10.14 cr. towards guarantee commission vide para 468 (Table-75) under the item "Finance and Other Charges".

Arrear payment to OHPC

471. In its application GRIDCO has submitted that as per Odisha Gazette Notification Dtd.01.10.10 OHPC has to pay Rs.0.01/Kwh (1 Paisa per Unit) as License Fee (Water Cess) on water used for generation of electricity from all hydro projects from October, 2010 onwards. Accordingly, OHPC have raised Water Cess bill of its Stations from October, 2010 onwards for reimbursement from GRIDCO in the month of March'11 by which time the process of ARR & BSP determination for FY 2011-12 was already over. Therefore, the amount of Rs.2.19 crore which has been paid to OHPC towards Water Cess from October, 2010 to March, 2011 could not be reflected in the ARR of GRIDCO FY2011-12. Hence, GRIDCO submits before the Commission to allow the arrear payment of Rs.2.19 crore to OHPC on account of Water Cess from Oct'10 to March'11 in the ARR of GRIDCO for the FY 2012-13, as tabulated below:

Table - 77

**Month-wise Water Cess Claim of OHPC Stations from 10/10 to 03/11
& Payment made by GRIDCO**

(Figures in Rs.)

Station	Burla	Rengali	Balimela	UKHEP	CHEP	UIHEP	TOTAL
Oct'10	707890	96872	586584	500808	955410	8239480	
Nov'10	263500	70456	836600	483648			
Dec'10	335780	78760	1116473	436008			
Jan'11	342900	136552	1377150	617772			
Feb'11	251160	169424	1089116	651432			
March'11	344230	174632	1084020	743712	219940		
Total	2245460	726696	6089943	3433380	1175350	8239480	21910309

Say: Rs. 2.19 crore

472. The Commission has allowed Rs.5.676 crore in the ARR of GRIDCO for FY 2011-12 for reimbursement to OHPC on account of water cess payable to the State Govt. for the period from April, 2011 to March, 2012. However, GRIDCO has paid Rs.2.19 crore to OHPC on this account for the period from October, 2010 to March, 2011. Hence, the Commission allows this amount of Rs.2.19 crore as pass through in the ARR of GRIDCO for FY 2012-13.

Arrear Payment to OPGC:

473. GRIDCO submitted that pursuant to the settlement approved by the State Government, GRIDCO was required to execute agreement amending the PPA and Tripartite Agreement, which shall be submitted to the Commission for approval. In line with the said settlement, GRIDCO is liable to pay Rs.109.48 Crore to OPGC towards arrear dues, at the end of the F.Y. 2008-09, which were held up because of the dispute with regard to the tariff norms applicable for procurement of power from OPGC. However, in the mean time as per its Board of Directors Resolution, GRIDCO has been paying the arrears of Rs.109.48 crore in installments which shall be completed in December, 2011. GRIDCO, during tariff hearing, stated that they have already paid Rs.109.48 crore to OPGC and requested to allow the said amount in the ARR of GRIDCO for the FY 2012-13.
474. Since the same amount of Rs.109.48 crore has already been paid by GRIDCO to OPGC, the Commission allow the same in the ARR of GRIDCO for FY 2012-13.

Arrear payment to NTPC in respect of TTPS:

475. GRIDCO has submitted that in addition to the projected power procurement cost, GRIDCO has to pay NTPC the differential amount arising out of the difference in the fixed costs for the period from 2004-05 to 2009-10, as per filing of petition (No. 184/2009 & 304/2009) before CERC by NTPC. It is expected that the pending petitions are to be disposed by CERC soon and as such GRIDCO now submits that the said differential amount of Rs.488.95 crore may please be allowed as a pass-through expense till the year 2012-13. A table showing year-wise differential amounts, which is supposed to be paid by GRIDCO to NTPC, is given below:

Table - 78

F.C Arrears of TTPS (NTPC)

Description	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Total
F.C. Billed by NTPC (Rs. Cr.)	186.87	193.38	195.73	199.38	200.88	200.88	200.88	200.88	1578.88
F.C due by NTPC as per filling before CERC (Rs. Cr.)	188.35	195.67	198.69	207.67	217.39	338.57	353.18	368.31	2067.83
Differential amount to be paid by GRIDCO to NTPC (Rs. Cr.)	1.48	2.29	2.96	8.29	16.51	137.69	152.30	147.43	488.95

In this connection, the Commission is of the view that the differential amount claimed by GRIDCO shall be considered as a pass through only after CERC passes order on the petition of NTPC. Pending such decision the amount claimed by GRIDCO is not allowed as a pass through expenses for the year 2012-13.

Excess payment made towards FPA for NTPC Stations

476. GRIDCO in its additional submission on 03.02.2012 submitted that pursuant to the additional submission of GRIDCO dtd.28.01.2011 for approval and pass through of an amount of Rs.321.89 crore towards excess FPA paid for the period from January, 2010 to December, 2010. The Commission after exercising due diligence, approved an amount of Rs.311.56 crore for FY 2011-12 as pass through in the ARR of GRIDCO vide its order dtd.18.03.2011 in Case No.144 of 2010. Now, GRIDCO is paying the excess amount towards FSA/FPA i.e. ECR to NTPC during the current year 2011-12 as per the bills raised by NTPC and the Commission recognizing such additional cost for pass through in terms of the para 574 of the RST order dtd.18.03.2011 for FY 2011-12. The excess FPA/FSA i.e. ECR (variable charges) over and above the OERC approval paid by GRIDCO to NTPC stations during the period from January, 2011 to December, 2011 works out to be Rs.172.08 crore, the details of which given in the table below:

Table - 79

Name of NTPC Stations	Units billed by the Generator (ESO) i.e. drawal by GRIDCO	FPA/ECR claimed by the generator	FPA/ECR claimed by the Generators i.e. actual FPA paid by GRIDCO	FPA/ECR calculated on ESO as per OERC approval	Excess/Less payment made by GRIDCO over and above OERC approval
	(Qn)	(Pbn)	(Pbn x Qn)	(Pn x Qn)	(PbnQn– PnQn)
	(MU)	(P/u)	(Rs.Cr.)	(Rs. Cr.)	(Rs. Cr.)
TTPS	3314.20	52.10	172.67	185.84	-13.17
TSTPS-I	2056.91	205.51	422.72	356.64	66.07
TSTPS-II	1410.81	204.07	287.91	243.74	44.16
FSTPS	1534.28	320.88	492.32	464.70	27.62
KhSTPS-I	815.98	266.95	217.83	176.98	40.84
KhSTPS-II	159.07	244.05	38.82	32.27	6.55
Total	9291.25	175.68	1632.27	1460.18	172.08

477. From the above table it is observed that GRIDCO has actually paid Rs.1632.27 cr. towards FPA as against the approved amount of Rs.1460.18 cr. From the detailed month-wise bills attached, it is found that the period of bill is from January, 2011 to December, 2011. The bill figure for the Month of January, February & March, 2011 is already accounted for in the audited figure for the FY 2010-11. The truing up exercise has already undertaken upto the FY 2010-11, for which Commission has allowed the regulatory asset to be amortised over a period of six years and accordingly made

necessary provision in the ARR for the FY 2012-13. Therefore, it will be proper to exclude the differential billing amount for January, February and March, 2011 which works out to Rs.65.05 cr. for calculation of FPA. Therefore, the differential amount of FPA from April, 2011 to December, 2011 of the FY 2011-12 works out to Rs.107.03 cr. (Rs.172.08 Cr-Rs.65.05 Cr). Hence, the Commission approves the amount of Rs.107.03 cr. towards excess payment made by GRIDCO to NTPC towards FPA.

Arrear payment to NHPC towards Teesta Power

478. GRIDCO in its additional submission dated 09.02.2012 and 18.02.2012 has submitted that CERC vide its order dated 05.12.2011 in petition no. 82/2011 has revised the Annual Fixed Charges of Teesta Hydro Power Station of NHPC for the period 2009 to 2014 in terms of CERC Tariff Regulations, 2009. Accordingly, NHPC has raised bills on GRIDCO for the additional arrear fixed charges of Rs. 75.59 Cr. retrospectively from FY 2009-10. In another supplementary bill on account of revision of tax for FY 2007-08 & FY 2008-09, NHPC has claimed for a sum of Rs. 4.262 Cr. based on the auditor certificate, totaling both the bills amounting to Rs.79.8547 Cr. on GRIDCO for necessary payment. GRIDCO has requested the Commission to pass through this statutory amount of Rs. 79.8547 Cr. in the ARR of GRIDCO for the FY 2012-13, since these bills are already due for payment and GRIDCO is going to settle the same very soon.
479. After due scrutiny the Commission accepts the submission of GRIDCO and allows Rs.79.8547 Cr. in ARR of GRIDCO for the FY 2012-13 as pass through amount towards past power purchase dues.
480. In view of the above, Commission allows the following amount towards pass through of arrear dues to be payable by GRIDCO during 2011-12.

Table - 80

(Rs. in Cr.)

Particulars	Proposed by GRIDCO	Approved by Commission
Outstanding Govt. Guarantee Commission	34.34	-
Arrear payment to OHPC	2.19	2.19
Arrear payment to OPGC	109.48	109.48
Arrear payment to NTPC-TTPS	488.95	-
Excess payment made towards FPA for NTPC Stations	172.08	107.03
Arrear payment to NHPC towards Teesta Power	79.85	79.85
Total	886.89	298.55

Reimbursement to OHPC during FY 2012-13

(a) License fee for use of water for generation of Electricity

481. As per the gazette notification dt.01.10.2010 OHPC has to pay Rs.0.01/kwh as license fee on water used for generation of electricity from all Hydro Electric Projects to the tune of Rs.5.676 cr. is to be reimbursed to OHPC by GRIDCO, based on design energy. The details of payment is summarized in the table below:

Table – 81**(Rs. Cr.)**

Description	RHEP	UKHEP	BHEP	HHEP	CHEP	UIHEP	Total
License fee for consumption of water for generation of electricity	0.525	0.838	1.183	0.684	0.49	1.962	5.676

Since, the above calculation is based on design energy of Hydro Projects, the actual generation from OHPC Power Stations may be considered for reimbursement of licence fee paid to Govt. of Odisha from GRIDCO. OHPC has proposed for approval of the above expenses.

Accordingly, the Commission has examined the proposal of OHPC and approves the reimbursement of license fee @Rs.0.01 per Kwh for use of water for generation of electricity based on the actual generation from OHPC power stations for the FY 2012-13. However, provisionally approves Rs.5.676 crore based on the design energy of OHPC stations.

(b) Electricity Duty on Auxiliary Consumption

482. 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 raised by OHPC. GRIDCO will make payment accordingly within 30 days of receipt of bills.

Accordingly, ED on Auxiliary consumption of all the hydro electric projects to the tune of Rs.0.57 cr. is to be reimbursed to OHPC by GRIDCO through separate billing. The Commission approves the same for FY 2012-13.

(c) SLDC Charges

483. The Commission, while determining the ARR and Fees & Charges of SLDC for the FY 2012-13 in Case No.97/2011, has allowed SLDC to levy and collect Annual Charges from the users towards System Operation Functions and Market Operation Functions in accordance with Regulations 22 & 23 of CERC (Fees and Charges of Regional Load Dispatch Centre and Other Related Matters) Regulations, 2009. Accordingly, the Commission has fixed Rs. 9122.52/MW/Annum to be collected from the generators towards annual charges of SLDC. Considering the installed capacity of 2084.5 MW of OHPC (as submitted by SLDC in its ARR application), the total SLDC charges of OHPC comes to Rs. 1.90 cr. for the FY 2012-13, which is to be collected by SLDC from OHPC on monthly basis and OHPC has to reimburse the same from GRIDCO. Accordingly, the Commission provisionally approves an amount of Rs.1.90 as pass through in the ARR of GRIDCO for the FY 2012-13 towards power purchase related cost of OHPC.

(d) ARR & Tariff Application Fees and related Publication Expenses

484. As per Regulation 42 of CERC Tariff Regulations, 2009, the application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating

company or the transmission licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be. Accordingly, OHPC has claimed for reimbursement of Rs.0.26 cr. from GRIDCO towards ARR and tariff application fees and related publication expenses. The Commission approves the said amount of Rs.0.26 cr. as pass through in the ARR of GRIDCO for FY 2012-13.

485. The details of ED on auxiliary consumption, license fee for use of water for generation of electricity and SLDC charges for FY 2012-13 of OHPC are summarized in the table below:

Table – 82

(Rs. Cr.)

Component of Costs	RHEP	UKHEP	BHEP	HHEP	CHEP	UIHEP	Total
(a) License fee for use of water for generation of electricity	0.525	0.832	1.183	0.684	0.49	1.962	5.676
(b) ED on Auxiliary Consumption	0.05	0.08	0.12	0.07	0.05	0.20	0.57
(c) SLDC charges							1.90
(d) Application fees and publication expenses							0.26
Total							8.406 or say 8.41

Special appropriation of repayment of principal

486. GRIDCO has proposed special appropriation of Rs.1580.66 cr. during 2012-13 under the following heads:

Table - 83

(Rs. Cr.)

State Govt. Loan	154.81
NTPC GoO Special Bond	441.16
Pension Trust Bond	32.63
Banks loan	518.16
CPA adjustment	433.90
Total	1580.66

State Govt. loan

487. The Commission disallowed the claim of Rs.154.81 cr. of state Govt. loan on the following ground:
488. The Govt. of Odisha vide letter No.2404 dtd.21.03.2011 have given the following decision, in response to the suggestion of the Commission vide letter No.4440 dtd.19.07.2010. The extract of the letter is given below:

- “i) *Moratorium on debt servicing by GRIDCO & OPTCL and OHPC to the State Government till the power sector turns around except the amount in respect of loan from the World Bank to the extent to the State Government is required to pay to Government of India.*
 - ii) *Keeping in abeyance the effect of up-valuation of assets of OHPC and GRIDCO/OPTCL till the sector turns around.*
 - iii) *The OHPC, GRIDCO & OPTCL shall not be entitled any RoE till the Sector becomes viable on cash basis.*
- (b) *Government in Finance Department, after careful examination of the issues, have observed that “an open ended commitment by the State Government to extend this supportive measures would be undesirable. At the first stage these supports may be continued till 2012-13 after which a review should be made by the State Government and on that basis a view could be taken on the need for further extension of these measures”.*

The Commission vide letter No.JT(FN-175/02/2502 dtd.06.01.2012 requested the State Govt. to issue the amended notification as suggested by the Commission vide their letter No.4440 dtd.19.07.2010, so that this would appropriately be reflected while determining the annual revenue requirement of the DISCOMs for the year 2012-13. However, in the meantime the State Govt. in Energy Department vide letter No.LC-34/2012-2261 dtd.19.03.2012 has communicated as follows:

“The suggestions of the Hon’ble Commission to keep the support of Govt. in the matter of keeping the effect of upvaluation of assets of GRIDCO/OPTCL and OHPC, allowing the moratorium on debt services to the State Govt. till the sector turns around and not allowing ROE to GRIDCO/OPTCL and OHPC till the sector becomes viable on cash basis has not been agreed to by the Govt. in Finance Deptt. However steps have been taken in regard to other recommendations of the Hon’ble Commission in their letter No.4440 dt.19.07.2010 and the proposal will be placed before the cabinet for approval after which required notification will be issued.”

- 489. Since the State Govt. vide their letter No.2404 dtd.21.03.2011 have extended the benefits/concession as stipulated in the Notification No.1068 dtd.29.01.2003 read with Notification No.5302 dtd.06.05.2003 till 2012-13, the effect of up-valuation such as depreciation, return on equity and interest and repayment on State Govt. loan and Bond is not been taken into account for FY 2012-13.
- 490. In view of the above, the repayment of Govt. of Odisha loan proposed by GRIDCO is disallowed.

NTPC Special Bond

- 491. GRIDCO claimed that the outstanding dues upto 31.03.2012 as NTPC (Govt. Bond) amounts to Rs.330.86 cr. and the principal repayment due is Rs.110.29 cr. for the year 2012-13. Hence GRIDCO claims an amount of Rs.441.15 (330.86 + 110.29) as a pass through in the revenue requirement for the financial year 2012-13.
- 492. The Commission in this context opines that the repayment schedule approved by the Commission in its securitization order dtd.20.07.2006 should be taken into cognizance to

determine the quantum to be considered as a pass through in the revenue requirement for 2012-13. In the securitization order the repayment schedule approved by the Commission includes NTPC Special Bond and other loans inherited by GRIDCO at the time of demerger of GRIDCO and OPTCL. But it excludes loan from State Govt. and Pension Trust Bond. The details of the schedule are given below:

Table - 84

Financial Year	Repayment approved for liquidation of power purchase dues
FY 2005-06	406.25
FY 2006-07	480.12
FY 2007-08	480.62
FY 2008-09	306.55
FY 2009-10	226.73
FY 2010-11	166.39
FY 2011-12	146.82
FY 2012-13	140.85
FY 2013-14	118.29
FY 2014-15	110.29
FY 2015-16	110.26
Total Repayment Amount	2693.17

493. As seen from the above table during FY 2012-13, Commission had approved an amount of Rs.140.85 cr. towards repayment of loan outstanding upto 31.03.2008 (inherited by GRIDCO at the time of demerger of GRIDCO and OPTCL). This loan includes repayment of NTPC Bond. In line with the order, Commission allows Rs.140.85 cr. of loan repayment towards special appropriation as against an amount of Rs.441.15 cr. claimed by the licensee.
494. GRIDCO proposed an amount of 32.63 cr. towards repayment of pension trust bond as a pass through in the revenue requirement of 2012-13 under the head special appropriation. The Commission disallows the same since the pension trust bond is excluded in the repayment schedule approved by the Commission in its securitization order dtd.20.07.2006.
495. **Bank Loans**
Under this head GRIDCO proposed an amount of Rs.518.16 cr. towards repayment of bank loan borrowed from the year 2008-09 to 2010-11. GRIDCO in its submission had stated the following:

“To ensure un-interrupted power supply to the State and to avoid imminent Power Regulation, GRIDCO borrowed Rs.3,153.71 Crore from Banks mainly with the Govt. Guarantee Support in order to pay to the generators. Out of the total borrowings, Rs. 907.47 Crore was utilized towards repayment of past loans resulting in net availability of loan of Rs.2,246.24 Crore. The balance deficit of cash flow were addressed through availing Over- Draft at high rates of interest, deferring payments to Govt. towards loans, and deferring payment of Power Purchase Dues etc.

It may be appreciated that GRIDCO has taken the borrowings, as the only recourse to address the Cash Deficit as no other alternatives were available for funding the same, including any subvention from the Government. A summarized position of Cash Deficit, the Loans & Borrowings availed by GRIDCO is given below:

Status of Financials of GRIDCO

Financial Year	OERC Approved Gap (Rs. Cr.)	Actual Gap in P&L Account (Rs. Cr.)	Year-end-Adjustment Bills Considered in Accounts but not paid by DISCOMs (Rs. Cr)	Actual Gap without considering Year-end- Adjustment Bills (Rs. Cr.)	Amount of Loan Availed (Rs. Cr.)
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5=3-4</i>	<i>6</i>
2008-09	(410.05)	98.14	163.94	(65.80)	300.00
2009-10	(882.85)	(1560.84)	164.22	(1725.06)	1213.00
2010-11	(806.15)	(587.85)	297.01	(884.86)	1640.71
Total	(2099.05)	(2050.55)	625.17	(2675.72)	3153.71

The Cash Deficit arising from non-recovery of costs has been managed by GRIDCO under the following heads:

Sl. No.	Sources of Funding	Amounts (Rs. in Crore)
1	Net Loan Availed (Rs.3153.71-Rs.907.47)	2246.24
2	Overdraft Availed	86.16
3	Deferment of Interest on GoO Bond (NTPC)	140.62
4	Deferment of Interest on Govt. Loan	60.21
5	Deferment of Guarantee Fees	15.33
6	Deferment of Power Purchase Dues (CGPs) & etc.	127.99
	Total	2675.72

As already explained in above referred Para GRIDCO availed Rs.3,153.71 crore term loans to meet the revenue gap. In absence of availability of depreciation, **Rs.518.16 Crore** may be considered in the BSP for 2012-13 towards Special Appropriation as detailed in TRF 3.”

496. The Commission took note of the submission made by the licensee. In the above para while determining the interest on loan to be allowed to GRIDCO during 2012-13, the Commission has recognized the quantum of loan availed by GRIDCO during 2008-09, 2009-10, 2010-11 amounting Rs.300.00 cr., Rs.1213.00 cr. and Rs.1640.71 cr. respectively. Hence, the Commission allows its repayment as per the repayment schedule mentioned in TRF-3 towards special appropriation. The year wise repayment of loan approved by the Commission is given below:

2008-09	-	Rs.57.78 cr.
2009-10	-	Rs.309.16 cr.
2010-11	-	Rs.89.94 cr.
Total	:	Rs.456.88

497. Regarding CPA adjustment of Rs.433.90 cr., GRIDCO in its submission have stated the following:

“CPA Adjustment: The Govt. of Odisha provided support to the extent of Rs.196.17 Crore towards the amount deducted by the Central Govt. from the Central Plan Assistance (CPA) over the period from 1997-98 to 1999-00. Pursuant to the decision taken in the Meeting held on 13-08-2004, the amount was likely to be adjusted from the Arrear Energy Charges Payable by the Govt. Departments amounting to Rs.123.23 Crore. However, the Govt. of Odisha in the Notification Dated 25.06.2011 (Enclosed as ED-XXVIII) converted these amounts towards loan carrying interest @ 10% to 12%. The total financial implications on this account including interest upto 31-03-2011 amounts to Rs. 433.90 Crore. It is submitted that GRIDCO has requested the Govt. of Odisha for adjustment of the same against receivables of GRIDCO. However, it is yet to be accepted by the Govt. of Odisha. Hence, the amount of Rs.433.90 Crore may be considered to be allowed in the proposed ARR for FY 2012-13.

(Rs. Cr.)

<i>Sanction Order No & Date</i>	<i>Loan Amount</i>	<i>Rate of Interest (%)</i>	<i>Interest upto 31-03-2011</i>	<i>Total Dues</i>
28846/25.06.2011	3.93	12.00	6.61	10.54
28849/25.06.2011	43.98	10.50	60.03	104.01
28840/25.06.2011	79.98	10.00	95.98	175.96
28843/25.06.2011	68.28	10.00	75.11	143.39
Total	196.17		237.73	433.90

498. The Commission is of the view that the Govt. of Odisha is yet to taken a decision in this regard. Hence, for the present the pass through of Rs.433.90 cr. towards CPA adjustment is disallowed by the Commission. A Table showing amount proposed for special appropriation by GRIDCO and approved by the Commission is given below:

Table - 85
Amount proposed and approved for Special Appropriation in the ARR & BSP for FY 2012-13

(Rs. Cr.)

State Govt. Loans	154.81	-
NTPC-GoO Special Bonds (Rs.1102.87 Cr.)	441.16	140.85
Pension Trust Bond	32.63	-
Bank Loans	518.16	456.88
Sub-Total	1146.76	597.73
CPA Adjustment	433.90	-
Total	1580.66	597.73

499. The Commission in its order on truing up of GRIDCO in case No.6 of 2012 have allowed amortization of regulatory asset amounting Rs.2266.60 cr. (undertaken upto the year 2010-11) over a period of six years. This amount includes Rs.1414.31 cr. allowed by the

Commission upto the period 31.03.2010. In the financial year 2011-12 the Commission allowed special appropriation of Rs.421.78 cr. by amortising the regulatory asset. This year i.e. for the FY 2012-13, the Commission allowed Rs.597.73 cr. as amortization of regulatory asset which shall be utilized for repayment of the principal loan as mentioned in above table. A table showing the total regulatory asset approved upto 31.03.2011, amortization of the regulatory asset during 2011-12 and 2012-13 and balance amount to be amortised over next four years is given below:

Amount approved by the Commission towards regulatory asset		Rs.2266.60 cr.
Less amortised during 2011-12	- Rs.421.78 cr.	
Less amortised during 2012-13	- <u>Rs.597.73 cr.</u>	Rs.1019.51 cr.
Sub Total	- Rs.1019.51 cr.	
Balance to be amortised		Rs.1247.09

Return on Equity

500. For the FY 2012-13 GRIDCO proposed a sum of Rs.67.11 cr. towards return on equity (RoE) at the rate of 15.50% on its equity capital of 432.98 cr. in line with National Tariff Policy and OERC Tariff Regulations. In this regard, Commission would like to observe that GRIDCO is not entitled to get return on equity in view of the communication of Govt. of Odisha vide letter No.2404 dtd.21.03.2011 to the Commission, the details of which has been discussed in paras 488 to 489.
501. In view of the above, the Commission does not consider allowing return on equity to GRIDCO for the FY 2012-13.

Miscellaneous Receipt:

502. GRIDCO during FY 2012-13 expects to earn an amount of Rs.6.40 cr. (at existing approved tariff) from proposed emergency sale of 10 MU to long term customers like Nalco and IMFA as per the MoU signed with these entities. The Commission in its retail supply order for the FY 2012-13 has fixed the rate of Rs.6.90 for emergency power to long term customers like Nalco, NTPC etc. at a proposed sale of 100 MU. Accordingly, the total earning of GRIDCO on this account works out to Rs.69.00 cr. The Commission approves the same for the FY 2012-13.

Receivable from DISCOMs towards securitized dues and others:

A. Securitised dues:

503. GRIDCO in its filing submitted that the DISCOMs have defaulted payment of Rs.747.63 cr. towards securitized dues as directed by the Commission in its order dtd.01.12.2008. The DISCOM wise default is given below:

Table - 86

(Rs. Cr.)

Particulars	Securitized dues payable by 31-03-2011	Amount paid by 31-03-2011	Outstanding as on 31-03-2011
WESCO	211.20	210.48	0.72
NESCO	229.80	222.70	7.10
SOUTHCO	149.40	38.15	111.25
CESU	841.20	212.64	628.56
Total	1431.60	683.97	747.63

504. GRIDCO requested the Commission to direct DISCOMs for making regular payment of the securitized dues along with the defaulted dues for improving the cash flow. The securitization order of the Commission dtd.01.12.2008 finalised the amounts outstanding as on 31.03.2005 to be discharged by the respective DISCOMs to GRIDCO in 120 monthly (maximum) equal installments starting from financial year 2006-07 and ending in 2015-16.
505. From the year 2006-07 to 2009-10, Commission in their RST order have determined the amounts over and above the current BST bills to be adjusted against the securitization of BST dues. Since the starting year of securitization is FY 2006-07, any excess amount paid by DISCOMs over and above 100% BST bill during 2005-06 and before shall be adjusted fully towards amortization of principals and interests of NTPC Bond. A statement showing the amount approved by the Commission in the ARR from 2006-07 to 2010-11, amount due as per the securitization order, the amount paid by the licensee over and above the 100% current BST bills, adjustment against the securitized amount and balance default amount is given in Table below:

Table - 87**Dues as per OERC Order Dt. 01-12-2008 and Actual Payment upto 31-03-2011**

(Rs. Cr.)

SI No	Particulars	Wesco	Nesco	Southco	REL Total	CESU	Grand Total
1	BST						
	OB 01-04-99	46.18	41.66	26.50	114.34	80.16	194.50
	From 01-04-99 to 31-03-05	118.41	194.83	47.19	360.43	605.20	965.63
	Sub total	164.59	236.49	73.69	474.77	685.36	1,160.13
2	DPS on Above	58.72	87.20	32.02	177.94	526.41	704.35
3	Loan						
	Principal	138.46	94.64	134.36	367.46	307.61	675.07
	Interest	60.31	41.05	58.43	159.79	162.86	322.65
	Sub total	198.77	135.69	192.79	527.25	470.47	997.72
4	Outstanding as on 31-03-2005 vide OERC Order Dated 01-12-2008 (1+2+3)	422.08	459.38	298.50	1,179.96	1,682.24	2,862.20

SI No	Particulars	Wesco	Nesco	Southco	REL Total	CESU	Grand Total
5	Average per month	3.52	3.83	2.49	9.84	14.02	23.86
6	Due from 2006-07 to2010-11 as per securitisation order				-		
	2006-07	42.24	45.96	29.88	118.08	168.24	286.32
	2007-08	42.24	45.96	29.88	118.08	168.24	286.32
	2008-09	42.24	45.96	29.88	118.08	168.24	286.32
	2009-2010	42.24	45.96	29.88	118.08	168.24	286.32
	2010-11	42.24	45.96	29.88	118.08	168.24	286.32
	Total	211.20	229.80	149.40	590.40	841.20	1,431.60
7	Due from 2006-07 to2010-11 as per Tariff order						
	2006-07	36.83	41.36	31.91	110.10	-	110.10
	2007-08	36.83	41.36	31.91	110.10	43.23	153.33
	2008-09	36.83	65.00	-	101.83	118.00	219.83
	2009-2010	-	-	19.00	19.00	151.00	170.00
	2010-11	-	-	-	-	-	-
	Total	110.49	147.72	82.82	341.03	312.23	653.26
8	Excess BSP paid by DISTCOs to be adjusted against securitised dues						
A	Downward Revision of BST in 2007-08	88.31	3.32	11.07	102.70	93.37	196.07
B	Payment by DISCOMS over and above the current						
	2006-07	36.83	41.36	-	78.19	-	78.19
	2007-08	4.40	41.36	9.53	55.29	-	55.29
	2008-09	-	65.00	5.86	70.86	32.47	103.33
	2009-10	2.00	-	9.69	11.69	80.50	92.19
	2010-11	-	-	-	-	-	-
	Total B	43.23	147.72	25.08	216.03	112.97	329.00
C	Total (A+B)	131.54	151.04	36.15	318.73	206.34	525.07
9	Short fall (6-8 C) as per securitisation order	79.66	78.76	113.25	271.67	634.86	906.53
10	Short fall (7-8 B) as per tariff order	67.26	-	57.74	125.00	199.26	324.26
11	Balance due (4-8 C)	290.54	308.34	262.35	861.23	1,475.90	2,337.13

506. The Commission therefore reiterates that directions given by the Commission vide securitization order dtd.01.12.2008 must be scrupulously followed by DISCOMs.

B. Rs.400.00 cr. Bond dues

507. GRIDCO in its submission stated that the DISCOMs have failed to honour the dues payable against Rs.400.00 cr. bond issued to NTPC as per the details given in the table below:

Table - 88

Particulars	Principal	Interest upto 31-03-2011	(Rs. Cr.)
			Outstanding as on 31-03-2011
WESCO	103.00	66.88	583.08
NESCO	167.00	167.44	334.44
SOUTHCO	130.00	146.23	276.23
Total	400.00	380.55	780.55

508. The Commission addressed the issues in details in the last year's (FY 2011-12) BSP order in para 510 to 518.

509. In the meantime, WESCO, NESCO & SOUTHCO filed application u/s.86(1)(f) of the Electricity Act, 2003 in regard to resolution of Power Bond in line with the order dtd.12.05.2011 of the Commission passed in Case No.35 of 2005. Commission admitted the case as Case No.107 of 2011 and heard the matter on 27.01.2012. Vide order dtd.08.02.2012, the Commission allowed the three DISCOMs to have several rounds of discussion with GRIDCO after which they are allowed to file their submission. The DISCOMs submitted the points of negotiation held with GRIDCO through affidavit on 01.03.2012. The matter is being examined.

C. Year End Adjustment Bill etc.

510. GRIDCO in its application has stated that DISCOMs have not paid the year end adjustment bill raised by GRIDCO in terms of the orders passed by the Commission from time to time. Further, GRIDCO claimed that other dues including amounts towards deferred credit, receivable under transfer scheme amounting Rs.987.83 cr. Regarding year end adjustment bill, Commission directs DISCOMs to settle the issues with GRIDCO. As regards deferred credit and receivables under transfer scheme etc. the Commission would not like to give any opinion in absence of the detailed calculation.

D. Receivable from other States and Govt. Departments

511. GRIDCO in its filing has mentioned an amount of Rs.296.53 cr. as receivable from different sources.

Table - 89

	(Rs. Cr.)
i) Govt. Departments	91.71
ii) PSUs/ULB	113.49
iii) MPSEB	71.78
iv) IMFA (ICCL)	19.55
Total	296.53

512. GRIDCO in its submission stated that the dues from Govt. departments and PSUs are carried over in the accounts of GRIDCO although they are the consumers of DISCOMs pursuant to Transfer Notification dtd.25.11.1998. The DISCOMs have not yet collected the outstanding dues nor have provided the detailed status of these consumers and also the outstanding dues as per the customers ledger. The dues from MPSEB and IMFA are under litigation and not yet settled. GRIDCO is not likely to receive any amount from these parties during FY 2012-13. In view of this, receivables from parties other than DISCOMs may not be considered in the ARR of GRIDCO for FY 2012-13. Commission accepts the submission made by GRIDCO.
513. Finally summary of the ARR approved for 2012-13 for GRIDCO is given below:

Table – 90
Revenue Requirement of GRIDCO for FY 2012-13

(Rs. cr.)

		2011-12	2012-13	
A	Expenditure	Approved	Proposed	Approved
	Cost of Power Purchase	4940.30	6780.91	5691.02
	Employee costs	4.21	4.88	4.29
	Repair & Maintenance	-	0.25	0.10
	Administrative and General Expenses	2.83	3.89	3.73
	Depreciation	-	0.22	-
	Other expenses (ERLDC Charges)	1.32	1.32	1.32
	Interest Chargeable to Revenue (including guarantee commission)	326.64	546.90	414.49
	Sub-Total	5275.30	7338.37	6114.95
	Less: Expenses capitalized			
	Total expenses (Total of A)	5275.30	7338.37	6114.95
B	Special appropriation			
	Carry forward of Previous Losses through amortization of regulatory assets	421.78		597.73
	Repayment of principal for the loan & payment towards Central Plan Assistance (CPA) adjustment		1580.66	-
	Arrear payment of OPGC	-	109.48	109.48
	Reimbursement towards OHPC	8.28	2.19	2.19
	Power Purchase related cost of TTPS (NTPC)		488.95	-
	Outstanding Govt. Guarantee Commission		34.34	-
	Excess payment made towards FPA for NTPC Station	311.56	172.08	107.03
	Arrear payment on Teesta Power		79.85	79.85
	Miscellaneous Charges as shown in Table ____		-	8.41

		2011-12	2012-13	
A	Expenditure	Approved	Proposed	Approved
	Total of B	741.62	2467.55	904.69
C	Return on Equity	-	67.11	-
	TOTAL (A+B+C)	6016.92	9873.03	7019.64
D	Less Miscellaneous Receipt	64.00	6.40	69.00
E	Less receivable from DISCOMs			
F	Less receivable from outside States			
G	Total Revenue Requirement	5952.92	9866.63	6950.64
H	Expected Revenue (Full year) from DISCOMs	5206.87 (at the approved rate for 2011-12)	5467.63 (at the existing BSP for 2011-12)	6250.06 (at the approved BSP for 2012-13)
I	GAP (+/-)	(-)746.05	(-)4399.00	(-)700.58

514. From the above table, it is found that GRIDCO after meeting all expenses would still be left with a negative gap of Rs.700.58 crore. The Commission expects that the same gap shall be bridged through export earning, UI charges and recovery of arrears from DISCOMs over and above their current BSP dues. In the RST order dated 23.03.2012 in case No.93, 94, 95 & 96 of 2011 vide para 435 & 436, the Commission has directed DISCOMs to ensure payment of outstanding dues that falls short of the amount approved by the Commission in tariff order and as per Securitisation Order of the Commission by the end of 2012-13 by taking systematic steps to collect the arrears outstanding as on 01.04.2010, 01.04.2011 and as on 01.04.2012. In the last Tariff Order Commission has directed the DISCOMs that out of the arrear outstanding as on 01.04.2011, CESU, WESCO, NESCO & SOUTHCO should collect Rs.250 crore, Rs.225 crore, Rs.225 crore and Rs.125 crore respectively during 2011-12. Out of the said arrear 50% would be paid towards the defaulted securitized dues by CESU, WESCO and SOUTHCO. In case of NESCO 50% of the arrear collected may be made against balance securitized dues of Rs.308.34 crore as on 31.03.2010. But it is found that the DISCOMs have not paid any amount during FY 2011-12(up to 29.02.2012) towards arrear BSP over and above the current arrear. The Commission once again directs the DISCOMs to comply with the directions of the Commission in the last year tariff order so far as payment of arrear BSP is concerned.

Bridging the gap in the account of GRIDCO

515. The Commission had approved for procurement of 23489.18 MU energy by GRIDCO from different sources at an estimated cost of Rs.4940.30 crore for the year 2011-12 at an average power purchase price of 210.32 paise per unit meant for sale to distribution companies in the State. In addition to above, Commission have allowed establishment cost, interest, special appropriation, and other past losses for an amount of Rs.1076.62 cr. The revenue requirement inclusive of cost of power works out to 6016.92 cr. After adjustment of miscellaneous receipt of Rs.64.00 cr. the net revenue requirement approved by the Commission was Rs.5952.92 cr. However, the Bulk Supply Tariff approved by the Commission for sale to the distribution companies for 2011-12 was 231.65 paise per unit which will recover Rs.5206.87 cr. through energy charges for the year 2011-12 from

DISCOMs. Thus, the Commission approves a negative gap of Rs.746.05 cr. for the FY 2011-12. The gap was supposed to be bridged by earning from trading of power, UI, recovery of arrears from DISCOMs over and above the current BSP and subvention from Government. Shortfall if any after such adjustment shall be recognized as regulatory assets and carrying cost thereof shall be passed unto the ARR for the FY 2012-13 onwards. The Commission also advised Government to consider to provide a special budgetary support to GRIDCO to enabling it to pay the power purchase cost to the generators in time and release the full amount of R&M expenditure to DISCOMs after adjusting the amount received from DISCOMs in the escrow accounts towards transmission charges, SLDC charges, Bulk Supply Price and current salary expenditure of the employee. In the current year upto November, 2011, GRIDCO landed in a net cash deficit of Rs.451.81 as per the data submitted by GRIDCO in its cash flow statement upto November, 2011 (discussed in para 462 above). Considering the same the Commission has allowed interest on a loan amount of Rs.338.29 cr. availed during 2011-12, in the revenue requirement for 2012-13. The Commission has already undertaken the truing up exercise of GRIDCO upto 31.03.2011 and passed the order. An amount of Rs.2266.60 cr. upto 31.03.2011 is recognized as a regulatory asset and has been allowed for amortization over a period of six years starting from the FY 2011-12. The truing up exercise for the year 2011-12 will be undertaken after the audited accounts for FY 2011-12 is available to the Commission based on which the regulatory asset to be allowed for 2011-12 shall be determined for amortization in future years.

516. Taking into account the requirement of energy projected by GRIDCO and the DISCOMs for the year 2012-13, the Commission has approved 24096.88 MU of energy for purchase by GRIDCO from different generators based on least cost criterion for the year 2012-13. Based on the cost of generation determined for the generators, the average power purchase cost per unit comes to 236.17 paise. Thus, the cost of procurement of power by GRIDCO from the generators for the year 2012-13 comes to Rs.5691.02 cr. After taking into account the salary cost, interest payment and A&G expenses, ERLDC charges of Rs.423.93 cr., Special Appropriation towards amortization of regulatory asset amounting Rs.597.73 cr., reimbursement towards OHPC amounting to Rs.2.19 cr., excess payment made towards FPA for NTPC stations amounting Rs.107.03 cr., arrear payment on Teesta power for Rs.79.85 cr. and other miscellaneous charges of Rs.8.41 cr., net revenue requirement works out to Rs.7019.64 cr. Against this, revenue realization anticipated from DISCOMs at the approved average bulk supply price of 270.74 paise/unit comes to Rs.6250.06 cr. for the FY 2012-13. After taking into account the Misc. Revenue of Rs.69.00 cr., there will be a gap of Rs.700.58 cr. for the year 2012-13. The Commission expects this gap to be met by earning from trading, UI, recovery of arrears from DISCOMs over and above the current BSP and subvention from Govt. shortfall, if any, after such adjustment shall be recognized as regulatory asset and carrying cost thereof shall be passed on to the ARR for the FY 2013-14 onwards. Govt. may also consider to provide a special budgetary support to GRIDCO for enabling it to pay the power purchase cost to the generators in time and release the full amount of R&M expenditure to the distribution companies after adjusting the amount received from the DISCOMs in the escrow account towards transmission charges, SLDC charges, bulk supply price and current salary expenditure of the employees. This will help the DISCOMs in improving the quality of supply by taking repair and maintenance work in time. DISCOMs on their

part must take systematic and coordinated efforts to ensure 100% billing of the power supplied and realize the current tariff bills in full. In this connection the prioritization of release of fund from escrow account as outlined vide para 451 in the RST order for 2012-13 shall be followed.

517. Based on normative parameters for most generating stations and GRIDCO projection for CGP, Co-generation and IPP power, the total availability is estimated at 25058.40 MU. After deducting the estimated state requirement of 24096.88 MU, there is a surplus of 961.52 MU which GRIDCO can trade. The quantum of surplus may be more if drawal from CGPs, Co-generation plants and IPPs is maximized.
518. The Commission is aware of the past record of GRIDCO in negotiating both ways trading for export of its surplus power as well as import of power at time of need with power traders. GRIDCO is also a member of power exchange of the country for participation of both ways trading of power. Apart from bi-lateral trading, UI exchange, GRIDCO also has adopted the banking route for trading of power. In the past, GRIDCO has managed to its best of capability both ways of trading of power for the best interest of Odisha Power Sector. The Commission, therefore, desires that GRIDCO should continue to procure maximum power from CGPs and IPPs of the State and try to trade the surplus power, after meeting the State need. Similarly, at the time of shortage at different period of the year and different hours of the day, GRIDCO may import power through trading and UI exchange. Some of the objectors, in the tariff hearing, as well as in writing had complained that GRIDCO had bought power at higher rates from outside the State than that of OERC approved average cost of purchase. Objectors have suggested that GRIDCO's purchase at higher rate than that of OERC approved quantity should not be passed on in the ARR of GRIDCO. The Commission would like to clarify that in the past the Commission had only approved the average cost of purchase of GRIDCO from the central and state generators and the approved quantity of purchase of energy of GRIDCO is a normative one for estimation of ARR of GRIDCO. Even though GRIDCO is required to purchase power at a cost higher than the rate approved by the Commission for the purpose of supply to the consumers in the State through the DISCOMs, such additional cost of power purchase by GRIDCO is not passed on to the consumers through the DISCOMs during that year because the tariff for the consumers is not being revised during the course of the year. In view of this, the apprehension of the objector is not based on facts.

Design for Bulk Supply Pricing Philosophy

519. A significant issue in the power sector in Odisha today is the changing nature of the consumer mix in the four distribution companies and its impact on power tariff. While the four Distribution Companies in Odisha 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 is concerned. The load growth in Odisha 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. The demand of Odisha is in increasing trend due to rise in demand on account of industrialization and massive rural

electrification envisaged under Rajeev Gandhi Grameen Vidyut Yojana (RGGVY) and Biju Gramya Jyoti Yojana (BGJY).

520. However, this load growth is mostly restricted to Western and North-Eastern/Central Odisha, largely due to exploitation of minerals for production of iron, steel and aluminum etc. 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 Odisha are old and have their own captive power plants. Therefore, while HT & EHT sales in WESCO & NESCO are 50.8% & 53.0% respectively, in case of CESU & SOUTHCO it is 43.2% & 25.9% respectively.
521. South Odisha 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. Further, due to massive rural electrification numbers of consumers are increased in SOUTHCO without much increase of revenue.
522. Now the power scenario in the state is in neck to neck situation i.e the generation in the state is not sufficient to meet the state peak demand. In the coming years because of higher consumer growth most of the power produced will be consumed within the State. If there is adequate rainfall during 2012-13 the hydro generation may be more than that estimated and in that case there may be some scope for trading of surplus power on a limited scale. Further in case the power available from IPPs as proposed by GRIDCO are materialized and the surplus power from CGPs & Co-generation Plants are made available to GRIDCO then there is an ample scope to GRIDCO to trade the surplus power in the market to bridge the gap in the ARR from the revenue earning.
523. As submitted by GRIDCO, the average cost of power purchase by GRIDCO during 2011-12 (upto November, 2011) has been increased to 226.61 paise per unit even with part payment to some generators, as against the Commission's approval of 210.32 P/U for FY 2011-12. This rise in cost of power has been largely due to higher coal and oil prices, low hydro generation and growing mis-match between demand and supply of power. The Commission after due scrutiny has now approved the average power purchase cost of 236.17 P/U for FY 2012-13 which is 25.85 P/U more from 2011-12 approval .
524. Due to introduction of open access from 1.4.2008, it is difficult to forecast 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.
525. Moreover, distribution companies with higher sale at EHT/HT have been found to be 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 the companies.

526. OERC has been following a uniform retail tariff policy. Considerations of public interest for consumers of the entire State warrants continuance of a 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 distribution 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 Odisha 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 higher 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 Odisha.
527. 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.
528. 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.
529. 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.
530. 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 those are very conveniently placed and have the advantage of large base of EHT and HT consumers like NESCO and WESCO 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 2012-13. 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.

531. Around 26.8% of the state's internal requirement is met out of low cost hydro generation, which has made the power sector revenue very vulnerable to the vagaries of nature. Hydro power no doubt provides stability to system operation but at the same time failure of monsoon can play havoc on the state's utilities. The Commission has considered revenue requirement of the current year based on the assumption of a normal rainfall.

Determination of Demand and Energy Charges

532. 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.
533. 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.
534. 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 had in earlier BSP orders decided that the entire revenue recovery of GRIDCO could be effected through energy charges only by combining the demand charges and energy charges. The same philosophy is followed in this Tariff Order for 2012-13. 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.
535. Some of the objectors have strongly pleaded that for HT and EHT class of consumers, there should be a two-part tariff for Bulk Supply of power 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.250/- per KVA plus 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 2012-13. 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.250 per KVA per month. This is again subject to the condition that the annual average SMD shall be limited to the SMD approved in the order. This is necessary to maintain the load planning and system stability. In case the annual average SMD is more than the approved SMD, then overdrawal amount shall

attract the penalty @ Rs.250 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

536. GRIDCO had proposed energy charge @ 412.28 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 including SLDC charges and meet their statutory obligations including meeting the expenses towards establishment, maintenance and other allied expenses.
537. The Commission has determined the revenue requirement of DISCOMs for FY 2012-13 considering the approved BSP and ensuring that all DISCOMs do not post any negative gap between the estimated revenue requirement and estimated revenue realisation. The revenue gaps i.e. surplus (+) of the four DISCOMs for the FY 2012-13 considering the approved BSP are given below:

WESCO	-	(+) 0.17
NESCO	-	(+) 0.32
SOUTHCO	-	(+) 2.28
CESU	-	(+) 2.21

538. 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 – 92

Bulk Supply Price and Quantum of Energy for 2012-13

Name of the DISCOM	Quantum of Energy (MU)	Bulk Supply Price (P/U)	Revenue from Bulk Supply Price (Rs. Crore)
CESU	8,236.00	261.00	2149.60
NESCO	5,306.00	301.00	1597.11
WESCO	6,496.00	300.00	1948.80
SOUTHCO	3,047.00	182.00	554.55
Total	23,085.00	270.74	6250.06

539. As against GRIDCO's total net revenue requirement of Rs.6950.64 crore after adjustment of miscellaneous receipts of Rs.69.00 crore, it will recover only Rs.6250.06 crore through energy charge for the year 2012-13 from DISCOMs and will leave a negative gap of Rs.700.58 crore. The treatment of this gap has already been discussed vide Para 514 to 516.

Charges for Overdrawl of Energy

540. GRIDCO in its application proposes that any excess drawl of energy by a Distribution and Retail Supply licensee during a month over and above the approved drawl would be payable on provisional basis at the highest OERC approved power purchase rate fixed for a station for the FY 2012-13 (which includes transmission charges & transmission loss)

on a monthly basis instead of the normal differential BSP applicable to the respective DISCOMs subject to final year-end adjustment considering the highest power purchase rate/cost including the rate(s) of energy drawn through UI route of the month plus transmission charges and transmission loss.

541. 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 Licensees, over and above what is approved in the RST order for FY 2012-13 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, once the bill is raised by GRIDCO. As the Commission introduced Intra-state ABT between GRIDCO and DISCOMs, in the 1st phase (in a separate order), the issue of overdrawal / underdrawal of energy will be adjusted as un-scheduled interchange. The scheduled energy will be paid as per Commission's present tariff order and any deviation from the scheduled energy shall be adjusted as per the frequency determined UOI rate applicable to Inter-state ABT.

Rebate

542. For payment of bills through a letter of credit or 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

543. 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 on the unpaid amount.

Duty and Taxes

544. The Commission approves that 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 fixed by the Commission.

Implementation of Intra-State ABT

545. OERC (Intra-State ABT) Regulation, 2007 was published in Odisha Gazette on 14.02.2008. As per Regulation 1 (III) of OERC (Intra-State ABT) Regulation, 2007, it is in force with effect from the date of publication in the Official Gazette i.e from 14.02.2008..
546. The Commission vide its Order dated 07.02.2012 in Case No. 2 of 2012 has fixed the date of implementation of Intra-State ABT (Phase-I) in real time mode with commercial implication in the State of Odisha w.e.f 01.04.2012. The Commission reiterates its direction that any lapses in implementation of Intra-State ABT (Phase-I) with commercial implication beyond 01.04.2012 will not be entertained & action under Section 142 will be

initiated against the Licensees, SLDC & the Officers responsible for derailing such implementation.

Harnessing Power from Renewable Energy Sources

547. OERC, in its Renewable and Co-generation Purchase Obligation and its Compliance Regulations, 2010 notified on 30th September 2010, has fixed 5.50% of the total consumption in the state to be purchased from renewable and co-generation sources for the year 2012-13 (solar – 0.15 % + non-solar – 1.40 % + Co-generation – 3.95%). This would go on increasing by 0.5% per annum to reach 7% in 2015-16 (solar - 0.30% + non-solar - 2.00% + Co-generation - 4.70%). In case the actual purchase from renewable sources falls below the percentage specified by the Commission, the obligated entities are required to purchase the renewable certificates at higher cost. This implies that energy required to meet the existing demand is to be purchased at a higher cost apart from the purchase of Renewable Energy Certificates (RECs). This would result in higher tariff implication to the consumers. In order to avoid or minimize such higher tariff implication it is necessary to exploit the existing potential from small and mini hydro projects where there is possibility of exploiting around 2000 MW from such sources. Further GRIDCO has to take up the matter with the State Govt. and OREDA for early implementation of Renewable Projects (particularly Solar, Biomass and SHP those are in the pipe line) in the state during FY 2012-13 in order to meet the RPO. As already observed by the Commission earlier in its order dtd.16.02.2012 in Case No.54 of 2007, OHPC may be entrusted the entire work starting from preparation of feasibility report, drawing and design, construction drawing, technical clearance from the State Technical Committee, tendering and finally selecting the successful prospective developers to implement small hydro projects, to avoid undue delay caused in the process of running from post to pillar by the prospective developers approaching different authority for clearance and approval. Further, during the FY 2012-13, GRIDCO has to make reasonable endeavor to purchase maximum quantum of power available from Co-generation plants because the availability of power from Co-generation Plants as proposed by GRIDCO in its submission is not sufficient to meet the Co-generation Power Obligation during the FY 2012-13 as stipulated.
548. The Bulk Supply Price in respect of GRIDCO as indicated in Para 538 will become effective from 1st April, 2012 and shall continue until further orders.
549. The application of GRIDCO in Case No. 91/2011 is disposed of accordingly.

Sd/-

**(B. K. MISRA)
MEMBER**

Sd/-

**(K. C. BADU)
MEMBER**

Sd/-

**(S.P. NANDA)
CHAIRPERSON**