

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

*** **

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

CASE NO. 101/2012

DATE OF HEARING : **01.02.2013**

DATE OF ORDER : **20.03.2013**

IN THE MATTER OF : Application for approval of Annual Revenue Requirement and determination of Bulk Supply Price of 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 2013-14.

ORDER

The Commission is mandated to regulate electricity purchase and procurement process of Distribution Licensees including the price at which electricity shall be procured from the Generating Companies or Licensees or from other sources through agreements for purchase of power for distribution and supply within the State under Section 86(1)(b) of the Electricity Act, 2003 (herein after referred to as the Act). Under the existing Bulk Supply Agreements (BSAs) 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) on its Annual Revenue Requirement and proposed Bulk Supply Price. Accordingly, the Commission has taken the filing of GRIDCO into consideration even though GRIDCO as a deemed trading licensee under the 5th Proviso to Section 14 of the Act is outside the purview of Section 62 of the said Act. The prices at which GRIDCO supplies power to the DISCOMs coincides with the procurement price fixed for DISCOMs under Section 86(1)(b) of the Act. For supply of surplus power to any other person anywhere after satisfying the requirements of the DISCOMs of Odisha, the bulk supply prices 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 the ARR of GRIDCO.

PROCEDURAL HISTORY (PARA 1 TO 6)

1. The Commission directed GRIDCO to publish its ARR application in the approved format in two leading and widely circulated daily newspaper one in Odia and one in English and the matter was also posted on the Commission's website (www.orierc.org) in order to invite objections from the intending objectors. The said public notice was published in the leading daily newspapers, Commission's website

and GRIDCO's website. The Commission directed 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 in respect to the ARR and BSP application of the GRIDCO Ltd., the Commission received 12 nos. of objections/ suggestions from the following persons/ associations/ institutions/ licensees: -

(1) Shri Ramesh Chandra Satpathy, Secretary, National Institute of Indian Labour, Plot No. 302(B), Beherasahi, Nayapalli, Bhubaneswar; (2) Shri Jayadev Mishra, N-4/98, IRC Village, Bhubaneswar-15; (3) Shri Pradeep Kumar Nath, AGM (E), O/o ED(Marketing), NALCO, NALCO Bhawan, P/1, Nayapalli, Bhubaneswar; (4) Shri G.N. Agrawal, Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur-768003; (5) M/s. Power Tech Consultants, 1-A/6, Swati Villa, Surya Vihar, Link Road, Cuttack-753012; (6) Shri A. K. Sahani, Plot No. B/L-108, VSS Nagar, Bhubaneswar; (7) Shri R. P. Mahapatra, Retd. Chief Engineer & Member (Gen.), OSEB, Plot No.775(Pt.), Lane-3, Jayadev Vihar, Bhubaneswar-13, (8) Shri Ajit Kumar Mohanty, DGM (Projects), M/s Shalivahana Green Energy Ltd. (9) Shri M. V. Rao, Resident Manager & Power of Attorney Holder, M/s Ferro Alloys Corporation Ltd., GD.2/10, Chandrasekharpur, Bhubaneswar-23; (10) Shri R. V. Sheshan, President, M/s GMR Kamalanga Energy Ltd., HIG-28, BDA, Gangadhar Meher Marg, Jayadev Vihar, Bhubaneswar-13; (11) M/s. Confederation of Indian Industry Odisha (CII Odisha), Plot No. 8, 1st Floor, Forest Park, Bhubaneswar; (12) Shri A.K. Bohra, Chief Executive Officer (Comm), 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 under S.94(3) of the Electricity Act, 2003, in order to protect the interest of the consumers of Odisha, the Commission have appointed 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 for FY 2013-14. The Consumer Counsel has also presented its views on the matter in the hearing.
4. The date for hearing was fixed on 01.02.2013 and it was duly notified in the leading newspapers mentioning the list of the objectors, time and place of hearing. The Commission also issued notice to the Department of Energy, Government of Odisha informing them about the date, time and place of hearing and requesting to send its authorized representative to take part in the proceeding.
5. In its consultative process, the Commission conducted a public hearing at its premises in Bhubaneswar on 01.02.2013 and heard the Applicant, Objectors, Consumer Counsel and the Representative of Dept. of Energy, Govt. of Odisha at length. The following persons participated in the hearing process.

(1) Shri Ramesh Chandra Satpathy, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar; (2) Shri Jayadev Mishra, N-4/98, IRC Village, Bhubaneswar; (3) Shri Pradeep Kumar Nath, AGM (E), NALCO, NALCO Bhawan, P/1, Nayapalli, Bhubaneswar; (4) Shri G.N. Agrawal, Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur; (5) M/s Power Tech Consultants, 1-A/6, Swati Villa, Surya Vihar, Link Road, Cuttack-753012; (6) Shri Hara Prasad Mohapatra, the authorized representative of Shri A. K. Sahani, Plot No. B/L-108, VSS Nagar, Bhubaneswar; (7) Shri R.P Mahapatra, for self and on behalf of Objector No.8

M/s Shalivahana Green Energy Ltd., (8) Shri M.V. Rao on behalf of Objector No.9 M/s Ferro Alloys Corporation Ltd. and Objector No.11 M/s. Confederation of Indian Industry Odisha, (9) Shri M. Das, the authorized representative of the Chief Executive Officer (Comm.), CSO, NESCO, WESCO, SOUTHCO; (10) Shri A. C. Mallick, as a general consumer and Shri B. P. Mohapatra, Dir (Finance), GRIDCO & Shri P. K. Pradhan, Director (Commerce), GRIDCO. Nobody was present on behalf of M/s GMR Kamalanga Energy Ltd., but its written objection/suggestion which was filed in the above case was taken into consideration by the Commission.

6. The Commission convened the State Advisory Committee (SAC) meeting on 28.02.2013 at 3.30 P.M. at its premises to discuss about the ARR application and Bulk Supply Price Tariff proposal of the licensee. The Members of the SAC, Special Invitees, the Representative of Department of Energy, Govt. of Odisha actively participated in the discussion and offered their valuable suggestions and views on the matter for consideration of the Commission.

PROPOSAL OF GRIDCO ON ARR AND BULK SUPPLY PRICE (BSP) FOR THE FY 2013-14 (Para 7 to 22)

7. According to applicant GRIDCO Ltd. (hereinafter called GRIDCO), it 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 as amended upto May 2011 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 which they have complied.

Projection of Demand and Energy

8. The Simultaneous Maximum Demand (SMD) of DISCOMs for the FY 2013-14 has been projected at 3749.02 MVA per month and energy requirement has been projected as 25125 MU for consumption of DISCOMs FY 2013-14. GRIDCO has also projected CGP drawal (NALCO & IMFA) as 100 MU for the same period.

Power Procurement Projected by GRIDCO

9. The proposed energy available to GRIDCO is 26221.41 MU and no shortfall in requirement is anticipated.

Table – 1
Demand and Energy Projection for FY 2013-14

ITEMS	Projection for FY 2013-14
SMD for DISCOMs (MVA)	3749
Energy Demand of DISCOMs (MU)	25125
Emergency Power to CGPs (MU)	100
Transmission Loss @ 3.80% in OPTCL system (MU)	996.41
Total Energy Requirement (MU)	26221.41
Total Energy Availability (MU)	26221.41
Shortfall of power	0.00

Power Purchase Cost Projected for 2013-14

10. The detailed cost of power purchase as furnished by GRIDCO for FY 2013-14 is reproduced hereunder in Table below.

Table – 2
Summary of Proposed Power Procurement Cost during FY 2013-14

Stations	Availability (After Transformation Loss and Auxiliary Consumption deduction) (MU)	Rate (P/U)	Total Cost (Rs. Crore)	Approved rate for FY 2012-13 (P/U)
HHEP	666.50	95.88	63.90	
CHEP	325.71	79.44	25.87	
Rengali	636.57	60.89	38.76	
Upper Kolab	831.60	37.83	31.46	
Balimela	1172.16	75.26	88.22	
OHPC(Old)	3632.54	68.33	248.22	66.05
Indravati	1948.32	80.42	156.68	79.26
Sub-Total OHPC	5580.86	72.55	404.89	
Machhkund	262.50	30.60	8.03	30.51
Total State Hydro	5843.36	70.67	412.93	68.83
OPGC	2668.40	220.77	589.11	195.15
TTPS	3210.00	249.61	801.25	179.87
Small Hydro	300.00	368.00	110.40	368.00
Biomass Energy	120.00	516.00	61.92	501.00
Solar Energy	65.76	1060.45	69.74	517.52
Co-generation Plants	1102.00	275.00	303.05	283.02
CGPs	1092.04	275.00	300.31	286.21
IPPs	3859.11	274.22	1058.25	278.91
Total State	18260.67	203.00	3706.95	179.71
TSTPS Stg.-I	2154.56	320.28	690.06	328.53
TSTPS Stg.-II	1342.41	315.28	423.24	328.10
FSTPS- I & II	1470.75	507.11	745.83	467.33
FSTPS- III	1022.35	575.98	588.85	
KhSTPS Stg.-I	841.56	436.48	367.33	407.96
KhSTPS Stg.-II	207.70	445.27	92.48	413.59

Stations	Availability (After Transformation Loss and Auxiliary Consumption deduction) (MU)	Rate (P/U)	Total Cost (Rs. Crore)	Approved rate for FY 2012-13 (P/U)
Total Central Thermal	7039.33	413.08	2907.78	376.32
Chukha	268.11	194.64	52.18	162.86
TALA	145.50	238.96	34.77	206.90
Teesta – V	507.82	260.40	132.23	214.44
Total Central Hydro	921.42	237.88	219.18	198.10
ERLDC Fees and Charges (SOC & MOC)			3.75	0.45
Total EREB	7960.75	393.27	3130.72	352.63
Total Availability	26221.42	260.77	6837.67	236.17

Pass through of arrear dues paid / to be paid during FY 2012-13

11. GRIDCO proposes to consider pass through of expenses, already incurred or to be incurred till FY 2012-13, in the ARR for the FY 2013-14. This expenses amount to Rs.321.49 crore consisting of outstanding Govt. Guarantee Commission (Rs.34.34 crore), one-third of total Arrear Estimation of NTPC-TTPS till FY 2012-13 as per its filing before the Hon'ble CERC (Rs.227.62 crore), and Arrear Estimation of NTPC's thermal power stations for the period of April,2012 to Sept,2012 (Rs.59.53 crore) .
Special Appropriation of repayment of principal for FY 2013-14
12. GRIDCO has proposed a sum of Rs.1768.51 crore on account of repayment of principal of all loans to be recovered through tariff of the FY 2013-14.
13. **Interest, Financing & Other expenses**

Table – 3
Interest, Financing & Other expenses for FY 2013-14 (Rs. Crore)

Particulars	GRIDCO proposal for FY 2013-14
1. Interest & Financial Charges	580.17
2. Other Costs:	
a. Employee Cost	5.22
b. A&G Cost	3.77
c. Repair & Maintenance Cost	0.50
Sub-Total - Other Costs	10.66
3. Depreciation	0.35
Total (1+2+3)	590.01

Return on Equity

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

Other Income / Miscellaneous Receipts

15. GRIDCO expects to earn an amount of Rs. 69 crore (at existing approved tariff) from proposed sale of 100 MU emergency power to NALCO and IMFA.

Receivable from DISCOMs and other parties

16. DISCOMs have defaulted in payment of Rs.1248.34 crore towards securitized dues, Rs.60 crore towards NTPC Bonds and Rs.988.83 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 including DISCOMs may not be considered in the ARR of GRIDCO for FY 2013-14. Further, GRIDCO has submitted that the DISCOMs have been defaulting in payment of BSP bills. The current outstanding BSP and UI dues payable by DISCOMs for FY 2011-12 and FY 2012-13 (upto September 2012) are Rs.971.32 crore.

Annual Revenue Requirement

17. The proposal for Annual Revenue Requirement of GRIDCO for FY 2013-14 is summarised in the Table below.

Table - 4
Annual Revenue Requirement of GRIDCO for FY 2013-14

(Rs. Crore)			
	Item	OERC approval for 2012-13	GRIDCO's Proposal for 2013-14
a)	Power Purchase Cost	5691.02	6837.67
b)	Pass through expenses and Special Appropriation	904.69	2090.00
c)	Interest, Financing and other expenses	423.93	590.01
d)	Return on Equity	0.00	67.11
e)	Revenue Requirement (a+b+c+d)	7019.64	9584.79
f)	(-) Misc. Receipts	69.00	69.00
g)	Net Revenue Requirement (e-f)	6950.64	9515.79

Proposed Revenue Earning at Existing BSP Rates

18. GRIDCO proposes to earn revenue of Rs 6802.99 crore during 2013-14 from the anticipated sale of 25125 MU to DISCOMs at the existing BSP rates for 2012-13, the details of which is given in Table below.

Table - 5
**Expected Revenue for FY 2013-14 with anticipated sale to DISCOMs
at Existing BSP Rates**

	Energy (MU)	Existing BSP Rate (P/U)	Amount (Rs. Cr.)
CESU	8854	261	2310.89
NESCO	6100	301	1836.10
WESCO	6821	300	2046.30
SOUTHCO	3350	182	609.70
TOTAL	25125		6802.99

Excess / Deficit in the ARR for 2013-14

19. GRIDCO has proposed that it would suffer revenue deficit of Rs.2712.80 crore considering the proposed ARR and the revenue to be earned from sale of the proposed

energy of 25125 MU to DISCOMs during FY 2013-14 at the existing BSP Rate for FY 2012-13, the details of which are shown in the Table below.

Table - 6
Excess / Deficit on Revenue Requirement for FY 2013-14
(Rs. Crore)

	Item	GRIDCO's Proposal for 2013-14
a)	Total Revenue Requirement	9584.79
b)	Less: Misc. Receipts	69.00
c)	Net Revenue Requirement	9515.79
d)	Revenue Receipt from DISCOMs (at existing BSP)	6802.99
e)	Excess(+) or Deficit(-)	-2712.80

Summary of Tariff Filing for FY 2013-14

20. GRIDCO has prayed the Commission to approve the following for FY 2013-14 and make the same effective from 1st April, 2013.
- i) Energy charges @ 378.74 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 2013-14 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.
21. 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 2013-14. World Institute of Sustainable Energy (WISE), Pune appointed as consumer counsel put up certain queries and objections regarding ARR and BSP filing of GRIDCO so also the objectors.
22. 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 2013-14. Based on their nature and type, these objections have been categorized broadly as indicated below:

VIEWS OF CONSUMER COUNSEL AND THE OBJECTORS ON THE BULK SUPPLY PRICE PROPOSAL FOR FY 2013-14 (Para No. 23 to 44)

Consumer Counsel

23. 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 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, interest on proposed new loan shall not be pass through in the ARR, R&M cost, depreciation and RoE shall not be pass through items in the ARR.

Views of Objectors

Legal Issues:

24. 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.
25. Under the provision of Electricity Act 2003, Section 185, Sub-section 3, GRIDCO only enjoys the status of 'Trading Licensee' for intra-state trading of electricity. GRIDCO has required satisfying under which provisions of EA 2003 it has submitted the present ARR and under which provisions of EA 2003, Hon'ble Commission has the necessary judicial powers to entertain the present application.
26. GRIDCO only enjoys the rights of 'Bulk Supply Distribution' of electricity generated from generators of the state and the state quota of electricity from available from central generators for supply of the same to distribution licensee. GRIDCO is required to make the bulk supply distribution to the distribution licensee with a trade margin to be fixed by the Commission for which it has the necessary power under the provisions of Section 86, Sub-section 1(j) of EA 2003.
27. After the distribution licensees meet the consumption requirement of the households and agricultural consumers from the bulk supply by GRIDCO; any shortfall to meet the requirement of large consumers, GRIDCO may be permitted to make the bulk supply from the purchased electricity from the CGPs of the state and from the private generators at the tariff fixed by the Commission. In case still there exists shortfall, GRIDCO may procure the bulk electricity on competitive rates from the market under the approval of the Commission and supply the same to distribution licensees with the trade margin fixed.
28. GRIDCO cannot claim the financial cost towards interest in loan etc as it has not followed the orders of the Commission contained in the Load Regulation Protocol, during periods of shortage of power supply. In spite of being a regulated entity, it was guided by the directions of the State Government to procure costly power.
29. 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 but buying costlier power from outside the State.

Energy Requirement & Availability:

30. 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 at the year under consideration, short time and long time requirement, generation and supply for which the necessary documents have not been presented.

Availability from State Stations

31. 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. 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 power requirement of the State Consumers.
32. Projections made by GRIDCO for availability from state thermal power plants are on a conservative basis and taking into consideration the past trends in performance, the plant availability will increase.
33. OPGC should furnish the reasons for sudden drop in PLF from a maximum of 90%. The licensees submit that PLF for OPGC and TTPS may be considered at 90% for FY 2013-14 and the estimated drawal would be 2997 MU and 3265 MU respectively.

Power Procurement Cost

34. Procurement action is suggested in merit order basis and through bidding for power from Stations other than OHPC, OPGC, CGP and Central Sector Station.

Interest on Long Term Liabilities

35. 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.

Revenue Gap and BST

36. The Commission should not allow GRIDCO to increase the energy charge, which if allowed would ultimately be passed on to consumers.
37. The proposal of GRIDCO to increase the average BSP by 39.89% i.e. from the existing rate of 270.74 P/U to 378.74 P/U (against the approved rate of 168.67 P/U for FY 2010-11 and 231.65 P/U for FY 2011-12) is not acceptable. This rate is projected at higher side without proper basis and such increase in BSP will affect the retail tariff. The projected power procurement rate of 260.77 P/U against last year's projection of 270.88 P/U, is around 3.73% lower.
38. Energy charges in BST should reduce as CAPEX Programme have already been launched and reservoir level has improved. State's shares from all respective units are to be properly monitored and received, benefit of sale of surplus power to others. 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.
39. 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.

40. Once the approach of the Commission is modified in line with ATE directives and GoI FRP scheme as well as Kanungo report etc, the requisite revenue would be available for GRIDCO from DISCOMs.

Levy of UI charges, Over Drawl Charge and Year End Adjustment

41. In the initial months, the overall UI dues were determined on the basis of allocation in proportion to energy drawal which was even contrary to the directives of the OERC. The UI costs and revenues need to be netted off to arrive at an overall benefit or cost.

Rebate and FPA

42. DISCOMs submit that the FPA charges have been allowed as pass through on an annual basis and unless there is a mechanism for recovering the FPA charges from the retail consumers in the same line interval in which the FPA claim was raised, there is bound to recovery shortfall.

Escrow mechanism and surcharge

43. 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. The Hon'ble Commission may give servicing of the loan as first priority for utilizing the escrowed collections.

Other Issues

44. 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 produce the detail planning for the information of the consumer as the STU is not able to evacuate power from IPPs and CGPs.

GRIDCO's RESPONSE TO THE OBJECTORS (Para 45 to 58)

45. In response to the views of the objectors on GRIDCO's application for approval of the Annual Revenue Requirement and Bulk Supply Price for 2013-14, GRIDCO had filed rejoinders on the same. GRIDCO's rejoinder on views expressed by the objectors has been broadly classified into the following main issues.

Legal Issues

46. GRIDCO, although classified as a "Trader", also happens to be the Bulk Supplier of power to the State DISCOMs as the Govt. of Odisha has notified GRIDCO as the "State Designated Entity" under the "Single Buyer Model". OERC through its various Orders including the BSP Orders for immediate previous years have also upheld GRIDCO's position as being legally tenable. It's because GRIDCO's legal existence is sustainable under the Law, it has been submitting its ARR & BSP Applications right from its inception under the relevant provisions of the Electricity Act, 2003 and the related OERC Regulations framed there under and the same is being considered by the appropriate fora for adjudication all along these years.

Energy Availability and Procurement

47. GRIDCO projected its quantum of power procurement from different sources for 2013-14 based on the following assumptions / factors to meet the demand of DISCOMs, which are subject to prudent check by the Commission. The procurement projection are as follows:

- a. Projection from OHPC, OPGC & TTPS have been taken as per the generation plan submitted by them.
- b. Projection from Machhkund is assumed as per the allotment.
- c. Projection from Samal and Meenakhi HPS has been assumed as per the PPA.
- d. Projection from Central Generating Stations at normative i.e 85% PLF has been considered based on the Hon'ble CERC (Determination of Tariff) Regulations, 2009.
- e. 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).
- f. Projection from Teesta HPS has been considered based on the annual saleable energy and the share of GRIDCO at 23.40%.
- g. Projection from the IPPs has been taken as per the provisions of the PPAs.
- h. Projection of procurement from CGPs / Cogeneration sources has been taken as 2194.04 MU; besides 120 MU of Bio-mass & 65.76 MU of Solar energy is proposed to be procured during FY 2013-14.
- i. The projected availability of renewable energy has been estimated with due care so as to fulfill the RPO. GRIDCO has proposed to procure 1587.76 MU of renewable energy consisting of 65.76 MU of Solar Energy, 1522 MU of non-solar energy like SHEP, Bio-Mass and Co-Gen energy.
- j. 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.

Sales Projection

48. GRIDCO generally considers the demand projection of the DISCOMs as submitted by them and adds the transmission loss (3.8% projected by OPTCL) to arrive at the energy requirement of the State. The projections by DISCOMs to purchase energy from GRIDCO are based on their sales projection to consumers plus the distribution loss of their system. GRIDCO does not consider distribution loss for projecting the DISCOMs' energy demand.

Power Procurement Cost

49. 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. GRIDCO has been paying the CGPs/ Co-Generation Plants @275 P/U or at the approved rate taking into consideration of their CGP status.

Other issues related to power purchase cost

50. GRIDCO takes every care to source the power by following the least cost approach or the Merit Order Procurement Policy. It is rather the external factors like increased power demand of the State coupled with static hydro power availability has forced GRIDCO to source high cost thermal power from various sources including those from CGPs / IPPs. In fact, the share cheaper hydro power has gone down from 57% to 22% only during last ten years while the requirement of power in the State in the

meantime has almost doubled. Besides, the availability of raw material such as coal and its prices have zoomed to a great extent during last year, although the situation has eased a little now. All these have contributed to overall increase in the power purchase cost because of high proportion of thermal power in the total power purchase basket.

PGCIL Transmission Charges

51. GRIDCO has projected the charges as per the new Hybrid methodology called the Point of Connection Charges (PoC Charges) which is effectively higher as compared to the earlier transmission charge. 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 to 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.

Past Losses and Special Appropriation

52. Rs.1768.51 Crore being legitimate expenditures of GRIDCO should be allowed as Special Appropriation without which GRIDCO's financials would be in jeopardy.
53. Major reasons for which GRIDCO has borrowed such huge sums are as follows:
 - a. GRIDCO has taken over all the losses of the Power Sector incurred up to FY 1998-99 and no loss has been transferred to DISCOMS as per the Transfer Scheme dated 26.11.1998.
 - b. Due to purchase of high cost power during hydrology failure in FY 2002-03, 2008-2009, 2009-10 and also purchase of high cost thermal power during 2010-11 and 2011-12 due to increased State Demand, which have added to the operational losses of GRIDCO.
 - c. As per the BSP approved by the OERC which is incidentally less than the corresponding power purchase rate, a revenue gap is left out in each year in the ARR of GRIDCO. The Commission has tried to justify the same with a hope that the revenue gap could be made up from the revenue earned from trading of surplus power and that from UI. But due to less hydrology coupled with increase in the State demand during last couple of years, the surplus power scenario has become a myth; consequently landing GRIDCO into serious financial crisis. GRIDCO has to borrow regularly in order to fund the shortfall mainly, to pay for the power purchase bills. The situation has taken alarming shape for GRIDCO as it has to service the various loans amounting to about Rs.6000 Crore, as of now. These loans are increasing every month due to revenue shortfall.
54. Various reasons underlying the projection of an increase in ARR & BSP proposal for FY 2013-14 including the pass through of past losses, are as under.
 - a. As per the approved tariff, a revenue gap is being left out in each year in the ARR of GRIDCO with a direction to bridge the same out of trading revenue & UI charges etc. which has not been possible during FY 2008-09, FY2009-10, FY 2010-11, 2011-12 and also during current year due to non-availability of surplus power.

- b. Due to Hon'ble Commission leaving huge deficit gaps in the ARR & inadequate BSP (tariff) approved by the OERC, GRIDCO has been selling power at a loss to the four DISCOMs as may be evidenced from the following Table.

Table - 7
Annual Revenue Requirement, Bulk Supply Price, Power Purchase Rate & Revenue Gap being approved by OERC over the years

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
2012-13	6950.64	(-)700.58	270.74	236.17

As may be observed, only except the years of FY 2011-12 & FY 2012-13, the OERC approved BSP is less than the approved power purchase rate. Besides, deficit revenue gap has been left by the Commission in all the years, which GRIDCO has not been able to replenish due to non-availability of surplus power for UI and Trading.

- c. GRIDCO's deficit has ballooned because of the fact that the DISCOMs are not paying the BSP Bills and the outstanding dues which stands at about Rs.4600 Crore as of September, 2012.
- d. Besides, the power purchase cost has been on the rise due to falling share of cheaper hydro power in the overall power purchase basket. In fact, the share of hydro power has fallen from earlier 57% to only 17% now. The increasing cost of thermal power has contributed to the overall rise in the power purchase cost.
- e. Due to purchase of high cost power during hydrology failure in FY 2008-09, 2009-10 FY 2010-11 and 2011-12 that have added to the losses of GRIDCO.
55. 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 - 8
Actual and approved revenue gap of GRIDCO

Particulars (As per OERC Approval)	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Demand Charge (Rs./KVA/Month)	200	200	200	200	200	200	200	200
Energy Charge (P/U)								
WESCO	98.82	98.02	157.25	157.25	154	194	262	300
CESU	85	79	101.5	101.5	101.5	157	219	261
NESCO	86	81	125	125	130	195	262	301
SOUTHCO	75	70	70	70	70	90	135	182
ARR (Rs. Crore)	1659.53	1774.44	2041.27	2152.23	2312.11	4242.44	5206.87	6250.06
Sale to DISCOMs (MU)	13188.1	14683	17021.9	17620	18921	20154	22477	23085.00
Average BSP (P/U)	125.84	120.85	119.92	122.15	122.2	170.25	231.65	270.74
% Change	-3.85%	-3.96%	-0.77%	1.85%	0.04%	39.32%	36.07%	16.87%
Revenue Gap	15.72	-504.52	-464.86	-410.05	-882.85	-806.15	-746.05	-700.58

Particulars (As per OERC Approval)	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
(+/-) As per OERC approval (Rs. Crore)								
Actual Revenue Gap (+/-) (Rs. Crore)	-3.88	43.03	587.48	118.57	-1540.69	-1296.25		
Cumulative Gap (Rs. Crore)	-907.28	-864.25	-276.77	-158.20	-1698.89	-2995.14		

56. Regarding payment of the BSP Bills of GRIDCO by DISCOMs after modification of Tariff Orders as per the directives by the APTEL, adoption of Kanungo Committee Report by the State Govt. and implementation of FRP Scheme of the Govt. of India, OERC has been allowing the recovery of the entire BSP in the ARR of DISCOMs who are also allowed Return on Equity. There is no reason as to why the DISCOMs should not pay the BSP of GRIDCO from their own earnings as the BSP is a complete pass through in the DISCOMs' ARR as well as in their Retail Supply Tariff.
57. At present, there is no surplus power in the State nor there is a favourable market price to undertake trading in electricity. Therefore, unless the BSP is allowed to increase, GRIDCO may not be in a position to sustain its operations any longer.

Miscellaneous Issues affecting financials of GRIDCO

58. The DISCOMs have not complied the above said Order dated 29/30.03.2012 of OERC in letter and spirit and have failed to oblige the Order as detailed below:
- Failed to pay Rs.50 Crore as directed at Para-14(ii) by 30.04.2012
 - Failed to pay Rs.10 Crore every month along with interest except payment Rs.10 Crore in the month of June 2012
 - No interest is paid on the said outstanding dues.
 - No loan agreement in this regard has been executed so far.
 - Had not made any written confirmation as regards withdrawal of litigations relating to NTPC bonds by 30.04.2012

OBSERVATIONS OF THE STATE ADVISORY COMMITTEE (SAC)

59. The Commission convened the State Advisory Committee (SAC) meeting on 28.02.2013. The Members of SAC deliberated on different issues related to power sector and the Annual Revenue Requirement of various licensees. However, no specific view was offered related to Annual Revenue Requirement and Tariff filing of GRIDCO.

COMMISSION'S OBSERVATIONS & ANALYSIS OF GRIDCO'S PROPOSAL (Para 60 to 281)

60. On detailed scrutiny and examination of the Annual Revenue Requirement and Bulk Supply Price Application of GRIDCO for FY 2013-14, the written and oral submissions of the objectors, the Commission passes the order as enunciated in the subsequent paragraphs.

Principle followed for approval of ARR for FY 2013-14

61. The Commission, for determination and approval of the ARR of GRIDCO for FY 2013-14 continues to follow the same principles as in the previous year. For the purpose of tariff setting for FY 2013-14, 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.

62. Tariff determination involves adoption of various assumptions and principles to arrive at the individual ARR components for a future year and hence, is liable to be at variance to actual turn of events. The Commission has also accepted the concept of true-up in order to insulate the licensee from any eventuality. The Commission, as in the previous years, has continued to determine the ARR for the year FY 2013-14 using the following principles.
63. 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 as per design energy and state thermal generation being computed based on the generation plan submitted by 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, Cogeneration Plants & energy from renewable sources have been considered based on the proposal of GRIDCO and the requirement of the state.
64. 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.
65. 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 orders, 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 and un-scheduled interchanges charges.
66. The Commission has scrutinised in detail the energy requirement proposed by the DISCOMs for FY 2013-14. 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 co-generation sources, some surplus energy will be available after meeting the State demand for FY 2013-14, which has been calculated on normative loss basis. The quantum of surplus energy may be increased /reduced based on hydrology and/or projected drawal from CGPs/Co-generation plants or central sector power not materializing as estimated on normative basis.
67. 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.

However, in the recent past, the earnings of GRIDCO on account of trading and UI charges have reduced due to 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 was practically reduced. However, for the ensuing year FY 2013-14, it is estimated that certain surplus power will be available with GRIDCO for trading and the earning on account of such trading will help to reduce the past liabilities.

68. 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 Clause 3(3), the distribution-related liabilities except accumulated losses incurred by GRIDCO in its erstwhile distribution business up to that date 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 upto to the date separation (i.e. 31.03.1999) and also being incurred thereafter by DISCOMs through back-to-back payment arrangements 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 assets of its own. GRIDCO, in the interest 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, in past, the liabilities to be reflected in its application, so that sums payable to the creditors can be smoothly recovered from DISCOMs, through escrow mechanism.

Quantum of Power Purchase

69. 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 of the state.
70. 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.*
71. GRIDCO Ltd. as well as DISCOMs have submitted their ARR for FY 2013-14 to the Commission for approval. The figures filed by GRIDCO and DISCOMs in their ARR for 2013-14 on quantum of energy drawl by DISCOMs from GRIDCO are examined and estimated based on the quantum of present drawl of power and estimated additional load growth during FY 2013-14 for EHT & HT industries and RGGVY & BGJY consumers.
72. The Distribution Companies have furnished projections for drawl of power from GRIDCO during FY 2013-14 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.
73. The quantum of power to be purchased during the FY 2013-14 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. 104/2012 (WESCO), 105/2012 (NESCO), 106/2012 (SOUTHCO) and 107/2012 (CESU) by following the guidelines of the Regulations quoted above. The Commission has approved the quantum of power to be purchased for the FY 2013-14 relating to CESU, NESCO, WESCO and SOUTHCO as 7937 MU, 5269 MU, 6655 MU and 3187 MU respectively totalling to 23048 MU.
74. The Commission has also approved 3.80% towards transmission loss in the OPTCL system for the FY 2013-14. The details of transmission loss have been furnished in the tariff order for OPTCL for the FY 2013-14 in Case no 102 of 2012.
75. 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 2013-14 after considering the submission of GRIDCO and actual drawal of CGPs during the past years. The details on the estimated requirement of power purchase for use within the State is indicated in the table below:

**Table –9
Purchase of Power by GRIDCO for State Use for FY 2013-14**

(In MU)

Name of the DISCOMs	Commission's Approval for 2012-13	GRIDCO's Proposal in ARR 2013-14	DISCOM's Proposal for 2013-14	Commission's Approval for 2013-14
CESU	8236.00	8854.00	8210.47	7937.00
NESCO	5306.00	6100.00	6140.24	5269.00
WESCO	6496.00	6821.00	6821.00	6655.00
SOUTHCO	3047.00	3350.00	3600.00	3187.00
TOTAL DISCOMs	23085.00	25125.00	24771.71	23048.00
CGP	100.00	100.00		100.00
TOTAL SALE	23185.00	25225.00		23148.00
Transmission loss at EHT in MU (DISCOMs Purchase only)	911.88 (@ 3.80% Transmission loss)	996.41 (@ 3.80% Transmission loss)		910.42 (@ 3.80% Transmission loss)
Total Purchase	24096.88	29221.41		24058.42

76. The Commission has approved the energy drawal by DISCOMs for FY 2013-14 after considering the present drawal pattern of DISCOMs and the projections made by them for additional load growth. Hence there should not normally be any variations from the approved drawal. The DISCOMs should limit their drawal to the approved quantum of energy by reducing Distribution Loss. They must also try to stick to the annual energy drawal as approved by the Commission.

Simultaneous Maximum Demand (SMD) in MVA

77. GRIDCO in its filing submitted that none of the DISCOMs except WESCO responded to their request to furnish the SMD projections for FY 2013-14. WESCO had indicated the highest SMD projection for FY 2013-14 as 1489.919 MVA to be occurring in the month of March, 2014 and the average SMD projection of WESCO was given to be 1438.376 MVA for FY 2013-14. However, GRIDCO further indicated that, the actual highest & the average SMD of WESCO for the 1st six Months for FY 2012-13 are recorded as 1039.887 MVA and 998.475 MVA per month respectively which are significantly lower than WESCO's corresponding projections. However, taking into account the present trend as well as the likely future load growth, GRIDCO has considered 5% increase over the highest SMDs recorded during the 1st six months of FY 2012-13 to be the projected SMDs of corresponding DISCOMs for the FY 2013-14 as are given under:

**Table - 10
Projection of SMDs of DISCOMs for FY 2013-14**

DISCOMs	OERC Approval of SMDs for FY 2012-13	Average SMD of each DISCOMs during 1st 6 months of FY 2012-13	Highest SMD (MVA per Month) recorded during FY 2012-13 (April'2012 to Sept.'12)	5% Increase over the highest SMDs of FY 2012-13 (April'12 to Sept'12)	GRIDCO's Projection of SMD for FY 2013-14
	(MVA/ Month)	(MVA / Month)	(MVA/ Month)	(MVA/ Month)	(MVA/ Month)
CESU	1271	1183.829	1226.071	1287.37	1287.37

NESCO	851	798.641	829.963	871.46	871.46
WESCO	1100	998.475	1039.887	1091.88	1091.88
SOUTHCO	475	457.058	474.574	498.30	498.30
TOTAL	3697	3438.003	3570.495	3749.02	3749.02

78. 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'12 to Dec'12 is furnished in the table below

Table - 11
Demand in MVA during 2012-13 (upto Dec' 12)

	CESU	NESCO	WESCO	SOUTHCO	ALL ORISSA
Apr-12	1,175.95	773.12	985.40	448.26	3,382.72
May-12	1,169.39	785.09	1,009.13	445.93	3,409.54
Jun-12	1,145.64	795.94	982.10	443.09	3,366.78
Jul-12	1,171.26	829.96	942.97	461.15	3,405.35
Aug-12	1,214.66	798.05	1,039.89	474.57	3,527.18
Sep-12	1,226.07	809.69	1,031.36	469.34	3,536.46
Oct-12	1,165.54	805.11	971.77	480.08	3,266.87
Nov-12	1,162.56	755.91	982.96	468.54	3,183.25
Dec-12	1,135.65	781.88	964.42	472.98	2,956.38
AVERAGE (4/12 to 12/12)	1,174.08	792.75	990.00	462.66	3,419.49

79. 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 3536.46 MVA in the month of September, 2012. However, the sum of the maximum demand of each DISCOMs comes to 3576.00 (CESU-1226.07 + NESCO-829.96 + WESCO-1039.89 + SOUTHCO-480.08) during the period from April, 2012 to December, 2012.
80. The Commission analysed the demand pattern of DISCOMs during the current FY 2012-13 and observed that the SMD of the DISCOMs has been reduced from what was approved by the Commission for the FY 2012-13. 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 1311.46 MU by the DISCOMs during FY 2013-14. Thus, for meeting this additional demand of 1311.46 MU, the additional MVA requirement has been worked out to 166.34 MVA. So, the Commission has estimated the Demand of the DISCOMs for FY 2013-14 taking the maximum demand during April, 2012 to December, 2012 plus the demand on account of additional load growth during FY 2013-14. But in case of WESCO, it is observed that the total demand comes to 1072 MVA which is much lower than the approval of 2012-13. So, the Commission has taken the demand of WESCO at the level that was approved for the FY 2012-13 and also proposed by WESCO for FY 2013-14.

Accordingly, the total estimated demand approved by the Commission works out to 3770.00 MVA for DISCOMs, the details of which are given in the table below.

**Table - 12
Demand in MVA 2013-14**

DISCOMs	OERC Approval for 2012-13	Proposal by DISCOMs for 2013-14	Proposal by GRIDCO for 2013-14	Actual avg SMD during 4/12 to 12/12	Maximum SMD during 4/12 to 12/12	Additional Load growth as estimated for 2013-14 (MU)	Additional load growth converted to MVA at 0.9 power factor	Maximum SMD during 4/12 to 12/12 + Additional load growth	OERC Approval for 2013-14
CESU	1271.00	1415.00	1287.37	1174.08	1226.07	602.87	76.47	1302.54	1303
NESCO	851.00	900.00	871.46	792.75	829.96	207.89	26.37	856.33	856
WESCO	1100.00	1100.00	1091.88	990.00	1039.89	254.13	32.23	1072.12	1100
SOUTHCO	475.00	610.00	498.30	462.66	480.08	246.57	31.27	511.35	511
ALL ODISHA	3697.00	4025.00	3749.00	3419.49	3576.00	1311.46	166.34	3742.34	3770

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

81. Taking into account the SMD in different months of 2012-13 and the additional load projected by the DISCOMs, the SMD for 2013-14 has been fixed at 3770 MVA, within which the DISCOMs should operate subject to an over-drawal of maximum 10% in a month.

Purchase of Power from Different Generating Stations

State Hydro

82. GRIDCO's proposal and Commission's approval on drawal of power from various stations of OHPC for the FY 2013-14 are given in the table below, the details of which have been dealt in Case No.100/2012 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 -13
Drawal from State Hydro Stations (in MU)**

Source of Generation	FY 2012-13	FY 2013-14	
	Commission's Approval	GRIDCO's Proposal	Commission's Approval
OHPC (Old Stations)	3676.86	3632.54	3676.86
Upper Indravati	1942.38	1948.32	1942.38
Machhkund	262.50	262.50	262.50
Total Hydro	5881.74	5843.36	5881.74

83. The design energy of Machhkund 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 Machhkund. The Commission desires that the State should draw at least 50% of Machhkund generation every day. GRIDCO/OPTCL and SOUTHCO should co-ordinate to maximise the drawal from Machhkund.

Talcher Thermal Power Station (TTPS)

84. 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 3210 MU at the plant availability of 89 % with adjustment of Auxiliary Consumption of 10.50 % as per the existing CERC norms. The NTPC will get full capacity charge at a normative plant availability of 82.0% and any deviation from normative plant availability will attract higher/lower capacity charge as the case may be. However, based on the submission of GRIDCO, the Commission approves the net drawl of 3209.78 MU from TTPS for the FY 2013-14, taking into account the projected plant availability of 89.0% & Auxiliary Consumption of 10.50%.

IB Thermal Power Station of OPGC

85. Orissa Power Generation Corporation (OPGC) owns IB Thermal Power Station at Banharpalli in Dist. Jharsuguda with an installed capacity of 2x210 MW.
86. Like the previous years, OPGC has not filed its ARR and Tariff application with the Commission for the year 2013-14. The Commission, vide its letter No.DIR (T)-383/10/4579 dated 20.12.2012 had directed OPGC to file the amended PPA before the Commission for vetting as per the recommendation of the High Level Task Force constituted by the Govt. of Odisha. In response to the above letter of the Commission, OPGC vide its letter No.3439 dated 22.12.2012 intimated that the amended PPA has been executed between OPGC and GRIDCO on 19.12.2012 after approval of the Govt. of Odisha and OPGC is taking steps for withdrawal of SLP pending before Hon'ble Supreme Court. Now the Commission observed that Hon'ble Apex Court vide its order dated 14.02.2013 has dismissed the said Civil Appeals No.4031 and 4032 of 2009 as withdrawn by OPGC-the Appellant. In the said order Hon'ble Apex Court has directed OPGC to file the amended PPA before OERC and the Commission shall consider the same appropriately in accordance with law.
87. Since the aforesaid Appeals of OPGC before the Hon'ble Apex Court were withdrawn much after the schedule date of filing of application i.e. 30.11.2012, it has not been possible to consider the same even if it submits the PPA and Tariff for our approval for FY 2013-14. Hence, the Commission shall consider the same, when it is filed before it.
88. 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 Bulk Supply Agreements (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 BSAs of GRIDCO with DISCOMs has brought about a situation that in effect and substance amounts to supply of power by OPGC to DISCOMs. Since under Section 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. In this piquant situation, the Commission has been invoking its power under Section 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 Section 86(1)(b), the Commission has thought it prudent to provisionally apply the

parameters of tariff-setting as per Section 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 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.

89. 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 Section 64 (1) of the Act. 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 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.
90. OPGC, in its generation plan for FY 2013-14, has submitted to GRIDCO that the net energy sent out from OPGC would be 2643.136 MU based on target generation of 2948.40 MU at the PLF of 80.14% & auxiliary consumption of 10.35%. However, GRIDCO in its submission has projected the net drawal of 2668.402 MU from OPGC taking into account the Auxiliary Consumption of 9.50% as per the power purchase agreement signed between GRIDCO and OPGC and the PLF of 80.14% as projected by OPGC. While replying to the queries raised by the Commission, GRIDCO has submitted that the cumulative PLF of OPGC upto December, 2012 is at the level of 83.61%. The Commission observed that OPGC is entitled 100% fixed charges on achieving 80% Plant Availability and any deviation from this will attract higher/lower capacity charge, as the case may be. Further, GRIDCO has projected the Plant Availability of OPGC at the level of 80.14% based on the submission of OPGC. Hence, based on the submission of GRIDCO, the Commission approves a net drawl of 2668.40 MU from OPGC during the FY 2013-14 considering Plant Availability of 80.14% and 9.50% auxiliary consumption.

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

91. GRIDCO in its filing has proposed to procure 1092.04 MU of energy from the CGPs and 1102 MU from the Co-generation Plants during FY 2013-14 with a total of 2194.04 MU.
92. The Commission observed that as per the estimation 968.02 MU of energy from Co-generation Plants is required to meet the Co-generation power purchase obligation for the ensuing year 2013-14. However, the Commission is mandated by the Electricity Act, 2003 to encourage generations from Co-generation Plants. Hence, the Commission approves the proposal of GRIDCO for purchasing the entire projected energy of 1102 MU from Co-generation Plants during the FY 2013-14 for state consumption. Besides, GRIDCO has projected to procure 1092.04 MU from the CGPs during the FY 2013-14. However, based on the estimated requirement of the state to be met by the DISCOMs, it is observed that this CGP power is the surplus energy available with GRIDCO after meeting the estimated state requirement for the FY 2013-14. 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 available power from CGPs and excess power available from 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 for the ensuing year. 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 for trading purposes after meeting the state demand subject to commercial viability.

Renewable Energy

Small Hydro Sources:

93. GRIDCO has submitted to procure around 300 MU of renewable power from small hydro sources that would be available to GRIDCO during FY 2013-14 as given in the table below.

Table – 14
Proposed Drawal from Small Hydro Sources for FY 2013-14

Sl. No.	Name of the SHEPs	Installed Capacity (MW)	Energy drawal during the 1st six months of 2012-13 (MU)	Proposed Energy procurement for FY 2013-14 (MU)
1.	Meenaskhi Small Hydro	37	91.180572	195.00
2.	SAMAL Small Hydro	20	49.631567	105.00
	Total		140.812139	300.00

94. Considering the above proposal of GRIDCO, the Commission allows GRIDCO to purchase 300 MU of renewable energy from these two SHEPs for consumption in the state during FY 2013-14.

Bio-mass Energy:

95. GRIDCO proposes to procure renewable energy of 120 MU during FY 2013-14 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:

96. In its submission, GRIDCO is hopeful to procure 63 MU of Solar Energy from the following sources to meet its Solar Power Purchase Obligation during the FY 2013-14.

(i) 13 MU from 8 Nos. of Solar PV Projects of 1 MW capacity each commissioned in the State under 'Rooftop PV and Small Solar Power Generation Programme' (RPSSGP) guidelines of MNRE, GoI.

(ii) 33 MU from 20 MW Solar capacity as per the Power Sale Agreement (PSA) executed with NTPC Vidyut Vyapar Nigam Limited (NVVNL) on 12th January 2011 under 'New Projects Scheme' under Phase-1 of Jawaharlal Nehru National Solar Mission (JNNSM) where Solar capacity bundled with equal quantum of thermal capacity from the unallocated quota of the NTPC Coal Based Stations is available to GRIDCO.

(iii) 17 MU from 10 MW Solar capacity as per the PPA executed with NTPC on 26.04.2011 to procure Solar power of 5 MW each from Dadri Solar PV project at U.P. & Faridabad Solar PV Project at Haryana.

97. Besides the above, GRIDCO has indicated that 2.76 MU will be made available to GRIDCO from the 5 MW Solar PV Project developed by M/s Alex Green Energy Ltd. at Beruan village in Khurda district under OREDA State Scheme. Thus, GRIDCO proposes to procure a total of 65.76 MU of Solar power during FY 2013-14 as given in the Table below:

Table - 15
Proposed Drawal of Solar Power during FY 2013-14

Sl. No.	Solar RE Sources	Energy Proposed for procurement during FY 2013-14 (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, Phase-1	33
3.	10 MW through NTPC from 5 MW Solar PV project at Dadri & Faridabad	17
	Sub – Total	63
4.	5 MW from M/s Alex Green Energy Ltd. through OREDA State Scheme	2.76
	Total	65.76

98. The Commission approves the above proposal of GRIDCO to procure 65.76 MU from Solar RE Sources. Thus, the total procurement of Renewable Energy during FY 2013-14 from Solar, Bio-mass & Small Hydro Sources comes to 485.76 MU. The procurement of energy from Co-generation Plants has been approved at 1102 MU. Hence, the total estimated power procurement for the purpose of RPO comes to 1587.76 MU as indicated in the Table below:

Table - 16
Proposed Drawal from Renewable Energy Sources during FY 2013-14

Sl. No.	RE Sources	Energy Proposed for Procurement during FY 2013-14 (MU)	Percentage w.r.t. 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	120.00	0.52
	Sub-Total (Non-Solar)	420.00	1.82
B.	Solar RE	65.76	0.28
C.	Total (Solar & Non-Solar)	485.76	2.11
D.	Energy from Co-Generation Plants	1102.00	4.78
E.	Total Energy for RPO	1587.76	6.89

(*) Total purchase of DISCOMs has been estimated to 23048 MU.

Renewable Purchase Obligation (RPO)

99. GRIDCO has submitted that although they are willing to purchase the required quantum of Renewable Energy consisting of Solar & Non-Solar Energy in order to fulfil its Renewable Purchase Obligation (RPO) of 6% consisting of 0.20% of Solar Energy, 1.60% of Non-Solar Energy and 4.20% of Co-Generation Energy during FY

2013-14 in terms of the OERC Order Dated 23.09.2011 in Case No. 64 of 2011, the availability of such energy has been posing a constraint. However, the Commission observed that the estimated sale of power to DISCOMs is 23048 MU for state consumption and the estimated quantum of energy available to GRIDCO from Co-generation and Renewable Sources is adequate to meet the Renewable and Co-gen purchase obligation fixed by the Commission for the FY 2013-14. The approval of energy from Renewable & Co- gen sources is at little higher side, keeping in view mandate in Electricity Act 2003, for promotion of Co-generation and Generation of Electricity from Renewable Sources of Energy.

Independent Power Producers (IPPs)

100. GRIDCO in its ARR application for FY 2013-14, has stated that M/s SEL has indicated to make available 600 MW during the FY 2013-14 out of its 2400 MW (4x600 MW) power plant. However, considering the past as well as present trend of injection by M/s SEL and the available evacuation facilities, GRIDCO has proposed to procure about 3132.90 MU of energy (equivalent to about 450 MW out of GRIDCO's share of 600 MW of power at 85% PLF with the auxiliary consumption of 6.50%) from M/s SEL during FY 2013-14. With regard to M/s. ASL, only one Unit of 50 MW capacity has been commissioned. Due to high cost of power from this power plant, GRIDCO has proposed to procure its share of 12% only from ASL limiting to 30 MU at variable cost during the FY 2013-14. Thus, GRIDCO has proposed to procure a total of 3162.90 MU of energy from the existing IPPs of M/s. Sterilite Energy Ltd. and M/s. Arati Steels Ltd.
101. GRIDCO has further stated that it has executed Power Purchase Agreements (PPAs) with a number of IPPs, which are in various stages of implementation. Out of which 1460 MW was schedule to be commissioned during FY 2012-13 with Odisha Share of 311.70 MW and further 5175 MW is scheduled to be commissioned during FY 2013-14 with the Odisha Share of 1130.65 MW. However, keeping in view the uncertainty of commissioning of the forthcoming IPPs, GRIDCO has restricted its proposal to procure power from the existing IPPs M/s SEL and M/s ASL and also one of the upcoming IPP namely, M/s GMR Kamalanga Energy Ltd., which is likely to be commercially operated in near future. GRIDCO has proposed to procure 696.20 MU of Energy (equivalent to about 100 MW at 85% PLF and Auxiliary consumption of 6.50%) during FY 2013-14 from M/s GMR Kamalanga Limited. Hence, the total estimation of GRIDCO is 3859.11 MU which to be procured from the IPPs during the FY 2013-14 as indicated in the table below.

Table - 17
Proposed Power Procurement from IPPs during FY 2013-14

IPPs	Proposed Drawal by GRIDCO for FY 2013-14 (MU)
Sterilite Energy Limited (SEL)	3132.90
Aarti Steels Ltd. (ASL)	30.00
GMR Kamalanga Energy Ltd.	696.20
Total	3859.11

102. The Commission scrutinised the above proposal of GRIDCO and approves only 3073.51 MU to be purchased by GRIDCO from the IPPs during the FY 2013-14 for consumption in the state. However, depending on the requirement, cost and availability, GRIDCO may purchase more quantum of energy from the IPPs in the event of non-availability of energy from other sources and/or increase in state demand than the estimation. 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 earnings after meeting the State's requirement.

Power Purchase from Central Generating Stations

Transmission Loss:

103. The constituents of power utilities of the Eastern Region share the losses occurring in the Central Transmission System. In the ARR filling for 2013-14, 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 from different Central Generating stations is given in the table below.

Table - 18
Percentage of System Loss proposed by GRIDCO for Central Stations

Name of power stations	Loss Percentage (%)
TSTPS Stage-I	2.681
TSTPS Stage-II	3.590
FSTPS- I, II & III	2.683
KHSTPS Stage-I	2.981
KHSTPS Stage-II	2.981
Chhuka , Tala & Teesta-V	2.98

104. 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 2011-12 and 2012-13, 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, CERC mentioned the applicable PoC loss slabs for different injection and withdrawal zones. 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 2011-12 is computed to the tune of 2.76% and that of for the year 2012-13 (i.e from April, 2012 to December, 2012) is computed to 2.97%.
105. The Commission observed that the scheduled PoC loss in the eastern regional system varies from week to week for Odisha injection and Odisha withdrawal. The weighted average Central Transmission Loss for GRIDCO drawal for the period from 01.04.2012 to 30.09.2012 comes to 2.68% based on PoC method as per data submitted by GRIDCO for performance review. Since, the 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 2.68% for FY 2013-14 based on the average of actual loss in Central Transmission System for FY 2012-13 upto Sept, 2012. 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 burdened to Odisha. The Commission desires that GRIDCO should take up this matter suitably at CERC and other regional and legal forum.

Central Generating Stations (CGSs)

106. 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.
107. GRIDCO in its filing stated that considering 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-ER Stations for FY 2013-14. The projection of net power procurement from the Central Thermal Generating Stations (CGSs) of Eastern Region for FY 2013-14 is estimated as 7039.33 MU considering the allocated share of GRIDCO, NAPAF of 85%, Auxiliary Consumption as per the CERC Tariff Regulations, 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 - 19
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	2.68%	2,154.56
TSTPS Stg-II	2000	6.50	85	13,924.02	10.00	1,392.40	3.59%	1,342.41
FSTPS-I & II	1600	6.93	85	11,087.99	13.63	1,511.29	2.68%	1,470.75
FSTPS-III	425	6.50	85	2,958.85	23.74	702.43	2.68%	683.59
	50	6.50	85	348.10	100	348.10	2.68%	338.76
KhSTPS Stg-I	840	9.00	85	5,691.72	15.24	867.42	2.98%	841.56
KhSTPS Stg-II	1500	6.50	85	10,443.02	2.05	214.08	2.98%	207.70
TOTAL				51,415.71		7,249.65		7,039.33

108. The Commission observed that as per CERC Tariff Regulations, 2009, the normative availability of 85% by the CGSs 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 GRIDCO's proposal for considering NAPAF of 85% of the central thermal power stations for FY 2013-14. Considering the Central Sector transmission loss @ 2.68% provisionally as stated earlier and NAPAF of 85%, the details of GRIDCO's drawl from Central Thermal Stations, approved for the FY 2013-14 are given in the table below:

Table - 20
Drawal From Central Thermal Generating Stations for FY-2013-14

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 2.68% (MU)	GRIDCO's proposal excluding Central Sector Transmission Loss (MU)
TSTPS –I	1000	6.50	6962.01	31.80	2213.92	2154.59	2,154.56
TSTPS –II	2000	6.50	13924.02	10.00	1392.40	1355.09	1,342.41
FSTPS-I& II	1600	6.94	11087.09	13.63	1511.28	1470.78	1,470.75
FSTPS-III	425	6.50	2958.85	23.74	702.43	683.61	683.59
FSTPS-III*	50						338.76
KhSTPS –I	840	9.00	5691.72	15.24	867.42	844.17	841.56
KhSTPS – II	1500	6.50	10443.02	2.05	214.08	208.34	207.70
TOTAL	7365		51066.71		6901.54	6716.57	7,039.33

*The Ministry of Power, Govt. of India vide its letter dated 09.12.2010 has allocated 425 MW out of 500 MW of power from the generating stations to the beneficiaries of Eastern Region and the balance 75 MW of power is to be sold outside through long term PPA by NTPC in terms of the National Electricity Policy for market development. GRIDCO has executed PPA with NTPC to purchase additional 50 MW of Power from FSTPS- III with effect from 01.09.2012 from NTPC's share of 75 MW of merchant power for 2 years. Since, the least cost power is available for state consumption has not been considered for State consumption. GRIDCO may trade the same and earned some revenue to bridge the past gap.

Central Hydro Generating Stations

109. **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 276.34 MU for FY 2013-14 considering the average drawal of last 6 years i.e. from FY 2006-07 to 2011-12. After deducting central sector loss of 2.98%, the net availability to GRIDCO is projected at 268.11 MU for the FY 2013-14.
110. The Commission scrutinized the proposal of GRIDCO and observed that the drawal of GRIDCO from Chukha was 253.52 MU for the FY 2011-12 and during 2012-13 upto September, 2012, it comes to 179.44 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 272.90 MU from Chukka during 2012-13 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 275.46 MU for FY 2013-14 considering the average drawal of last 5 years i.e. from FY 2007-08 to 2011-12. After deducting the Central Loss of 2.68%, the net drawal of GRIDCO comes to 268.08 MU for FY 2013-14.
111. **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 149.97 MU of energy from Tala HEP during FY 2013-14 by averaging previous 4 years drawal i.e. from 2008-09 to 2011-12. After deducting Central Sector Loss of

2.98%, the net availability to GRIDCO is projected as 145.50 MU during FY 2013-14.

112. After scrutiny of the above proposal of GRIDCO the Commission estimates the drawal of 147.19 MU from Tala Power Station, taking the average drawal of last 5 years i.e from FY 2007-08 to 2011-12 and approves the net drawl of 143.25 MU from Tala HEP for FY 2013-14, considering central sector transmission loss of 2.68 %.
113. **TEESTA:** GRIDCO in its ARR has submitted that the annual design energy of Teesta-V HEP (510 MW) situated in Sikkim is 2572.70 MU. Considering 12% free energy to Home State & 1.2% of Auxiliary Consumption, the annual saleable energy of the project is 2236.808 MU. Considering the share of GRIDCO as 23.4% from the saleable energy, GRIDCO proposes to procure 507.82 MU of energy during the year 2013-14 after deducting the Central Sector loss of 2.98% as shown in the table below.

Table - 21

Design Energy	(MU)	2572.70
Annual Saleable Energy available considering 1.2% Auxiliary Consumption and 12% free energy for home state (MU)		2236.81
GRIDCO Share (%)		23.40
Availability (MU)		523.41
After deducting Central Transmission Loss @ 2.98% (MU)		507.82
Proposed drawal for FY 2013-14 (MU)		507.82

114. 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% of 2541.80 MU i.e. the design energy less auxiliary consumption of 1.2%. After considering the central sector transmission loss of 2.68%, the Commission approves the net drawl of 509.33 MU from Teesta HEP during FY 2013-14.

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

115. A summary of GRIDCO's proposal for purchase of power from different generating stations and the Commission's approved quantum of purchase for FY 2013-14 is given in the table below:

Table – 22
Quantum of Power Purchase from Various Sources for FY 2013-14

(Figures in MU)

Sources of Purchase	Commission's Approval for State Drawl for 2012-13	GRIDCO's Proposal for 2013-14	Estimated Availability for 2013-14	Commission's Approval for State Drawl for 2013-14
HYDRO (OLD)	3,676.86	3,632.54	3,676.86	3,676.86
Indravati	1,942.38	1,948.32	1,942.38	1,942.38
Machakund	262.50	262.50	262.50	262.50
Total Hydro	5,881.74	5,843.36	5,881.74	5,881.74
OPGC	2,890.82	2,668.40	2,668.40	2,668.40
TTPS (NTPC)	2,957.32	3,210.00	3,209.78	3,209.78
IPPs	3,556.92	3,859.11	3,859.11	3,073.51
Total CGPs	696.10	1,092.04	1,092.04	0

Co-Generation Plants	665.76	1,102.00	1,102.00	1,102.00
Total Small Hydro	300.00	300.00	300.00	300.00
Biomass Energy	122.00	120.00	120.00	120.00
Solar Energy	46.00	65.76	65.76	65.76
TOTAL STATE	17,116.66	18,260.67	18,298.83	16,421.19
CHUKHA	272.90	268.11	268.08	268.08
Tala HPS	144.29	145.50	143.25	143.25
Teesta-V	510.95	507.82	509.33	509.33
Total Central Hydro	928.14	921.43	920.65	920.65
TSTPS St-I	2,161.45	2,154.56	2,154.59	2,154.59
TSTPS St-II	1,359.40	1,342.41	1,355.09	1,355.09
FSTPS I & II	1,475.36	1,470.75	1,470.78	1,470.78
FSTPS III		1,022.35	1,022.38	683.61
KhTPS St-I	846.86	841.56	844.17	844.17
KhTPS St-II	209.01	207.70	208.34	208.34
Total Central Thermal	6,052.08	7,039.33	7,055.35	6,716.57
Total Central Sector	6,980.22	7,960.76	7,976.00	7,637.23
TOTAL GRIDCO	24,096.88	26,221.43	26,274.83	24,058.42

Power Procurement Cost

116. 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.

OHPC Stations

117. OHPC has submitted the application for approval of its Annual Revenue Requirement and Tariff of its individual power stations separately for the FY 2013-14 in terms of Section-62, 64 and 86 of the Electricity Act, 2003 which has registered as Case No.100/2012. 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.
118. Accordingly, the cost of power purchase from each of the power stations of OHPC is given in the table below:

Table – 23
Cost of Power Purchase from OHPC Stations for FY 2013-14

Name of the Power Station	Quantum of Power Purchase for 2013-14 (MU)	Approved Average Tariff for 2013-14 (P/U)	Cost of Power Purchase for FY 2013-14 (Rs. Cr.)
Burla	677.16	92.53	62.66
Chipilima	485.10	52.22	25.33
Balimela	1171.17	71.14	83.31
Rengali	519.75	78.48	40.79
Upper Kolab	823.68	35.36	29.13
Upper Indravati	1942.38	80.53	156.41
Total	5619.24		397.67

Machhkund Hydro Electric Project

119. OHPC has proposed for approval of a rate of 30.80 P/U for sale of power of Machhkund Power Station for the year 2013-14 for the energy drawl of 262.50 MU. Odisha has to pay its share of O & M charges for the energy drawl from Machhakund upto 30% and @ 8 paise/unit for the drawal beyond 30% and upto 50%. With this principle, the cost of Machhakund power has been projected at 30.80 P/U for FY 2013-14 against the approval of 30.51 P/U for FY 2012-13.
120. The Commission has taken into consideration the net amount payable by Odisha towards O&M expenses for the year 2011-12 (actual) on account of 30% share which is of the order of Rs.6.48 crore. Allowing an escalation of 5.72% per annum for the years 2012-13 and 2013-14, O&M expenses come to Rs. 7.24 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. 8.08 crore. Hence, the rate per unit of Machhakund power comes to 30.78 paise for the year 2013-14 considering energy drawl of 262.50 MU. Accordingly, the procurement cost of Machhakund Power by GRIDCO estimated to be Rs.8.08 crore for an approved energy drawl of 262.50 MU.

Talcher Thermal Power Station (TTPS)

121. 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).
122. **Fixed Cost:** GRIDCO has submitted that CERC in its order dated 03.09.2012 has disposed of the petition No-184/2009 and revised the Annual Fixed Cost of TTPS for the period 2004-09. In the said order the fixed charges for the year 2008-09 has been fixed at Rs. 214.40 Crore. NTPC has also filed petition No-304/2009 for fixation of tariff as per the CERC Regulations for the period 2009-14 and the petition is now pending at CERC for adjudication. However, considering the said petition of NTPC, the fixed cost of TTPS has been projected by GRIDCO to tune of Rs. 378.90 Crores for the FY 2013-14. GRIDCO has estimated that the fixed cost per unit of energy from TTPS at PLF of 89% and auxiliary consumption of 10.5% works out to 118.04 P/U for the proposed drawal of 3210 MU for FY 2013-14. GRIDCO has indicated that the projected Annual Fixed Cost of Rs.378.90 Crore considered in the ARR Application without prejudice to their right to contest the same before the CERC on valid grounds.
123. After scrutiny of the submissions of GRIDCO in this regard, the Commission observed that CERC in its Order dtd. 03.09.2012 has revised the fixed cost of TTPS to Rs.214.40 crore for FY 2008-09. The submission of NTPC before CERC for determination of fixed charges of TTPS for the FY 2009-14 as per the new CERC Regulations, 2009 is yet to be finalized by CERC. Hence, the Commission provisionally approves the fixed cost of TTPS at Rs.214.40 crore for the FY 2013-14 as per the latest approval of CERC vide order dated 03.09.2012. Accordingly, the fixed charge per unit comes to 66.80 p/u for drawal of 3209.78 MU from TTPS.
124. **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. 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 2013-14 as being claimed by NTPC at present.

125. **FPA:** GRIDCO in its ARR submitted that the average Fuel Price Adjustment (FPA) Charge as claimed by TTPS for first six month of FY 2013-14 comes to 62.19 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 65.38 P/U and thus, proposes 78.46 P/U towards FPA for FY 2013-14. The details are tabulated below:

Table – 24
Fuel Price Adjustment (FPA) OF TTPS (P/U)

Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Average of six months	Monthly highest FPA	GRIDCO proposal for FY 2013-14 considering 20% escalation on 65.38 P/U
62.50	62.46	64.05	65.38	60.79	57.97	62.19	65.38	78.46

126. The Commission scrutinized the proposal of GRIDCO and approves the FPA charges of 75.95 P/U for FY 2013-14 considering 20% escalation over 63.29 P/U i.e., the average of nine months of FPA charges claimed by NTPC during the period from April, 2012 to December, 2012 in respect of TTPS.
127. **Year-end Charges:** GRIDCO has projected the year-end charges of TTPS to the tune of Rs.22.66 crore for the FY 2013-14 based on the actual charges paid by GRIDCO during 1st six months of the FY 2012-13, which includes electricity duty, charges towards water cess, UI overdrawal and incentive. GRIDCO has claimed Rs.7.72 crore towards Electricity duty, Rs.0.08 crore towards Water Cess Charges, Rs.5.32 crore towards UI overdrawal and Rs.9.54 cr. towards incentive for FY 2013-14. The Commission on examination of the claims approves (i) Electricity duty of Rs.7.72 crore calculated @ 20 paise/unit on auxiliary consumption of the generation at 89% PLF, (ii) Water Charge / Cess of Rs.0.08 crore and (iii) Rs. 6..31 Crore towards incentive on excess generation beyond the normative PLF of 82%. The claim for UI overdrawal is not being allowed in the tariff since the possibility of overdrawl or underdrawl can not be predicted at this moment Thus, the year-end charges approved for 2013-14 comes to Rs.14.11 crore. The year-end charges proposed by GRIDCO and approved by the Commission for the FY 2013-14 is shown in the table below:

Table – 25
Year-End Charges of TTPS

ITEM	(Rs. in crore)		
	OERC approval for FY 2012-13	GRIDCO's Proposal for FY 2013-14	OERC approval for FY 2013-14
Electricity duty@ 20P/U	6.66	7.72	7.72
Water Cess / Charge	0.12	0.08	0.08
UI overdrawl	0.00	5.32	0.00
Incentive	0.00	9.54	6.31
Total (Rs. Crore)	6.78	22.66	14.11
ESO(MU)	2957.32	32.10	3209.78
Per unit cost P/U	2.29	7.06	4.40

128. After taking into account all the above estimated cost, the approved tariff for TTPS power comes to 193.19 p/u (179.87 p/u approved for 2012-13) comprising of fixed cost of 66.80 p/u, variable charges of 46.05 p/u, FPA of 75.95 p/u and year end charges of 4.40 p/u.

Odisha Power Generation Corporation (OPGC)

129. OPGC has not filed its ARR application with OERC for the year 2013-14. Hence, the per unit rate of energy drawal from OPGC for FY 2013-14 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 and 12.10.2009, which is subject to change in accordance with court orders or otherwise.
130. **Fixed Cost:** GRIDCO has submitted that OPGC has furnished a statement of tariff calculation to GRIDCO for the FY 2013-14, wherein OPGC proposes the fixed cost at Rs.185.88 cr. and variable cost at 121.40 p/u. GRIDCO has worked out the tariff for OPGC by considering the normative auxiliary consumption of 9.5% on the station generation of 2948.40 MU as submitted by OPGC in its generation plan for 2013-14 and at a PLF of 80.14% with the use of 100% domestic coal. GRIDCO has proposed the fixed cost of IB Thermal Power Station of OPGC for FY 2013-14 to the tune of Rs.185.87 crore based on the norms fixed in the PPA dtd.13.08.1996 signed with OPGC. After scrutiny, the Commission approves the estimated fixed cost of Rs.185.87 crore for the FY 2013-14 considering use of 100% domestic coal and 8% escalation on the O&M expenses over FY 2012-13.
131. **Variable Charges:** GRIDCO has proposed variable charges in respect of IB Thermal Power Stations at 121.40 P/U for 2013-14 based on the submission of OPGC with the use of 100% domestic coal. After detailed scrutiny, the Commission observes that on the basis of evidential documents and tariff calculation submitted by GRIDCO which is based on use of 100% MCL Coal, the coal price assumed as Rs. 966.32/MT. The Commission accepts the above coal price and does not consider any escalation at this point of time, taking into consideration the price trend of coal in the market. Accordingly, the variable charge is computed and it comes to 112.94 P/U for IB Thermal Power Stations for the FY 2013-14 for the net energy drawal of 2668.40 MU.
132. **Year-end Charges:** GRIDCO has proposed year-end charges of Rs.46.90 crore on account of land tax, water cess, electricity duty, income tax, and incentive payable to OPGC, Electrical Inspection Fees and SOC & MOC for SLDC, ERPC charges.
133. **Income Tax:** GRIDCO has claimed Rs.34.58 crore towards Income Tax payment for FY 2013-14. The Commission provisionally approves Rs.34.58 crore towards income tax payment for 2013-14 as proposed by GRIDCO subject to change after actual payments are made.
134. **Electricity Duty:** The Commission approves Electricity duty of Rs.5.31 crore @ 20 P/U on auxiliary consumption of the generation at 80.14% PLF.
135. **Incentive:** Incentive of Rs.0.16 crore is approved for generation over and above normative generation of 80% PLF for the year 2013-14 in line with the notification dtd.21.06.2008 of Govt. of Odisha regarding settlement of dispute of OPGC.
136. GRIDCO has claimed Rs.0.38 crore towards SOC and MOC of SLDC and Rs.0.15 crore towards ERPC charges for the FY 2013-14 . The Commission approves these expenses to be included in the year-end charges.

137. Thus, the total estimated year-end charges approved for FY 2013-14 is Rs.46.90 crore which is shown in table below.

Table – 26
Year-end Charges of OPGC

ITEM	OERC approval for 2012-13	Proposed year end charges for 2013-14	OERC approval for 2013-14
Income Tax	34.58	34.58	34.58
Water Cess & Water Charges	5.04	6.00	6.00
Tax and Cess on Land	0.13	0.15	0.15
Electricity duty@20P/U	5.75	5.31	5.31
Incentive	7.59	0.16	0.16
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	3.00	-	-
Total	56.79	46.90	46.90

138. After taking into account all the above estimated cost, the approved price for OPGC power comes to 200.17 p/u for the FY 2013-14 (195.15 p/u approved for 2012-13) comprising of fixed cost of 69.66 p/u, energy charges of 112.94 p/u and year end charges of 17.57 p/u.

Captive Generation Plants (CGPs) and Co-generation Plants

139. 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. Subsequently, from 15.09.2012 onwards GRIDCO has been considering payments to the CGPs and Co-Generation Plants at the flat rate of Rs. 2.75 per Unit on the basis of fresh Letter of Intent (LoI) issued by GRIDCO keeping in view of the good hydrology condition of the State. As such, GRIDCO proposes to procure 1092.04 MU of energy from CGPs at a cost of Rs.300.31 Cr. and 1102 MU of energy from Co-generation Plants at a cost of Rs.303.05 Crore during FY 2013-14 considering the aforesaid rate.

140. GRIDCO has prayed the Commission to fix the procurement price first from the CGPs / Co-Generation Plants for FY 2013-14 if the Commission feels it necessary and then to incorporate the same in the ARR 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.
141. 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 and in the subsequent orders dtd. 29.08.2011 in case no. 22 of 2011 and dated 01.10.2012 in Case No. 86 of 2011 have clarified certain issues on CGP pricing mechanism. Since no further revision of CGP price has been made, the Commission provisionally accepts the proposal of GRIDCO for taking the average price of 275 p/u towards procurement of surplus power from CGPs & Co-generation Plants for calculation of ARR of GRIDCO for the FY 2013-14. Further, out of the total availability of 2194.04 MU from CGPs and Co-generation Plants, the Commission has approved for purchase of 1102 MU only which is available from Co-generation Plants for state consumption in view of the Co-generation Purchase Obligation. Accordingly, the cost of power purchase from Co-generation Plants comes to Rs.303.05 crore for the approved energy drawal of 1102 MU at an average price of 275 P/U. The Commission approves the same and directs that in case of any revision in CGP price for the FY 2013-14, 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 either in the truing up exercise or while taking up the approval of ARR of GRIDCO for FY 2014-15.

Power Purchase from Renewable Sources

142. In its ARR for FY 2013-14, GRIDCO has projected to procure 195 MU from Meenakhi Small Hydro Electric Project and 105 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.
143. 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 Rs.110.40 Cr towards procurement of 300 MU of power at the rate of 368.00 P/U from the said small hydel sources during FY 2013-14 is approved by the Commission.
144. GRIDCO has proposed to procure 120 MU of renewable energy from Bio-mass sources @ 516 p/u at a total cost of Rs.61.92 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 and according to the said order, the tariff for bio-mass energy would be 516 p/u for FY 2013-14, if the benefit of accelerated depreciation is not availed and 495 p/u, if benefit of accelerated depreciation is availed. Energy availed by GRIDCO from bio-mass sources during FY 2013-14 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 2013-14 the Commission considers the tariff of 516 p/u for Bio-mass energy. Accordingly, the Commission

approves the proposal of GRIDCO to procure 120 MU from Bio-mass renewable sources at a cost of Rs.61.92 crore @ 516 p/u.

145. GRIDCO has proposed to procure 65.76 MU of solar energy from different sources at the total cost of Rs.69.735 cr. with an average rate of 1060.45 p/u as indicated in the Table below:

Table -27
Proposed Procurement & Cost of Solar Power during FY 2013-14

Sl. No.	Solar RE Sources	Energy Proposed for FY 12-13 (MU)	Rate (P/U)	Total Cost (Rs. Cr.)
1	8 Nos. of Solar PV projects of 1MW each under RPSSGP *	13	628	8.164
2	20 MW through NVVN under 'New Projects scheme' under JNNSM, Ph-1	33	1272	41.976
3	10 MW through NTPC from 5 MW Solar PV projects at Dadri & Faridabad	17	1039	17.663
4	5 MW from M/s Alex Green Energy Ltd. through OREDA State scheme	2.76	700	1.932
	Total	65.76	1060.45	69.735

146. The Commission approves the above proposal of GRIDCO. Accordingly, the procurement cost of total 65.76 MU of solar power comes to Rs.69.74 cr. at an average rate of 1060.45 p/u.

IPPs

147. 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 3132.90 MU (considering supply of 450 MW at a PLF of 85% and auxiliary consumption of 6.50%) from M/s Sterlite Energy Ltd. during the FY 2013-14 at a provisional rate of 275 P/U which was approved by the Commission for FY 2012-13. The cost involvement is estimated at Rs. 861.55 Crore.
148. Similarly, GRIDCO has proposed to procure 30 MU from the 50 MW generating unit of M/s Arati Steels Ltd. towards the state share of 12% at the provisional variable cost of 175 P/U, which will entail the cost of Rs. 5.25 Crore to GRIDCO.
149. Besides, GRIDCO also proposes to procure 696.20 MU (considering supply of 100 MW at a PLF of 85% & Auxiliary Consumption of 6.50%) from the up-coming IPP i.e. M/s. GMR Kamalanga Energy Ltd. during FY 2013-14 at a cost of Rs.191.46 Crore @ 275 P/U provisionally.
150. Thus, as estimated by GRIDCO, the procurement cost of total 3859.11 MU from the two existing IPPs & one upcoming IPP is Rs.1058.25 crore as shown in the Table below:

Table -28
Proposed Power Procurement & Cost from IPPs during FY 2013-14

IPPs	Quantity	Rate	Cost
	(MU)	(P/U)	(Rs. Crore)
M/s. Sterilite Energy Ltd.	3132.90	275.00	861.55
M/s. Arati Steel Ltd.	30.00	175.00	5.25
GMR Kamalanga	696.20	275.00	191.46
Sub Total	3859.11	274.22	1058.25
For State Consumption	3073.51	274.22	842.82

151. Pending the finalization of the tariff for the aforesaid IPPs, the Commission considered the submissions of GRIDCO and provisionally accepts the average rate as proposed by GRIDCO for procurement of power from the aforesaid IPPs during FY 2013-14. However, the Commission has approved for procurement of 3073.51 MU from the said IPPs for state consumption. Accordingly, the power procurement cost for the approved drawal of 3073.51 MU from the said IPPs estimated to Rs.842.82 crore at an average rate of 274.22 p/u. The Commission provisionally approves the same for the FY 2013-14 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

152. **Chukha:** GRIDCO has stated that the procurement cost of power from Chukha for FY 2013-14 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 163.88 paise/unit for 2013-14 including Central Transmission Loss of 2.98%. Thus, the power purchase cost of 268.10 MU from Chhuka Hydro Station @ 163.88 P/U has been worked out by GRIDCO to Rs.43.94 crore for FY 2013-14.
153. The Commission scrutinized the application of GRIDCO and approves the rate of 163.38 paise/unit considering the central transmission loss @ 2.68% for the power procurement from Chukka for FY 2013-14. So the cost for Chukka power comes to Rs.43.80 crore for the approved drawal of 268.08 MU for FY 2013-14. The details are given in Table below.

Table – 29

	GRIDCO's Proposal for FY 2013-14	Commission's Approval for FY 2013-14
Net Energy Drawal (MU)	268.10	268.08
Energy Charge (P/U)	159.0	159.0
Energy Charge incl. Tr. Loss (P/U)	163.88 (C.T.L. of 2.98%)	163.38 (C.T.L. of 2.68%)
Cost of Chukka Power (Rs. Crore)	43.94	43.80

154. **TALA:** GRIDCO has submitted that the procurement cost of both primary and secondary energy from TALA for FY 2013-14 has been calculated @ 202 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 208.20 P/U for 2013-14 considering Central Transmission Loss of 2.98%. Considering the above, the procurement cost of the estimated at Rs. 30.29 Crore for 145.50 MU of energy from Tala inclusive of Central Sector Transmission Loss of 2.98%.

155. Submission of GRIDCO was examined. The average rate per unit of TALA power is worked out to 207.56 P/U considering central transmission loss of 2.68% for FY 2013-14. The total cost of Tala power comes to Rs.29.73 crore for the approved drawal of 143.25 MU for FY 2013-14 and the same is approved by the Commission. The details are given in Table below.

Table – 30

	GRIDCO Proposal for 2013-14	Commission's Approval for 2013-14
Net Energy Drawal MU	145.50	143.25
Energy Charge (P/U)	202.00	202.00
Energy Charge incl. Tr.Loss (P/U)	208.20 (C.T.L. of 2.98%)	207.56 (C.T.L. of 2.68%)
Cost of Tala Power (Rs. In Crore)	30.29	29.73

156. TEESTA: GRIDCO has stated that CERC vide its Order dated 05.12.2011 has allowed Provisional Annual Fixed Charges in respect of TEESTA-V HEP for FY 2013-14 as Rs.466.16 Crore. Further, CERC vide its Order dated 21/06/2011 has inserted a new clause numbered 15 (5) as per which the generating company shall recover the short-fall or refund the excess AFC (Annual Fixed Charges) on account of return on equity due to change in applicable Minimum Alternate / Corporate Income Tax Rate as per the Income Tax Act 1961 (as amended from time to time) of the respective FY directly without making any application before the Commission. With reference to the said Clause 15 (5), NHPC has revised the AFC of its own for the period FY2009-10 to 2012-13 pending finalization of tariff of Teesta-V HEP by the CERC and billing has been made to GRIDCO accordingly. The Minimum Alternate / Corporate Income Tax Rate is yet to be declared for the F.Y. 2013-14 and also the tariff components of Teesta-V project for the said F.Y. are also not known to GRIDCO at this point of time. So, GRIDCO has proposed the tariff for FY 2013-14 as 222.80 (P/U) for TEESTA -V HEP by doubling the modified Energy Charge Rate (M-ECR) for the FY 2012-13 i.e. 111.40 (P/U). Considering 2.98% of Central Sector Transmission Loss, the tariff is estimated to 229.64 P/U. Thus, the estimated power purchase cost for 507.82 MU from Teesta-V HEP comes to Rs.116.62 Crore for FY 2013-14.
157. After due scrutiny, the Commission approves the rate of Teesta Power provisionally based on latest bill i.e. for December,2012, billed by NHPC for Teesta power and calculate the average rate per unit of Teesta power which comes to 224.93 P/U inclusive of central transmission loss of 2.68% for FY 2013-14. The cost of Teesta power comes to Rs.114.56 crore for the approved drawal of 509.33 MU during FY 2013-14. The details are given in Table below.

Table – 31

	GRIDCO Proposal for FY 2013-14	Commission's Approval for FY 2013-14
Net Energy Drawal MU	507.82	509.33
Annual Fixed Cost for 2013-14 as per latest bill claimed by NHPC for Dec,2012		489.63 (Provisional)
Energy Charge (P/U)	222.80	218.90
Energy Charge incl. Tr. Loss (P/U)	229.64 (C.T.L. of 2.98%)	224.93 (C.T.L. of 2.68%)
Cost of Teesta Power (Rs. In Crore)	116.92	114.56

Central Sector Thermal Power Stations:

158. 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. On the basis of application made by NTPC for finalisation of Tariff of its different stations, CERC have issued orders for the tariff period 2009-14 of all Stations except FSTPS-III & TSTPS-II. Accordingly, GRIDCO considers it prudent to take the Fixed Cost as approved by Hon'ble CERC. However the CERC Orders for FSTPS-III & TSTPS-II are provisional subject to finalisation of tariff by the Hon'ble Central Commission.
159. GRIDCO is to pay about Rs.698.97 Crore as Capacity Charge (Fixed Charge) towards its share from NTPC Stations at normative availability of 85% irrespective of the drawl from these Stations during FY 2013-14. 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 – 32
Projected Fixed Cost of NTPC-ER Central Thermal Stations for FY 2013-14

Central Thermal Stations	Annual Fixed Cost considered by GRIDCO for FY 2013-14 (Rs. Cr.)	GRIDCO Share (%)	F.C. share of GRIDCO for FY 2013-14 at Normative PLF of 85% (Rs. Cr.)	GRIDCO's Proposed drawal for FY13-14 after C.S. Loss (MU)	Fixed Cost (P/U)
TSTPS Stage -I	590.2261	31.8	187.69	2,154.56	87.11
TSTPS Stage -II	1102.3705	10	110.24	1,342.41	82.12
FSTPS-I&II	950.3788	13.63	129.54	1,470.75	88.08
FSTPS-III	542.953	23.74	159.48	683.59	155.99
FSTPS-III (50 MW)				338.76	
KhSTPS-I	564.0661	15.24	85.96	841.56	102.15
KhSTPS-II	1271.2707	2.05	26.06	207.70	125.47
TOTAL	5021.2652		698.97	7,039.33	99.29

160. The Commission scrutinised the proposal of GRIDCO and calculate the cost of power purchase from central sector thermal stations provisionally based on Orders already issued by CERC for these stations.
161. **Fixed Cost:** Tariff of Central Thermal Generating Stations is governed by CERC tariff notifications. Based on the CERC order, the fixed cost applicable for 2013-14 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 – 33
Fixed Cost of Central Thermal Stations for 2013-14

Name of Power Station	Fixed cost approved by CERC for 2013-14 (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 2013-14 (Rs. In Cr.)	Estimated energy Drawal after Central Tr. Loss of 2.68% (MU)	Commission's approval including Central Tr. Loss of 2.68% (P/U)
TSTPS –I	590.226 (Order dt.15.06.2012)	31.80	187.69	87.11	187.69	2154.59	87.11
TSTPS –II	1102.37 (Order dt.06.07.2011)	10.00	110.24	82.12	110.24	1355.09	81.35
FSTPS-I&II	950.379 (Order dt.14.06.2012)	13.63	129.54	88.08	129.55	1470.78	88.08
FSTPS-III	479.450 (Order dt.14.11.2011)	23.74	159.48	155.99	113.82	683.61	166.50
KhSTPS- I	564.066 (Order dt.23.05.2012)	15.24	85.96	102.15	85.96	844.17	101.83
KhSTPS-II	1271.27 (Order dt.13.04.2012)	2.05	26.06	125.47	26.06	208.34	125.09

162. **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 2012-13 which is given below:

Table – 34

Energy Charge Rate (ECR) of NTPC Stations

Central Thermal Stations	Actual Cumulative ECR of 1 st six month of FY 2012-13 (Paise/Unit)	Projection for FY 13.-14 (30% hike over cumulative ECR of 1 st six month of 2012-13) (Paise/Unit)
TSTPS Stage-I	153.98	200.18
TSTPS Stage-II	153.43	199.46
FSTPS – I & II	297.31	386.50
FSTPS - III	298.04	387.46
KhSTPS Stage-I	233.44	303.47
KhSTPS Stage-II	221.30	287.68

163. 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.
164. Actual bills submitted by NTPC to GRIDCO are scrutinized and it is observed that the ECR has been decreased due to intervention of appropriate authority at different level. The details Price of Coal , GCV & ECR as per bill served by NTPC to GRIDCO for the period from April, 2012 to December, 2012 are given in the table below:

Table-35
Price of Coal & GCV of CGS

MONTH	FSTPS - I & II			FSTPS-III	KSTPS-I			KSTPS-II	TSTPS-I & II		
	Cost of Coal (Rs./MT)	GCV of Coal Kcal/Kg	ECR P/U	ECR P/U	Cost of Coal (Rs./MT)	GCV of Coal Kcal/Kg	ECR P/U	ECR P/U	Cost of Coal (Rs./MT)	GCV of Coal Kcal/Kg	ECR P/U
Apr-12	3,820.2	3,409.0	294.20	291.70	2,161.4	2,716.0	217.80	205.60	1,935.7	3,151.1	158.70
May-12	3,804.2	3,347.0	298.40	295.80	2,301.6	2,744.0	229.50	216.70	2,105.5	3,094.5	175.80
Jun-12	4,096.6	3,581.0	300.40	297.70	2,553.1	2,807.0	248.90	234.90	1,761.8	2,809.5	162.00
Jul-12	3,702.2	3,277.0	296.60	294.00	2,674.8	2,648.0	276.40	260.90	1,738.2	2,811.9	159.70
Aug-12	3,137.2	2,672.0	308.30	305.60	1,982.8	2,394.0	226.60	213.90	1,252.1	2,642.9	122.40
Sep-12	3,184.0	2,816.0	296.90	294.30	2,081.5	2,491.0	228.60	215.80	1,225.6	2,781.2	113.80
Oct-12	2,412.5	2,816.0	224.90	223.00	1,875.3	2,631.0	205.40	193.90	1,720.4	2,901.7	153.20
Nov-12	2,095.0	3,070.0	179.20	177.60	1,327.6	2,732.0	132.90	125.50	1,765.1	2,886.9	158.00
Dec-12	1,878.9	3,021.0	163.30	161.90	1,633.26	2,645	169.00	159.50	1,525.5	2,985.2	132.00
Avg from 4/12 to 12/12	3,125.6	3,112.1	262.47	260.18	2,119.8	2,645.4	215.01	202.97	1,670.0	2,896.1	148.40

165. From the above table it is found that the ECR for FSTPS I & II are varied from 163.30 p/u to 308.30 p/u, for KhSTPS-I, it varies from 132.90 p/u to 276.40 p/u, for KhSTPS-II, it varies from 125.50 p/u to 260.90 p/u and for TSTPS-I, it varies from 113.80 p/u to 175.80 p/u for the period from April, 2012 to December, 2012. It is observed that the ECR have varied inconsistently. Hence it is difficult to assess the actual ECR for the ensuing year 2013.14. The comparisons of ECR of different years are given below.

Table – 36
Energy Charge Rate (ECR) in Paise /Unit

	Approval for 2011-12	Avg. of actual for 2011-12	Approval for 2012-13	GRIDCO Proposal for 2013-14	Avg. of actual for 2012-13 upto Dec,12	Max. ECR from 4/12 to 12/12	Min. ECR from 4/12to 1/12	Avg. ECR of last 6 months i.e. 7/12 to 12/12	Avg. ECR of last 3 months i.e.10/12 to 12/12
TSTPS-I	201.38	207.56	244.77	200.18	148.40	175.80	113.80	139.85	147.73
TSTPS-II	197.77	207.56	244.77	199.46	148.40	175.80	113.80	139.85	147.73
FSTPS- I&II	340.75	329.26	384.67	386.50	262.47	308.30	163.30	244.87	189.13
FSTPS- III	-		-	387.46	260.18	305.60	161.90	242.73	187.50
KHSTPS-I	232.11	271.83	311.85	303.47	215.01	276.40	132.90	206.48	169.10
KHSTPS-II	219.92	253.87	294.37	287.68	202.97	260.90	125.50	194.92	159.63

166. The wide variation in ECR in recent times was due to use of different types of coal by NTPC for power generation in its Plants. Considering the above, the Commission estimated the ECR for FY 2013.14, taking 20% escalation over average of actual ECR for the last six months i.e. from July,2012 to December,2012 to meet the variations as against 30% escalation proposed by GRIDCO as indicated in Table below.

Table – 37
Energy Charge Rate (ECR) of CGSs for 2013-14

(Figs in Paise/Unit)

Stations	GRIDCO's proposal with 30 % hike over Avg. ECR of 1 st six months	Actual Average ECR for the period from July,2012 to Dec,12 (excluding central Tr. Loss)	Approval of the Commission with an escalation of 20% over actual Avg. ECR for the period from July, 2012 to Dec,2012 (excluding central Tr. Loss)	Approval of the Commission including central Tr. Loss of 2.68%
TSTPS –I	200.18	139.85	167.82	172.44
TSTPS –II	199.46	139.85	167.82	172.44
FSTPS – I & II	386.50	244.87	293.84	301.94
FSTPS - III	387.46	242.73	291.28	299.30
KHSTPS – I	303.47	206.48	247.78	254.60
KHSTPS – II	287.68	194.92	233.90	240.35

167. In case of any further variation in ECR during 2013-14 over and above 20% 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 2014-15.
168. The 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.

169. **Year-end Adjustment Charges (YEA):** GRIDCO had proposed the year-end adjustment charges of central generating stations for FY 2013-14 to the tune of Rs. 11.701 crore with the projected CS loss in line with the actual payment of Year end Charges for FY 2011-12.
170. The Commission scrutinized the above proposal of GRIDCO and accepted the Year End Charges of Rs. 11.70 Cr. for the FY 2013-14 which is at the level of the actual Year End Charges for the FY 2011-12. Accordingly, the year-end charges approved by the Commission including central transmission loss are given in the table below.

Table – 38
Year End Charges Approved for the FY 2013-14

Central Generating Stations	FPA due to Secondary fuel oil (Rs. Crore)	Water/ Pollution Cess (Rs. Crore)	Electricity Duty (Rs. Crore)	TOTAL (Rs. Crore)	Estimated energy Drawal after Central Tr. Loss of 2.68% (MU)	Rate including loss (P/U)	GRIDCO Proposal including loss (P/U)
TSTPS –I	1.57	0.09	3.08	4.74	2154.59	2.20	2.24
TSTPS –II	2.07	0.04	1.94	4.05	1355.09	2.99	2.95
FSTPS – I & II	1.62	0.93	0	2.55	1470.78	1.73	1.78
FSTPS - III	0	0	0	0	683.61	0	0
KhSTPS –I	0.03	0.06	0	0.09	844.17	0.11	0.11
KhSTPS –II	0.26	0.01	0	0.27	208.34	1.30	1.34
Total	5.56	1.12	5.01	11.70	6716.57		

Transmission Charge for PGCIL System

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. 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. 31.03.2012 have furnished the Slab PoC Rates & PoC Loss for New Grid & SR Grid.

171. Accordingly, GRIDCO received Bill # 1 amounting to Rs 19.01 Crore for the month of April'12 for the approved LTA of 1127.55 MW and Rs 19.80 Crore from May'12 to August'12 for the approved LTA quantum of 1132.2 MW (addition of NVVN Coal Power) applying the approved PoC rates of CERC vide its Order Dtd 31.03.2012. From Sept'12 GRIDCO has been billed for an amount of Rs 20.63 Crore for the

approved LTA quantum of 1178.95 MW (addition of unallocated power of Farakka-III).

172. GRIDCO has not been receiving any Bill towards the second part of Bill (Bill#2) due to absence of additional Medium Term Open 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 & the exact figure can not be predicted. The Third Part of the Bill which is basically year end adjustment in nature, has been received by GRIDCO on quarterly basis. GRIDCO received a bill of Rs 1.15 Crore towards Bill # 3 for the period from January'12 to March'12. The same Bills for the period from April'12 to September'12 have not been received by GRIDCO. Assuming the same amount to be received for the entire year GRIDCO proposes Rs. 5 Crore towards Bill #3 for the ensuing year, 2013-14. However, considering the bills received for the last six months and prorating the same for a year, GRIDCO proposes an amount of Rs. 1.25 Crore payable towards Bill #4 for the ensuing FY 2013-14.
173. Further, GRIDCO is paying for ULDC and Communication Charges amounting to Rs.1.11 Crore per month for which GRIDCO proposes to pay an amount of Rs.13.36 Crore for the ensuing year i.e. FY 2013-14. GRIDCO has received an amount of Rs. 10.88 Crore towards Short-Term Open Access (STOA) Charges for the period from April,12 & August,12. Accordingly, GRIDCO proposes Rs.26.54 Crore to be received as STOA Charges for the ensuing year 2013-14.
174. Besides the above bills, PGCIL is also raising the bills frequently for the Pre PoC period (i.e. for the period from 2004 to 2011 till June'11) basing upon the CERC Orders revised from time to time. Such bills received during April'12 to Sept'12 are supplementary bills of differential Annual Fixed Cost due to MAT rate variation, deferred tax liability for the period upto 31.03.09 etc., total of which amount to Rs. 2.17 Crore. Considering aforesaid bills, GRIDCO proposes to pay an amount of Rs. 4.00 Crore for the ensuing tariff period for the bills pertaining to Pre-PoC period. With the above facts, the Transmission Charges payable by GRIDCO for the ensuing year comes to Rs. 244.63 Crore. Considering energy drawal of 8199.36 MU (and after allowing 2.98% of CTU loss, per unit PGCIL Transmission Charge including loss works out to 30.75 P/U.
175. Further, in the compliance to Commission's queries on ARR, GRIDCO submitted on dated 22.01.2013 that GRIDCO had filed a Writ Petition before Hon'ble High Court of Orissa challenging the CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010, being W.P.(C) No. 29250 of 2011. In the mean time, based upon the Petition filed by PGCIL in this regard, Hon'ble Supreme Court of India transferred the matter to Hon'ble High Court of Delhi by the Order dtd. 07.05.2012 and the matter was listed on 19.09.2012, 24.09.2012 and 20.11.2012. However, till date Hon'ble High Court of Delhi has not given any directions on the matter. Since the matter is sub-judice, GRIDCO is making payment to PGCIL on Pre-PoC method amounting to Rs.10.80 Crore per month by recasting the amount towards Transmission Charges.
176. 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. The Order of CERC pertaining to PGCIL transmission charges is Sub-judice at different High Courts and Hon'ble Supreme Court of India. Pending finalization of Court cases, the Commission feels it prudent to consider the PGCIL transmission charges for FY 2013-14 with an escalation on the actual payment made by GRIDCO to PGCIL during the current financial year, for the purpose of computation of the ARR of GRIDCO. Accordingly Commission considered provisionally an amount of Rs.168.480 crore for the FY 2013-14 (allowing 30% rise over Rs.10.80 Crore/

month paid by GRIDCO to PGCIL for FY 2012-13) towards PGCIL Transmission Charge for Central Sector Generating Stations.

177. The Commission also scrutinise the ULD & Communication Charges as proposed by GRIDCO in the ARR for FY 2013-14 and provisionally approves the same and pass through in the tariff. Further the Commission does not consider the receipt from Short term OA Customers as proposed by GRIDCO due to uncertainty of OA transaction and also the principle of sharing of Transmission charges is sub-judice.
178. 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 2013-14 comes to 22.64 P/U. The details of total cost towards PGCIL transmission charges is indicated in the table below:

Table – 39
PGCIL Transmission Charges for FY 2013-14

Particulars	GRIDCO's Proposal	Commission's Approval
Transmission charge payable by GRIDCO for 2012-13 towards First Bill Bill#1 (Rs. Cr.)	247.56	
Deviation charges proposed towards bill #4 (Rs. Cr.)	1.25	
Year End Charges proposed towards Bill #3 (Rs. Cr.)	5.00	
Total (Rs. Cr.)	253.81	168.48 (30% rise over Rs.10.80 x 12)
ULD and Communication Charges (Rs. Cr.)	13.36	13.36
Bills pertaining to Pre Poc Period (Rs. Cr.)	4.00	4.00
less: allocable to short term customers (Rs. Cr.)	26.54	0
Net amount payable by GRIDCO towards Transmission Charges (Rs. Cr.)	244.63	185.84
Energy drawal by GRIDCO before Central Sector Loss (MU)	8199.36	7847.54
PGCIL Transmission Charge (P/U)	29.84	23.68
Weighted Average Central Sector Transmission Loss %	2.98%	2.68%
PGCIL Transmission Charge including loss (P/U)	30.75	24.33

179. Taking all the above cost into account the summary of power purchase from Central Generating Stations and its cost for GRIDCO approved for FY 2013-14 is given in the table below.

Table – 40

Generating Stations	Energy MU	Fixed Cost P/U	Energy Charge Rate 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
TSTPS-I	2,154.59	87.11	172.44	2.20	261.75	563.97	24.33	286.09
TSTPS-II	1,355.09	81.35	172.44	2.99	256.78	347.96	24.33	281.11
FSTPS-I	1,470.78	88.08	301.94	1.73	391.75	576.18	24.33	416.08
FSTPS-III	683.61	166.50	299.30	-	465.80	318.42	24.33	490.13
KHSTPS -I	844.17	101.83	254.60	0.11	356.54	300.98	24.33	380.87

KHSTPS-II	208.34	125.09	240.35	1.30	366.73	76.41	24.33	391.07
Sub Total Thermal	6,716.57	97.27	226.14	1.74	325.15	2183.92	24.33	349.49
Chukka	268.08		163.38		163.38	43.80	24.33	187.71
Tala	143.25		207.56		207.56	29.73	24.33	231.90
Teesta	509.33		224.93		224.93	114.56	24.33	249.26
Sub total Hydro	920.65				204.30	188.09		
Total Central Sector (Thermal + Hydro)	7637.23				310.59	2372.01		
NB:	The rates include Central Transmission Loss of 2.68%.							

180. 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 2013-14. 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 2013-14. The Commission approves the same and pass through in the tariff.
181. 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 2013-14 are given in the table below:

Table - 41
GRIDCO's Proposal & Commission's Approval for FY 2013-14

Generators	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	Energy (MU)	Total Rate (P/U)	Total cost (Rs. Cr.)	Energy (MU)	Total Rate (P/U)	Total cost (Rs. Cr.)
HYDRO (OLD)	3,632.54	68.33	248.21	3,676.86	65.62	241.26
Indravati	1,948.32	80.42	156.68	1,942.38	80.52	156.41
Machakund	262.50	30.60	8.03	262.50	30.78	8.08
Total Hydro	5,843.36	70.67	412.93	5,881.74	68.98	405.75
OPGC	2,668.40	220.77	589.11	2,668.40	200.17	534.14
TTPS (NTPC)	3,210.00	249.61	801.25	3,209.78	193.19	620.10
IPPs	3,859.11	274.22	1,058.25	3,073.51	274.22	842.82
CGPs	1,092.04	275.00	300.31	-	275.00	-
Renewable						

Generators	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	Energy (MU)	Total Rate (P/U)	Total cost (Rs. Cr.)	Energy (MU)	Total Rate (P/U)	Total cost (Rs. Cr.)
Co-Generation	1,102.00	275.00	303.05	1,102.00	275.00	303.05
Small Hydro	300.00	368.00	110.40	300.00	368.00	110.40
Biomass Energy	120.00	516.00	61.92	120.00	516.00	61.92
Solar Energy	65.76	1,060.45	69.74	65.76	1,060.45	69.74
TOTAL STATE	18,260.67	203.00	3,706.95	16,421.19	179.52	2,947.91
CHUKHA	268.11	194.64	52.18	268.08	163.38	43.80
Tala HPS	145.50	238.96	34.77	143.25	207.56	29.73
Teesta-V	507.82	260.40	132.23	509.33	224.93	114.56
Total Central Hydro	921.43	237.88	219.19	920.65	204.30	188.09
TSTPS St-I	2,154.56	320.28	690.06	2,154.59	261.75	563.97
TSTPS St-II	1,342.41	315.28	423.24	1,355.09	256.78	347.96
FSTPS I & II	1,470.75	507.11	745.83	1,470.78	391.75	576.18
FSTPS III	1,022.35	575.98	588.85	683.61	465.80	318.42
KhTPS St-I	841.56	436.48	367.32	844.17	356.54	300.98
KhTPS St-II	207.70	445.27	92.48	208.34	366.73	76.41
Total Central Thermal	7,039.33	413.08	2,907.79	6,716.57	325.15	2,183.92
Total Central Sector	7,960.76	392.80	3,126.98	7,637.23	310.59	2,372.01
PGCIL Tr. Charges					24.33	185.84
ERLDC Charges		0.47	3.75		0.49	3.75
TOTAL GRIDCO	26,221.43	260.77	6,837.67	24,058.42	229.01	5,509.51

Rebate for Prompt Payment from the Generators

182. 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.
183. 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

Truing up of GRIDCO

184. The Commission had approved the Truing up of GRIDCO upto the financial year 2010-11 in its Order dated 19.3.2012 in Case No.6/2012. While undertaking the truing up exercise, the submission of the petitioner and the Audited Annual Accounts upto FY 2010-11 were taken into consideration. The principles followed by the Commission in regard to Truing up of GRIDCO are summarized below:-
- i) Power Purchase Cost is allowed on actual basis.
 - ii) Employees Cost is allowed on actual basis.
 - iii) Repair & Maintenance Cost is allowed on actual basis.

- iv) Administrative & General Expenditure is allowed as per actual subject to the limit approved in the ARR.
- v) Interest on loan amount is allowed on actual basis except interest on loan from state govt.
- vi) Depreciation is allowed as per actual upto FY 2000-01. From 2001-02 onwards, depreciation is calculated in line with Hon'ble High Court Order i.e. at pre-upvalued cost of asset and pre-92 rate notified by Govt. of India.
- vii) Income from interest payable by WESCO, NESCO & SOUTHCO as bond value of Rs.400 crores shown in Audited Accounts for FY 2006-07 has not been considered in truing up exercise since the matter is subjudice.

185. Accordingly, the Commission approved an amount of Rs.2260.00 crore by the end of 31.3.2011, to be amortized over a period of six years.

For the year 2011-12, the petitioner GRIDCO submitted its Revenue Gap vis-à-vis Truing up. As per the submission of GRIDCO, the actual aggregate revenue gap from 2008-09 to 2011-12 becomes Rs.4002.02 crore as against the approval gap of Rs.2845.10 crore during 2008-09 to 2011-12. After considering the year-end adjustment charge, the gap is increased to Rs.5062.12 crore. The details are depicted in table below:-

Table -42

Financial Year	OERC approved Gap	Actual Gap in P&L A/C	Repayment of loan	Year end adjustment	Total (3-4-5)
1	2	3	4	5	
2008-09	(-) 410.05	98.14	374.26	163.94	(-) 440.06
2009-10	(-) 882.85	(-) 1560.84	205.06	164.22	(-) 1930.12
2010-11	(-) 806.15	(-) 487.93	328.15	297.01	(-) 1113.09
2011-12	(-) 746.05	(-) 762.12	382.40	434.33	(-) 1578.85
Total	(-) 2845.10	(-) 2712.75	1289.87	1059.50	(-) 5062.12

186. The cash deficit arising from Non-recovery of costs till FY 2011-12 has been managed by GRIDCO under the following heads.

<u>Sources of Funding</u>	<u>Amount</u>
1. Loan availed	4017.87 Crore
2. Realisation from 400 Cr. NTPC Bond	50.00 Crore
3. Deferment of Interest on GoO Bond (NTPC)	217.13 Crore
4. Deferment of Interest on Govt. loan	289.08 Crore
5. Deferment of Power Purchase dues (CGPs) etc.	461.84 Crore
6. Deferred Guarantee Fees	26.70 Crore

	5062.12 Crore
	=====

As already stated above, GRIDCO availed Rs.4017.87 crore term loans to meet the revenue gap. The petitioner requests that the principal repayment obligation of the loan amounting Rs.864.03 crore may be considered in BSP for 2013-14 towards special appropriation.

187. The final truing up exercise in respect of GRIDCO were undertaken up to 2010-11 and the Commission had approved Rs.2266.00 crore towards regulatory asset. For the financial year 2010-11 the truing up exercise was undertaken based on the Audited Annual Accounts of the licensee. The Principle followed while undertaking the truing up exercise is same as was followed in the Truing Up Order of the Commission dt.19.3.2012.
188. Accordingly the submission of Truing up exercise for the financial year 2011-12 is depicted in table below:-

Table- 43

Rs. Crore

Particulars	2011-12			
	OERC Approval	Actuals	TRUE UP	DIFERENCE
Expenditure				
Power Purchase including wheeling	4940.30	5212.98	5212.98	-272.68
Employee Cost(less expense capitalised)	4.21	3.47	3.47	0.74
R & M Cost	0.00	0.03	0.03	-0.03
A & G Cost	2.83	3.20	2.83	0
Gross Interest	326.64	739.21	510.34	-183.7
<i>Less: Capitalisation</i>	0.00	0.00	0.00	0
<i>Less: Interest receivable from Discos</i>	0.00	0.00	0.00	0
Net Interest	326.64	739.21	510.34	-183.7
Depreciation	0.00	0.12	0.12	-0.12
Damage due to cyclone	0.00			0
Other Expenses(ERLDC fees)	1.32	0.00	0.00	1.32
Bad Debts	0.00	0.00	0.00	0
Total Expenditure	5275.30	5959.01	5729.77	-454.47
Prior Period Adjustments	319.84	139.88	-19.42	339.26
Special appropriation to cover Previous loss	421.78		421.78	0
Previous Loss	0.00	174.69	0.00	0
Contingency Reserve	0.00			0
Repayment of Principal	0.00			0
Reasonable Return	0.00			0
TOTAL COST	6016.92	6273.58	6132.13	-115.21
TOTAL REVENUE	5270.87	5336.79	5336.79	65.92
Difference- in Cost and Revenue(Profit / (loss)	-746.05	-936.79	-795.34	-49.29
Add: Approved gap in ARR				-746.05
True up on adjustment of Approved gap in ARR				-795.34
Cumulative TRUEUP GAP				-3061.94

Amount approved upto 31.3.2011

- Rs. 2266.60 Crore

Amount approved for 2011-12

- Rs. 795.34 Crore

Total

- Rs.3061.94 Crore

Already the Commission have amortized Rs.1019.51 Crore (Para 499 of BSP Order 2012-13). The balance amount to be amortised is Rs.2042.43 crore.

Employees cost

189. The Annual Revenue Requirement for the Financial Year 2013-14 filed by GRIDCO includes an amount of Rs.5.22 crores towards employees cost, which is analysed in the table below:-

Table -44

	2012-13 (Approved)	2013-14 (Proposal)	2011-12 (Actual)
Basic Pay	1.56	1.72	1.62
DA	1.12	1.48	0.92
HRA	0.21	0.21	0.18
Medical Reimbursement	0.08	0.17	0.08
Others	0.70	0.40	0.06
Terminal benefits	0.62	0.64	0.61
Contractual engagement	-	-.60	-
Total	4.29	5.22	3.47

190. In line with the Orders of the last year, the Commission called for the monthly data by actual payment towards Basic Pay + GP from April, 2012 to November, 2012. GRIDCO in reply to query furnished the month-wise drawal towards Basic Pay+ G.P. DA, HRA & Total from April, 2012 to November, 2012 as under:-

Basic Pay	-	0.91
G.P.	-	0.21
DA	-	0.78
<u>HRA</u>	-	<u>0.12</u>
Total	-	2.02

191. The basic pay + GP for a period of 8 months was Rs.1.12 crore (0.91+0.21). Extrapolating the same for a period of 12 months and factoring in 3% of normal annual increment the forecast of Basic Pay + GP for the FY 2013-14 works out to Rs.1.72 crore.

As regard the DA, the present rate w.e.f. 1.7.2012 is 72%. In past, the periodic rise in DA with effect from 1st January and 1st July was to the extent of 7%. Assuming the rise in DA @7% in 01.1.2013, 1.7.2013 and 1.7.2014, the annual average DA for the financial year 2013-14 is pegged at 86%.

In respect of other major expenditure such as medical allowance, HRA, Terminal benefits the following principle has been adopted.

1. Medical reimbursement 5% of Basic Pay + GP
2. House rent allowance 15% of Basic Pay + GP limiting to claim made by licensee in these filing.
3. Terminal benefits allowed as proposed

192. GRIDCO during hearing informed that three new section has been created for (i) DISCOM Capex monitoring (ii) Renewable energy (iii) Energy conservation for

which GRIDCO outsourced 29 contractual employees. The expenditure proposed under the head was 0.60 crore. Commission approves the same.

With the above principle the approved employees cost for 2013-14 is shown in table below:-

Table -45

	2012-13 (APP)	2013-14(Prop.)	2013-14 (APP)
Basic Pay + GP	1.56	1.72	1.72
DA	1.12	1.48	1.48
HRA	0.21	0.21	0.21
Expenses on contractual engagement	-	0.60	0.60
Medical reimbursement	0.08	0.17	0.09
Others	0.70	0.40	0.25
Terminal liabilities	0.62	0.64	0.64
Total	4.29	5.22	4.99

Commission approves an amount of **Rs.4.99** crore towards employees cost for 2013-14 as against an amount of Rs.5.22 crore proposed by the licensee.

Repair Maintenance

193. During Financial Year 2013-14 GRIDCO proposes an amount of Rs.0.50 crore towards repair & maintenance out of which 0.30 core is proposed under building maintenance and 0.20 crore towards furniture fixtures and office equipment maintenance. On scrutiny of the Audited accounts for 2011-12, it is revealed that expenditure on repair maintenance are incurred only against Motor Vehicle and furniture and fixture. Therefore Commission disallows claim of Rs.0.30 crore proposed under building maintenance and approves an amount of **Rs.0.20** crore only towards repair maintenance of vehicle, furniture fixture and office equipment for the FY 2013-14.

Administration & General Expenses

194. During Financial Year 2013-14, GRIDCO proposed an amount of Rs.3.77 crores under the head Administrative and General Expenses, inclusive of an amount of Rs.1.15 crores towards license fee payable to OERC. Thus excluding license fee the A & G expenses would be 2.62 crore (3.77-1.15). The Audited Account for the FY 2011-12 excluding license fee works out to Rs.1.80 crore. Factoring in the average inflation rate for 2012-13 (8.87%) and 7.50% for 2013-14, the A & G expenses works out to Rs.2.11 crore. Including the license fee of Rs.1.25 crore, the total A&G expenses for FY 2013-14 is approved at **Rs.3.36** crore (R.2.11 Cr. + Rs.1.25 Cr.).

Depreciation

195. Under this head GRIDCO has proposed Rs.0.35 crore towards the depreciation on fixed assets (vehicle, furniture and office equipment etc.) for the FY 2013-14. On scrutiny of the audited accounts of GRIDCO for the year 2011-12 it was found that an amount of Rs.0.12 crore was put under the head depreciation. Hence, Commission allows the depreciation amount of **Rs.0.35** crore for the FY 2013-14 proposed by the licensee.

Interest on Loan

196. GRIDCO has proposed an amount of Rs.580.17 crore under this head for the Financial Year 2013-14. As submitted by GRICDO the interest component is increasing year by year due to increase in size of loan portfolio for meeting the regulatory gap as well as default in payment of BSP by DISCOMs. The detailed statement is furnished in TRF-3.
197. On scrutiny of the figures submitted by the licensee, it is found that all loans up to 31.3.2008 are inherited by GRIDCO at the time of demerger of GRIDCO in to GRIDCO to OPTCL; the interest liabilities of which has been accepted by the Commission as a pass through in the revenue requirement. After that the actual loans availed by GRIDCO in different financial years are given as follows:-

2008-09	300.00 crore
2009-10	1213.00 crore
2010-11	1640.71 crore
2011-12	864.16 crore
2012-13 (Upto January 2013)	803.00 crore

A table showing loan position of GRIDCO as on 31.3.2014 and the claims of interest for 2013-14 is depicted in table below:-

Table-46

Sl No	Particulars	Rate of Interest 30-09-12	OB as on 01-04-11 Principal	2011-12			2012-13			2013-14			Interest due for the year
				Addition	Repay-ment	CB as on 31-3-12	Addition	Repay-ment	CB as on 31-3-13	Addition	Repay-ment	CB as on 31-3-14	
A	Upto 31-03-2008												
1	State Govt.(WCL)	13.00%	120.00	-	-	120.00	-	-	120.00	-	120.00	-	15.60
2	St.Govt (OPGC Adj.)	10.50%	42.54	-	-	42.54	-	-	42.54	-	37.65	4.89	4.47
3	NTPC (Govt. Bonds)	8.50%	827.16	-	8.13	819.02	-	-	819.02	-	551.44	267.59	78.99
4	Bond PF/99 (P.Trust)	8.00%	97.89	-	32.63	65.26	-	32.63	32.63	-	32.63	-	1.42
5	Union Bank of India- III	11.25%	33.86	-	14.40	19.46	-	14.29	5.17	-	5.17	-	0.14
6	Union Bank of India- IV	12.50%	47.98	-	16.84	31.14	-	16.67	14.47	-	14.47	-	0.90
7	Allahabad Bank - II	8.25%	17.71	-	10.74	6.96	-	6.96	-	-	-	-	-
8	Allahabad Bank - III	8.25%	12.05	-	7.12	4.93	-	4.93	-	-	-	-	-
9	Dena Bank - II	8.25%	31.04	-	11.52	19.52	-	11.52	8.00	-	8.00	-	0.25
10	Andhra Bank-I	11.00%	14.05	-	7.14	6.91	-	6.91	-	-	-	-	-
11	Syndicate Bank-I_50cr	8.25%	9.99	-	9.99	-	-	-	-	-	-	-	-
	Sub-total		1,254.27	-	118.52	1,135.75	-	93.91	1,041.84	-	769.36	272.48	101.76
B	Availed during 2008-09												
12	Uco Bank -I (200 cr)	11.25%	94.44	-	66.64	27.80	-	27.80	-	-	-	-	-
13	Uco Bank -II (100 cr)	11.25%	63.60	-	33.59	30.01	-	30.01	-	-	-	-	-
	Sub-total		158.04	-	100.24	57.81	-	57.81	-	-	-	-	-
C	Availed during 2009-10												
14	Union Bank STL- V	10.25%	100.00	-	-	100.00	100.00	100.00	100.00	-	100.00	-	11.25
15	Union Bank TL- VI	11.25%	162.83	-	40.82	122.02	-	40.20	81.82	-	40.20	41.62	7.45

16	Andhra Bank-II	11.25%	178.32	-	40.03	138.29	-	40.00	98.29	-	40.00	58.29	9.80
17	Karnataka Bank_II-100cr	10.75%	91.61	-	25.05	66.56	-	25.08	41.48	-	25.08	16.40	3.53
18	Canara -I_100 cr TL	11.25%	76.89	-	25.20	51.69	-	25.20	26.49	-	25.20	1.29	1.83
19	Canara -II_100 cr TL	11.25%	84.96	-	20.04	64.92	-	20.04	44.88	-	20.04	24.84	4.38
20	Kalinga GB -50 cr	11.25%	50.00	-	6.30	43.69	-	12.60	31.09	-	12.60	18.49	3.17
21	Karur Vbank_I -50 cr	11.00%	50.00	-	4.15	45.85	-	9.96	35.89	-	9.96	25.93	3.83
22	Dena Bank - III	11.00%	100.00	-	1.67	98.33	-	20.04	78.29	-	20.04	58.25	8.47
23	Uco Bank -III (100 cr)	10.75%	99.99	-	-	99.99	-	33.33	66.65	-	33.33	33.32	6.17
24	Uco Bank -IV (200 cr)	10.75%	200.00	-	-	200.00	-	66.67	133.33	-	66.67	66.67	12.34
	Sub-total		1,194.61	-	163.27	1,031.33	100.00	393.12	738.21	-	393.12	345.09	72.22
D	Availed during 2010-11												
25	Karur Vbank_II -50 cr	11.00%	50.00	-	-	50.00	-	5.81	44.19	-	9.96	34.23	4.86
26	Union Bank-VII_190_2010-12	10.25%	100.00	90.00	0.13	189.87	-	-	189.87	-	3.34	186.53	21.36
27	Allahabad Bank - IV	10.25%	200.00	-	0.00	200.00	-	8.34	191.66	-	33.36	158.30	19.85
28	Syndicate Bank-II_200cr	10.25%	200.00	-	-	200.00	-	16.67	183.33	-	40.00	143.33	18.57
29	Canara -III_200 cr TL	10.40%	199.86	-	0.01	199.85	-	-	199.85	-	20.10	179.75	22.31
30	Canara_IV -200_2010-12	10.30%	100.00	100.00	0.19	199.81	-	-	199.81	-	6.70	193.11	22.55
31	Bank of India_100cr_I	10.75%	100.00	-	-	100.00	-	16.68	83.32	-	16.68	66.64	9.08
32	Bank of India_200cr_II	10.75%	200.00	-	-	200.00	-	27.80	172.20	-	33.36	138.84	18.83
33	Cental Bank_I -100 cr	10.50%	99.99	-	0.01	99.99	-	25.00	74.99	-	25.00	49.99	7.29
34	IOB_I -200_2010-11	10.25%	200.00	-	0.01	199.99	-	-	199.99	-	4.76	195.23	22.48
35	Andhra Bank_III_2010-11	10.25%	93.71	106.29	0.02	199.98	-	-	199.98	-	3.34	196.64	22.50
	Sub-total		1,543.57	296.29	0.37	1,839.49	-	100.30	1,739.19	-	196.60	1,542.59	189.67
E	Availed during 2011-12												
36	St.Govt Loan (CPA Adj.)	12.00%	-	162.77	-	162.77	-	-	162.77	-	162.77	-	19.53
37	GRIDCO PP Bond-2012-100cr	11.00%	-	100.00	-	100.00	40.00	-	140.00	-	1.67	138.33	15.05
38	Union Bank-FDR Loan	11.25%	-	132.00	-	132.00	113.00	-	245.00	-	245.00	-	27.56
39	Union Bank-SOD	11.50%	-	173.11	-	173.11	-	-	173.11	-	-	173.11	20.02
	Sub-total		-	567.88	-	567.88	153.00	-	720.88	-	409.44	311.44	82.16
F	Availed during 2012-13												
40	Real Growth PPB_2012-50cr	10.40%	-	-	-	-	50.00	-	50.00	-	-	50.00	5.20
41	New Loan_OMC	10.00%	-	-	-	-	500.00	-	500.00	-	-	500.00	50.00
42	New Loan_PFC	12.00%	-	-	-	-	300.00	-	300.00	-	-	300.00	36.00
43	New Loan_Bond	10.00%	-	-	-	-	300.00	-	300.00	-	-	300.00	30.00
	Sub-total		-	-	-	-	1,150.00	-	1,150.00	-	-	1,150.00	121.20
	TOTAL (A+B+C+D)		4,150.49	864.16	382.40	4,632.25	1,403.00	645.13	5,390.12	-	1,768.51	3,621.60	567.02

D	Finance & Other Charges												
44	Guarantee Commission	0.50%	-										13.16
45	Rebate & other Finance Charges		-										-
E	Grand Total (A+B+C+D)		4,150.49	864.16	382.40	4,632.25	1,403.00	645.13	5,390.12	-	1,768.51	3,621.60	580.17

198. **Loans availed during FY 2008-09:** For the financial year 2008-09, GRIDCO availed loan of Rs.300.00 crore to meet the deficit in cash flow, which is mainly attributable to unfavourable hydro position resulting in procurement of power at a higher cost. On this loan the Commission had approved the interest impact in ARR of FY 2010-11 (Para 455 of BSP Order 2010-11) ARR of FY 2011-12 (Para 461 of BSP Order 2011-12) and ARR of FY 2012-13 (Para 454 of BSP Order 2012-13). In line with the earlier orders, the Commission approves interest on loan amount of Rs.300 crore availed during 2008-09. After repayment, the outstanding loan amount as on 31.3.2013 is shown as 'NIL'. Hence, there is no impact of the above loan for FY 2013-14 since all the loans are redeemed during FY 2012-13.
199. **Loan availed during 2009-10:** For the Financial Year 2009-10, GRIDCO availed loan of Rs.1213.00 crore. In the BSP Order for FY 2011-12 (Para 455 to 456) the Commission stated the reasons for allowing interest on loan amount of Rs.1213.00 crore availed during the Financial Year 2009-10. In line with the Orders of the previous years, the Commission accepts and allow the claim towards interest on loan availed during 2009-10 due for the FY 2013-14.
200. **Loans during FY 2010-11:** During the FY 2010-11, GRIDCO availed an amount of Rs.1640.71 crore. On this loan the Commission had approved the interest impact in the ARR for FY 2012-13. The relevant extract of the Order is reproduced below (Para 456 to Para 460) of BSP Order 2012-13).

“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.”

In the light of above observation Commission feels it justified to allow interest on the loan value of Rs.1640.71 crore availed during FY 2010-11 due for the FY 2013-14.

201. **Loans during FY 2011-12:** During FY 2011-12 GRIDCO availed an amount of Rs.864.16 crore.

202. The Audited Accounts of GRIDCO for 2011-12 was scrutinized. The analysis of loan availed during 2011-12 was given below:-

Table –47

		(Rs. Cr.)
1.	Loan Position as on 31.3.2012	4632.25
2.	Loan position as on 31.3.2011	4150.49
3.	Difference (Net loan during 2011-12) (1-2)	481.76
4.	Add repayment made during 2011-12 as per Cash Flow	382.40
5.	Total loan availed (3-4+5)	864.16

203. Source wise loan of Rs.864.16 core is indicated below:-

Table -48

		Rs. In Crore	Rate of Interest
1.	Canara Bank – IV	100.00	10.25%
2.	Union Bank VIII	90.00	10.25%
3.	Andhra Bank III	106.29	10.25%
4.	State Govt. (CPA Adjustment)	162.77	12%
5.	Union Bank – FDR Loan	132.00	11.25%
6.	Union Bank – SoD	173.11	11.50%
7.	GRIDCO Private Placement Bond	100.00	11.0%
	Total	864.16	

204. Out of the above loan, the CPA Adjustment of the State Govt. amounts to Rs.162.77 crore, the interest impact on which is 19.53 crore for the FY 2013-14. This issue has been dealt in para 497 & 498 of the BSP Order 2012-13 the extract of which is reproduced below:

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.)

Sanction Order No & Date	Loan Amount	Rate of Interest (%)	Interest upto 31-03-2011	Total Dues
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.*

205. After scrutiny of the audited account of the GRIDCO for the FY 2011-12 it was revealed that Govt. of Odisha issued post facto loan sanctioned order for Rs.196.17 crore converting the amount made available to GRIDCO from Central Plan Assistance, payable by 31.3.2012. Out of the said amount Rs.162.77 crore relates to GRIDCO and balance to OPTCL. GRIDCO has accounted for the same as unsecured

loan and has to move to Govt. of Odisha for modification of sanction order. As per Clause XII of Notification No.1068 dated 29.1.2003, GRIDCO have moved a proposal to Govt. of Odisha for adjustment of these loans against receivables of GRIDCO from State Govt.

In the line of the above observation the Commission for the present don't allow the interest impact of the CPA adjustment in the ARR until final decision.

206. Besides the CPA Adjustment, in their submission GRIDCO stated that DISCOMS have now-a-days started even defaulting in payment of current BSP during FY 2011-12 and onwards. Because of such failure of DISCOMS, the revenue deficit faced by GRIDCO was widened to unmanageable levels leading to serious cash crunch for which GRIDCO during 2011-12 availed Secured Overdraft (SOD) from Union Bank to the tune of Rs.305.11 Crore to meet their cash deficit. As per the audited account for the year FY 2011-12 (Note-6) the outstanding Overdraft from Union Bank was to the tune of Rs.306.07 crore. As per the TRF-3 submitted by GRIDCO during the year 2012-13 GRIDCO availed further FDR loan of Rs.113.00 crore totaling Rs.419.07 crore. During 2013-14 no additional borrowing has been proposed but, GRIDCO anticipate repaying to the tune of Rs.245 crore if surplus is available. The interest impact on the total of Rs.419.07 crore is shown at Rs.47.58 crore. Commission approves the same.

Over and above the CPA adjustment and secured overdraft totalling to Rs.467.88 crore (SOD 305.11 + CPA 162.77), GRIDCO further availed Rs.396.28 crore from different banks to meet the revenue deficit. GRIDCO claimed interest on such loan. The Commission approves the interest impact on the above loan as pass through in the ARR for the FY 2013-14.

207. **Loan during 2012-13:** In the FY 2012-13, GRIDCO has availed an amount of Rs.803.00 crore upto January 2013 and proposed to avail another 600 crore during FY 2012-13. As required by the Commission, GRIDCO submitted the cash flow for FY 2012-13 (upto January 2013). A summarized position of cash deficit of GRIDCO is given below:-

Revenue from DISCOMS	4097.11 crore
1. Revenue from UI Trading	395.95 crore
2. Miscellaneous	<u>62.81 crore</u>
Total	4555.87 crore
A. Cash Out Flow	
1. Power Purchase	4479.42
2. UI Trading Purchase	127.53
3. Employees Cost	2.74
4. A & G expenses	3.36
5. Loan repayment	507.62
6. Interest & Finance	309.07

Total	5429.74 Crore
B. Cash Deficit	873.87 Crore

208. To meet the above cash deficit, GRIDCO has no alternative but to fund deficit through borrowing from different sources.

Source wise borrowing of the loan during 2012-13 is given below:-

Union Bank STL-V	100.00 Crore
GRIDCO Power Purchase Bond	40.00 Crore
Union Bank (FDR) Loan	113.00 Crore
Real Growth Bond	50.00 Crore
Odisha Mining Corporation	500.00 Crore

Commission in principle allows the interest impact of Rs.803 crore in the ARR for FY 2013-14 claimed by GRIDCO since cash deficit till January, 2013 is Rs.873.87 Cr.

As regards the proposed loan of Rs.600 core to be availed during 2012-13, the Commission will consider the interest impact of the above loan only when GRIDCO submits the necessary supporting details.

209. GRIDCO also inherited certain loans at the time of de-merger of GRIDCO into GRIDCO & OPTCL before 2008-09. The outstanding loan position up to 31.03.2008 has been exhibited in the table above. In line with the orders of the previous years, Commission allows interest on such loans excepting interest on State Govt. loans and pension trust fund.

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”.

210. 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.”

211. 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. Accordingly, Commission did not consider the effect of up-valuation such as depreciation, return on equity and interest on State Govt. loan and Bond in determining the ARR for FY 2012-13. Now that year is over. The Commission again in their letter vide No.JD(FN)-175/2002/4617 dated 28.12.2012 requested the Govt. to continue the same concession for FY 2013-14 and onwards so that the effect of upvaluation is not factored while determining the ARR for 2013-14. Reply from the State Govt. on this issue is awaited. However, the Commission in the said letter mentioned that pending receipt of reply /notification from Govt., Commission could assume the extension of benefits notified by the Govt. on 29.1.2003 and 6.5.2003 shall continue in the sector as a whole turns around.
212. 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 2013-14. With the above observation, interest liability for 2013-14 proposed by GRIDCO and approved by Commission is depicted in the table below:

Table –49

(Rs. Cr.)

Sl. No.	Particulars	Rate of interest	2013-14	
			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%	78.99	78.99
4	Union Bank of India-III	11.25%	0.14	0.14
5	Union Bank of India-IV	12.50%	0.90	0.90
6	Allahabad Bank-II	8.25%	-	
7	Allahabad Bank-III	8.25%	-	
8	Dena Bank-II	8.25%	0.25	0.25
9	Andhra Bank-I	11.00%	-	-
10	Pension Trust Bond	8.00%	1.42	0
	Sub Total		101.76	80.28
B. Loan availed during FY 2008-09 to meet the Revenue Deficit				
11	Uco Bank-I (200 cr.)	11.25%	0.00	0.00
12	Uco Bank-II (100 cr.)	11.25%	0.00	0.00
	Sub Total		0.00	0.00
C. New Loan availed during FY 2009-10 to meet the Revenue Deficit				
13	Union Bank of India-V-100 cr.	10.25%	11.25	11.25
14	Union Bank of India-VI-200 cr.	11.25%	7.45	7.45
15	Andhra Bank-II-200 cr.	11.25%	9.80	9.80
16	Canara-I-100 cr.	11.25%	1.83	1.83

Sl. No.	Particulars	Rate of interest	2013-14	
			Interest due for the year as per the revised proposal of GRIDCO	Approval
17	Canara-II-100 cr.	11.25%	4.38	4.38
18	Kalinga GB-50 cr.	11.25%	3.17	3.17
19	Kaur Vysya Bank-50 cr.	11.00%	3.83	3.83
20	Karnataka Bank-II-100 cr.	10.75%	3.53	3.53
21	Uco Bank III- 100 cr.	10.75%	6.17	6.17
22	Uco Bank IV- 113.00 cr. (Sanctioned Rs.200 cr.)	10.75%	12.34	12.34
23	Dena Bank III- 100 cr.	11.00%	8.47	8.47
	Sub Total		72.72	72.72
D. New Loan availed during FY 2010-11 to meet the Revenue Deficit				
24	Uco Bank IV- 87.00 cr. (Sanctioned Rs.200 cr.)	10.75%	Included in item No.22	Included in item No.22
25	Bank of India-I-100 cr.	10.75%	9.08	9.08
26	Bank of India-II-200 cr.	10.75%	18.83	18.83
27	Central Bank-I-100 cr.	10.50%	7.29	7.29
28	Karur Vysya Bank-II-50 cr.	11.00%	4.86	4.86
29	Canara Bank-III-200 cr.	10.40%	22.31	22.31
30	Canara Bank-IV-100 cr.	10.30%	22.55	22.55
31	Syndicate Bank-II-200 cr.	10.25%	18.57	18.57
32	Allahbad Bank-IV-200 cr.	10.25%	19.85	19.85
33	Union Bank -VII 100 cr.	10.25%	21.36	21.36
34	Andhra Bank-III 93.71 cr. (Sanction loan Rs.200.00 cr.)	10.25%	22.50	22.50
35	IOB-I 200 cr.	10.25%	22.48	22.48
	Sub Total		189.68	189.68
E. Loan availed during FY 2011-12				
36	Andhra Bank-III 106.29 cr. (Sanction loan Rs.200.00 cr.)	10.25%	Included in item No.34	Included in item No.34
37	Union Bank FDR TL-VIII 132 cr.	11.25%	27.56	27.56
38	Union Bank SOD 173.11	11.50%	20.02	20.02
39	GRIDCO PP BOND-2012 – 100 Cr.	11.00%	15.05	15.05
40	CPA Adjustment (State Govt. Loan) 162.77 Crore	12.00%	19.53	19.53
41	Canara Bank-IV-100 cr.	10.30%	Included in item 30	Included in item 30
42	Union Bank -VII 90 cr.	10.25%	Included in item 33	Included in item 33
	Sub Total		82.16	82.16
E. Loan availed during FY 2012-13 (Upto November, 2012 to meet the Revenue Deficit)				
43	Union Bank of India-V-100 cr.	10.25%	Included in item 13	Included in item 13
44	GRIDCO PP BOND-2012 – 40 Cr.	11.00%	Included in item 39	Included in item 39
45	Union Bank FDR TL-VIII 113 cr.	11.25%	Included in item 37	Included in item 37
46	Real Growth PPB- 50 Cr.	10.40%	5.20	5.20
47.	Loan from OMC – 500 Cr.	10.00%	50.00	50.00

Sl. No.	Particulars	Rate of interest	2013-14	
			Interest due for the year as per the revised proposal of GRIDCO	Approval
48.	Proposed Loan from PFC – 300 Cr.	12.00%	36.00	0.00
49	Proposed Loan Bond – 300 Cr.	10.00%	30.00	-
	Sub Total		121.20	55.20
F. Finance & Other Charges				
50	Guarantee Commission	0.5%	13.16	13.16
	Sub Total		13.16	13.16
G.	Grand Total (A+B+C+D+E+F)		580.17	494.11

Pass through of Arrear Dues

213. GRIDCO proposed expenses of Rs.321.49 cr. incurred/to be incurred till 2012-13 as a pass through in the ARR of 2013-14. The summary of proposed expenses claimed as a pass through is given in table below:

Table - 50

Summary of Proposed Pass Through Expenses in ARR & BSP for FY 2013-14	
Particulars	Amount in Rs. Crore
(I)TTPS (Differential Fixed Cost Arrears from FY 2009-10 to FY 2012-13) (1/3rd proposed for Pass Through in ARR for FY 2013-14	227.62
(II) NTPC Arrear Charges from April,12 to Sept.'12	
(A) Arrear Charges Paid in respect of FSTPS-I&II for FY-2012-13 (April'12 to Sept.'12)	18.31
(B) Arrear Charges Paid in respect of TSTPS-I for FY-2012-13 (April'12 to Sept.'12) :	29.24
(C) Arrear Charges Paid in respect of KhSTPS-I for FY-2012-13 (April'12 to Sept.'12)	11.13
(D) Arrear Charges Paid in respect of KhSTPS-II for FY-2012-13 (April'12 to Sept.'12)	0.85
Sub Total (NTPC) (II)	59.53
(III) Outstanding Govt. Guarantee Commission	34.34
Total amount proposed for pass Through in the ARR & BSP for FY 2013-14	321.49

214. **Arrear payment to NTPC in respect of TTPS:** GRIDCO has submitted that in addition to the projected power procurement cost, GRIDCO has already paid to NTPC the differential amount of Rs. 72.34 Crore (upto August 2012) arising out of the difference in the fixed costs for the period from 2004-09 as per CERC order dated 03.09.2012. Further, the claim of NTPC towards interest on the above motioned differential fixed charge amounting to Rs. 16.96 Crore has already been paid by GRIDCO during October 2012. Apart from than NTPC had already been paid arrear on account of FPA revisions and on account of Income-tax totalling to Rs. 9.40 Crore. GRIDCO has prayed the Commission to allow the above total amount of Rs. 98.70 Crore in the ARR of GRIDCO for the FY 2013-14.
215. Apart from the above, GRIDCO has also prayed the Commission for pass through of an amount of Rs. 584.15 Crore in the ARR for FY 2013-14, arising out of differential fixed charge to be paid to NTPC from FY 2009-10 onwards based on the filling of

NTPC before CERC in Petition No. 304/2009. The proposed year wise differential amount which is paid/ supposed to be paid by GRIDCO to NTPC is given below:

Table – 51
Pass Through in respect of TTPS (NTPC) (Rs. Crore)

Description	2009-10	2010-11	2011-12	2012-13	TOTAL
(A) Fixed Cost Arrears:					
(i) F.C. Billed by NTPC	214.4	214.4	214.4	214.4	857.602
(ii) F.C due by NTPC as per filling before CERC	338.57	353.18	368.31	381.69	1441.75
(iii) Differential amount to be paid by GRIDCO to NTPC	124.17	138.78	153.91	167.29	584.15
(B) Arrears due to Differential Fixed Charge, Interest thereon, FPA Revisions & Income Tax					98.70
(C) Total Amount for Pass Through in respect of TTPS					682.85
(D) 1/3rd of the Arrear amount proposed for Pass Through in a staggered manner in the ARR for FY 2013-14 to avoid Tariff Shock					227.62

216. As indicated in the above table, in order to avoid tariff shock GRIDCO proposes for recovery of Pass Through in respect of TTPS in a staggered manner i.e for Pass Through of an amount to Rs. 227.62 Crore during the FY 2013-14 which is 1/3rd of the total Pass Through amount of Rs.682.85 Crore.
217. In this connection, the Commission is of the view that the differential amount of Rs. 98.70 Crores which has already paid by GRIDCO to NTPC arising out of revision of fixed charge for the period from 2004-09 should be passed in the ARR of GRIDCO for the FY 2013-14 and the balance amount shall be considered only after CERC passes order on the petition of NTPC. Pending such decision out of the total claim of 682.85 Crore, the amount of Rs. 98.70 Crore only is allowed as a pass through expenses for the year 2013-14.
218. **Arrear payment to NTPC in respect of CGS:** GRIDCO submitted that NTPC had claimed an amount of Rs.59.53 crore on account of revision of Fixed charges in respect of TSTPS-I, KHSTPS-I & II and FSTPS-I & II due to finalisation of Tariff by CERC for the period FY 2009-14. The GRIDCO has already paid the said amount to NTPC. The commission scrutinised the proposal of GRIDCO and approved the same of Rs.59.53 Crore as pass through in the ARR of GRIDCO for 2013-14.
219. **Guarantee Commission:** Further, GRIDCO has proposed an amount of Rs.34.34 cr. towards outstanding guarantee commission upto FY 2011-12 is to be a pass through item in the ARR for the FY 2013-14. In line with the earlier BSP order of 2012-13 (Para 470), the Commission disallows the Outstanding Guarantee Commission as a pass through revenue requirement for the FY 2013-14 as claimed by GRIDCO.

Reimbursement to OHPC during FY 2013-14

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

220. As per the gazette notification dt.01.10.2010 OHPC has to pay Rs.0.01/kwh as license fee to the State Govt. towards use of water for generation of electricity by all the Hydro Electric Projects. Accordingly Rs.5.676 cr. is to be reimbursed to OHPC by

GRIDCO based on the power procurement (design energy) from OHPC. The details of payment is summarized in the table below:

Table – 52

(Rs. Cr.)

Description	RHEP	UKHEP	BHEP	HHEP	CHEP	UIHEP	Total
License fee for consumption of water for generation of electricity	0.525	0.832	1.183	0.684	0.490	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 also proposed for approval of the above expenses in its ARR & Tariff Application. Accordingly, the Commission after examining the proposal of OHPC, approves for 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 2013-14. However, provisionally approves Rs.5.676 crore towards such charges for the ensuing year based on the design energy of OHPC stations.

(b) Electricity Duty on Auxiliary Consumption

221. 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 2013-14.

(c) SLDC Charges

222. The Commission, while determining the ARR and Fees & Charges of SLDC for the FY 2013-14 in Case No.103/2012, 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. 7834.99/MW/Annum to be collected from the generators towards annual charges of SLDC. Considering the installed capacity of 2027.50 MW of OHPC (as submitted by SLDC in its ARR application), the total SLDC charges of OHPC comes to Rs. 1.59 cr. for the FY 2013-14, 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.1.59 as pass through in the ARR of GRIDCO for the FY 2013-14 towards power purchase related cost of OHPC.

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

223. 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 2013-14.

224. The details of ED on auxiliary consumption, license fee for use of water for generation of electricity and SLDC charges for FY 2013-14 of OHPC are summarized in the table below:

Table – 53

(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	0.490	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							1.59
(d) Application fees and publication expenses							0.26
Total							8.096 or say 8.10

Special Appropriation of Repayment of Principal

225. For the FY 2013-14 GRIDCO has proposed Special Appropriation of Rs.1768.51 crore under the following heads:-

	<u>Rs. In Crore</u>
State Govt. loan	320.41
NTPC GOO Special Bonds (Rs.1102.87 Crore)	551.44
Pension Trust Bond	32.63
Bank Loans	864.03
	=====
Total	1768.51

State Govt. Loan

226. As submitted by GRIDCO, the Govt. loan dues payable by GRIDCO was kept in abeyance for a period of 5 years upto FY 2005-06 vide Govt. of Odisha notification dated 29.1.2003 and subsequently deferred to FY 2010-11 vide Notification dated 06.1.2010. In absence of further approval for deferment of dues, repayment of loan and payment of interest to Govt. up to FY 2013-14 is proposed in this ARR & BSP application. Therefore GRIDCO claimed an amount of Rs.320.41 crore as Special Appropriation in the tariff for repayment of Govt. loan.
227. The Commission disallows the claim of Rs.320.41 crore of State Govt. loan on the following ground:-
- (a) 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”.

228. 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.”

229. 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. Accordingly, Commission did not consider the effect of up-valuation such as depreciation, return on equity and interest on State Govt. loan and Bond in determining the ARR for FY 2012-13. Now that year is over. The Commission again in their letter vide No.JD(FN)-175/2002/4617 dated 28.12.2012 requested the Govt. to continue the same concession for FY 2013-14 and onwards so that the effect of upvaluation is not factored while determining the ARR for 2013-14. Reply from the State Govt. on this issue is awaited. However, the Commission in the said letter mentioned that pending receipt of reply /notification from Govt., Commission could assume the extension of benefits notified by the Govt. on 29.1.2003 and 6.5.2003 shall continue in the sector as a whole turns around.

In view of the above observations the repayment of Govt. of Odisha loan proposed by GRIDCO is disallowed.

NTPC Special Bond

230. During FY 2013-14, GRIDCO claimed the outstanding principal repayment dues of 441.15 crore upto 31.3.2013 and Rs.110.29 crore for the FY 2013-14 totaling to Rs.551.44 crore as a passed through the revenue requirement for FY 2013-14.
231. 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 – 54

(Rs. Cr.)

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

232. As seen from the above table during FY 2013-14, Commission had approved an amount of Rs.118.29 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.118.29 cr. of loan repayment towards special appropriation as a part of amortization of regulatory assets as against an amount of Rs.551.44 cr. claimed by the licensee.
233. GRIDCO proposed an amount of 32.63 cr. towards repayment of pension trust bond as a pass through in the revenue requirement of 2013-14 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.

Bank Loan

234. Under this head GRIDCO propose an amount of Rs.864.03 crore towards repayment of Bank loan borrowed from the year 2008-09 to 2011-12.
235. As per the submission of GRIDCO, the actual aggregate revenue gap from 2008-09 to 2011-12 becomes Rs.4002.02 crore as against the approval gap of Rs.2845.10 crore

during 2008-09 to 2011-12. After considering the year-end adjustment charge, the gap is increased to Rs.5062.12 crore. The details are depicted in table below:-

Table –55

(Rs. Cr.)

Financial Year	OERC approved Gap	Actual Gap in P&L A/C	Repayment of loan	Year end adjustment	Total (3-4-5)
1	2	3	4	5	6
2008-09	(-)410.05	98.14	374.26	163.94	-440.06
2009-10	(-)882.85	(-)1560.84	205.06	164.22	-1930.12
2010-11	(-)806.15	(-)487.93	328.15	297.01	-1113.09
2011-12	(-)746.05	(-)762.12	382.40	434.33	-1578.85
Total	(-)2845.10	(-) 2712.75	1289.87	1059.50	-5062.12

236. The cash deficit arising from Non-recovery of costs till FY 2011-12 has been managed by GRIDCO under the following heads.

Sources of Funding

Amount

Loan availed	4017.87 Crore
Realisation from 400 Cr. NTPC Bond	50.00 Crore
Deferment of Interest on GoO Bond (NTPC)	217.13 Crore
Deferment of Interest on Govt. loan	289.08 Crore
Deferment of Power Purchase dues (CGPs) etc.	461.84 Crore
Deferred Guarantee Fees	26.70 Crore

5062.12 Crore
=====

As already stated above, GRIDCO availed Rs.4017.87 crore term loans to meet the revenue gap. The petitioner requests that the principal repayment obligation of the loan amounting Rs.864.03 crore may be considered in BSP for 2013-14 towards special appropriation.

237. The Commission took note of the submission made by the licensee. As discussed in the para above the Commission recognized the borrowings by GRIDCO from different banks starting from the year 2008-09 onwards. Hence, the Commission in principle recognizes the repayment schedule as mentioned in TRF-3 towards special appropriation through amortization of regulatory assets as approved by the Commission in Truing up Order. Under this repayment head
238. GRIDCO proposed an amount of Rs.864.03 crore to be recovered through special appropriation. Commission after scrutiny of the figures approves an amount of Rs.591.38 crores as a repayment of bank loan excluding the CPA adjustment and the Secured Overdraft for an amount of Rs.162.77 crore and 245.00 crore respectively. Regarding CPA adjustment the reason for disallowing the principal as well as interest payment has been mentioned in above para. Finally a table showing amount proposed towards special appropriation by GRIDCO and approved by the Commission is given in the table below:

Table -56
Amount proposed and approved for Special Appropriation in the
ARR & BSP for FY 2013-14

	(Rs. Cr.)	
	Proposed	Approved
State Govt. Loans including CPA Adjustment	320.41	-
NTPC-GoO Special Bonds (Rs.1102.87 Cr.)	551.44	118.29
Pension Trust Bond	32.63	-
Bank Loans including & SOD	864.03	591.38
Total	1768.51	709.67

239. The Commission in para above have determined the regulatory assets for an amount of Rs.3061.94 Crore on the basis of truing up exercise undertaken upto the FY 2011-12 based on the audited accounts. Out of this above amount already Commission have amortized Rs.1019.51 crore in the last tariff order. Therefore the remaining balance to be amortized works out to Rs.2042.43 crore. From the above amount Commission allow amortization to the extent of Rs.709.67 crore leaving a balance of Rs.1332.76 crore to be amortized in future years. This amount of Rs.709.67 crore shall be utilized for repayment of principal during the year 2013-14.
240. The repayment liability of the State Govt. loan as well as Bank loan put a huge burden on the Bulk Supply Price of DISCOMs. The Commission feels that in order to keep the BSP at a reasonable level, the repayment liability should not be considered as pass through in the ARR of GRIDCO so that the revenue requirement of GRIDCO is kept at minimum and DISCOMs will have the benefit of the lower BSP. In this context it is necessary to analyse in depth the generation potential of OHPC and its commercial implication. A large number of objectors have pointed out that by proper planning with regard to storage of water in the reservoir and having satisfied the need for flood control and irrigation in the normal monsoon year OHPC can generate much more than its design energy. We have already provided for generation of 5881 MU and any generation beyond the design energy available to GRIDCO can be traded with profit and this amount can be made available for repayment of loan. In the current year Tariff Hearing OHPC submitted that GoO directed them to restrict generation. The Commission is, therefore, of the view that lesser generation from OHPC is not so much due to monsoon failure but because of administrative Order issued by GoO from time to time. In the present context the Commission would like to advise the Govt. to revisit its earlier assumption with regard to storage capacity for flood control and irrigation. The Commission is of the view that by proper planning and redesigning of priorities, power generation of OHPC can go beyond the design energy without sacrificing obligation towards flood control and irrigation. The Commission feels that a proper day to day planning and co-ordination with different purchaser within and outside the State, GRIDCO on conservative estimate will be able to trade about 2216.41 MU (CGPs - 1092.04 MU, IPPs – 785.60 MU and FSTPS-III – 338.77 MU) of power and generate a substantial amount of revenue, which can be utilised for repayment of principal loan liabilities.
241. In view of this Commission decides the following measures to be taken by GRIDCO:-
- a) A separate head may be created under GRIDCO account where the revenue from trading of surplus power above design energy of OHPC, UI Charges and

other miscellaneous receipts, shall be shown as receipts for repayment of principal. Since GRIDCO is fully owned Govt. of Odisha undertaking the State Govt. shall monitor and ensure that the money kept under this separate head is utilised only for repayment of loan.

- b) In case the earmarked fund receipts as mentioned above is not sufficient to meet the repayment obligation of principal amount of loan, the State Govt. may make budget provision for the differential amount and pay the same to Banks/Financial Institutions through GRIDCO.
- c) For the time being repayment of the principal amount along with interest on State Govt. loans and Bonds may be deferred till the financial health of GRIDCO becomes sound.

Hence, in view of the above decision of the Commission, the repayment liability recognised by the Commission through amortisation of Regulatory Asset as stated in the Para above has not been considered as a pass through in the revenue requirement for the year 2013-14.

- 242. Based on normative parameters for most generating stations and GRIDCO projection for CGP, Co-generation and IPP power, the total availability is estimated at 26274.83 MU. After deducting the estimated state requirement of 24058.42 MU, there is a surplus of 2216.41 MU which GRIDCO can trade. The quantum of surplus may be more if drawal from State Hydro, CGPs, Co-generation plants and IPPs is maximized.
- 243. 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. 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. GRIDCO through SLDC, may have close interaction with OHPC generating stations for backing down their generation to minimum technical limit, at time of Grid Frequency of 49.96 Hz or above and maximize generation at 49.50 Hz or below. GRIDCO may daily analyze the state hydro generation Vs. Grid Frequency at every 15 minutes interval and advise course correction to the generators, if necessary.

Return on Equity

- 244. GRIDCO proposes Rs.67.11 crore towards Return on Equity (RoE) @ 15.50% on its Equity Capital of Rs.432.98 Crore in line with National Tariff Policy and OERC Tariff Regulations. In this regard the Commission would like to observe that GRIDCO is not entitled to get Return on Equity as per the reasons discussed in para 209 to 211 above.

Other Income/ Miscellaneous Receipts

- 245. During the FY 2013-14 GRIDCO expects to earn an amount of Rs.69.00 crore (at existing approved tariff) from proposed emergency sell of 100 MU to long term customers like NALCO & IMFA as per the MOU signed with these entities. The

Commission in this retail tariff order for FY 2013-14 has fixed the rate of 690 P/U for emergency power to long term customers like NALCO , NTPC at a proposed sale of 100 MU. Accordingly, the total earnings of GRIDCO on this account work out to Rs.66.50 crore after deducting Transmission tariff of 25 P/U. The Commission approves the same for the FY 2013-14.

Receivables from DISCOMs and Others

246. **Securitized Dues:** GRIDCO in its filing submitted that the DISCOMs have defaulted payment of Rs.1248.34 crore towards securitized dues as per the direction of the Commission vide order dated 01.12.2008. The DISCOMs wise default is given below:-

Table -57

Particulars	Securitized Dues payable by 31.3.2012	Amount paid & Adjusted by 31.3.2012	Outstanding as on 31.3.2012
WESCO	253.25	122.56	130.69
NESCO	275.63	142.42	133.21
SOUTHCO	179.10	31.83	147.27
CESU	1009.34	172.17	837.17
TOTAL	1717.32	468.98	1248.34

247. GRIDCO requested the Commission to direct DISCOMs for making regular payment of the securitised 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 instalments starting from financial year 2006-07 and ending in 2015-16.
248. 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 - 58

**Dues as per OERC Order Dt. 01-12-2008 and Actual Payment upto 31-03-2011
(Rs. Cr.)**

Sl 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						

SI No	Particulars	WESCO	NESCO	SOUTHCO	REL Total	CESU	Grand Total
	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
5	Average per month	3.52	3.83	2.49	9.84	14.02	23.86
6	Due from 2006-07 to 2010-11 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
	2009-10	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
	2011-12	42.24	45.96	29.88	118.08	168.24	286.32
	Total	253.44	275.76	179.28	708.48	1009.44	1717.92
7	Due from 2006-07 to 2010-11 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
	2009-10	-	-	19.00	19.00	151.00	170.00
	2010-11	-	-	-	-	-	-
	2011-12	-	-	-	-	-	-
	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

Sl No	Particulars	WESCO	NESCO	SOUTHCO	REL Total	CESU	Grand Total
9	Short fall (6-8 C) as per securitisation order	121.90	124.72	143.13	389.75	803.10	1192.85
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

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

249. **400 Crore Bond dues:** GRIDCO submitted that DISCOMs have failed to honour the order of the OERC dated 29.3.2012 in paying the monthly installment of Rs.10 crores. On this account there is an overdue of Rs.60 crore till end of November, 2012 excluding penal interest.

In this context Commission again wrote letters to WESCO, NESCO & SOUTHCO on 16.1.2013 for compliance of the direction of the Commission mentioned in the order dated 29.3.1012 so that the entire amount of the settled Bond value is liquidated by the end of 2012-13. GRIDCO is also directed to comply with the orders of the Commission dated 29.3.2012 in Case No.107/2011 (Para 14(iv)). The extract of the said order is reproduced below:-

“Out of the assets hypothecated to GRIDCO on account of NTPC Bond, GRIDCO may retain hypothecated assets limiting to Rs.250 crore and balance hypothecated assets may be released before 31.5.2012 in order to enable NESCO, WESCO & SOUTHCO to approach the financial institutions for loan.”

250. **Year End Adjustment Bill etc.:** 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.988.83 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.

Receivable from other States and Govt. Departments

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

Table -59

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

252. 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.

253. **Non Payment of BSP Dues by DISCOMs:** GRIDCO submitted that DISCOMs have now-a-days started defaulting in payment of current BSP bill in addition to their failure to pay the outstanding BSP dues (Securitized dues). Because of the default on the part of DISCOMs the revenue gap of GRIDCO has widened further and no commercial bank is going to give loan to loss making sector like GRIDCO. Therefore, GRIDCO prays the Commission to prevail upon the DISCOMs for making the regular payment of the BSP dues. The outstanding dues of DISCOMs payable to GRIDCO are given below in a tabular form.

Table -60
Outstanding Dues of DISCOMs for FY 2011-12 & FY 2012-13
(Rs. Crore)

DISCOMs	BSP Dues		UI Dues
	FY 2011-12	FY 2012-13	
WESCO	238.86	223.1	60.98
NESCO	89.05	167.01	31.77
SOUTHCO	31.3	0.00	13.36
CESU	75.12	0.00	40.77
Total	434.33	390.11	146.88

254. The Commission directs the DISCOMs to pay the current BSP bill in full by renewing the Letter of Credit (LC) in favour of GRIDCO.

The summary of the ARR of GRIDCO approved for the FY 2013-14 is given below:

Table – 61
Revenue Requirement of GRIDCO for FY 2013-14
(Rs. Cr.)

A	Expenditure	2012-13	2013-14	
		Approved	Proposed	Approved
	Cost of Power Purchase	5691.02	6837.67	5509.51
	Employee costs	4.29	5.22	4.99
	Repair & Maintenance	0.10	0.50	0.20
	Administrative and General Expenses	3.73	3.77	3.36
	Depreciation	-	0.35	0.35
	Other expenses (ERLDC Charges)	1.32	-	-
	Interest Chargeable to Revenue (including guarantee commission)	414.49	580.17	494.11
	Sub-Total	6114.95	7427.68	6012.52
	Less: Expenses capitalized		-	-
	Total expenses (Total of A)	6114.95	7427.68	6012.52
B	Special appropriation			
	Carry forward of Previous Losses	597.73	-	-

		2012-13	2013-14	
A	Expenditure	Approved	Proposed	Approved
	through amortization of regulatory assets			
	Repayment of principal for the loan & payment towards Central Plan Assistance (CPA) adjustment	-	1768.51	-
	Arrear payment of OPGC	109.48	-	-
	Arrear payment of OHPC	2.19	-	-
	Power Purchase related cost of TTPS (NTPC)	-	227.62	98.70
	Outstanding Govt. Guarantee Commission	-	34.34	-
	Excess payment made towards FPA for NTPC Station	107.03	59.53	59.53
	Arrear payment on Teesta Power	79.85	-	-
	Reimbursement to OHPC	8.41	-	8.10
	Total of B	904.69	321.49	166.33
C	Return on Equity	-	67.11	-
	TOTAL (A+B+C)	7019.64	9584.79	6178.85
D	Less Miscellaneous Receipt	69.00	69.00	66.50
E	Less receivable from DISCOMs			-
F	Less receivable from outside States			-
G	Total Revenue Requirement	6950.64	9515.79	6112.35
H	Expected Revenue (Full year) from DISCOMs	6250.06 (at the approved BSP for 2012-13)	6802.99 (at the existing BSP for 2012-13)	6113.92
I	GAP (+/-)	(-)700.58	(-)2712.80	(+) 1.57

Escrow Mechanism for DISCOMs

255. The Commission in the RST order for FY 2013-14 have elaborated the prioritisation for release of funds by GRIDCO from Escrow Account to the DISCOMs. The relevant extract of the said order on Escrow Relaxation is reproduced below.

“With the above stipulation as indicated in above paras, keeping in view the statutory requirement to protect the interest of the consumers and the need for adequate attention to refurbish the fragile network of the DISCOMs, the Commission, has therefore, decided that w.e.f. 1.4.2013 release of fund from the Escrow account by GRIDCO would be regulated as indicated as below:-

Escrow Relaxation

(A) From Current Revenue

- (a) Current BST dues, current Transmission charges, SLDC charges and license fees payable by the Distribution Companies to OERC, the energy bill of DISCOMs in respect of direct power purchase from CGPs or other agencies, if any and any other charges approved by the Commission from time to time.

- (b) *Monthly R&M expenditure excluding special R&M as approved by the Commission in the tariff order from FY 2013-14 onwards.*
- (c) *Monthly Employees cost as approved by the Commission in the tariff order from FY 2013-14 onwards.*
- (d) *The monthly obligation for repayment of principal and interest in respect of loan obtained/ to be obtained from the financial institutions for capex programme/system improvement.*
- (e) *Monthly special R&M expenditure as approved by the Commission in the tariff order from FY 2013-14 onwards.*
- (f) *Average monthly obligation of the defaulted arrear BST of the previous years, if any.*

The balance amount towards arrear of BSP dues worked out upto 31.3.2005 as approved in the securitization order of the Commission dated 01.12.2008.

(B) From Arrear Revenue

The collection to be made out of the arrear outstanding as on 01.4.2013, beginning of the relevant financial year would be utilised in order of priority as indicated below:-

- (i) *15% of the monthly arrear collection would be utilised towards payment of the balance arrear revised salary and pension liabilities worked out up to 31.3.2009 in respect of the retired and serving employees in that order.*
- (ii) *Out of the arrear to be collected through different modes including under OTS, 15% would be utilized to clear the arrear dues of employees, 15% for repair and renovation of distribution network and the balance 70% would be utilized towards payment of the outstanding NTPC dues. After NTPC dues have been cleared the aforesaid 70% of the arrear collection would be adjusted against the outstanding securitized dues.*

(C) GRIDCO and the Distribution companies are also bound to follow the following guidelines:-

- (i) *GRIDCO is to strictly adhere to the above prioritization of the operation of Escrow account and in case GRIDCO makes any relaxation thereof, any financial cost on account of this will be entirely charged to the account of GRIDCO and cannot be allowed as pass through in the ARR.*
- (ii) *GRIDCO is to relax escrow towards repair and maintenance in each month to DISCOMs proportionately based on the figures approved in the ARR of the respective financial year, considering the revenue deposited in escrow and the LC limit allowed by the banks to DISCOMs taken together. If the DISCOMs fail to draw the amount earmarked towards R&M for a quarter at the end of next quarter, the claim of DISCOMs will automatically lapse and the unutilized amount shall not be carried over to next period.*

- (iii) *WESCO, NESCO and SOUTHCO should open letter of credit in the form prescribed by the bank and communicate the same to GRIDCO. This is also applicable to CESU if not already done.*
- (iv) *In each month WESCO, NESCO, SOUTHCO and CESU should give the following statements to GRIDCO:*
 - a. *Amount of revenue collected*
 - b. *Amount deposited in escrow account*
 - c. *Amount paid to GRIDCO, OPTCL, SLDC*
 - d. *Amount drawn towards R&M cost, Employees cost, Spl R&M*
 - e. *Amount diverted from SOD account.*
 - f. *Statement of arrear collection out of the amount outstanding at the beginning of the year and deposited in escrow account.”*

Design for Bulk Supply Pricing Philosophy

256. 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 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 Vidhyut Yojana (RGGVY) and Biju Gramya Jyoti Yojana (BGJY).
257. However, in EHT & HT 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. Therefore, while HT & EHT sales in WESCO & NESCO are 51.7% & 48.1% respectively, in case of CESU & SOUTHCO it is 43.9% & 26.7% respectively.
258. 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.
259. 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.
260. 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.

261. 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.
262. 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.
263. 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.
264. 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.

Demand Charges

265. Like the ARR approval of GRIDCO for FY 2012-13, there shall not be any levy of separate maximum demand charges upto the permitted SMD for the distribution

companies for the FY 2013-14. 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

266. GRIDCO has proposed energy charge @ 378.74 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.
267. The Commission has determined the revenue requirement of DISCOMs for FY 2013-14 considering the approved BSP. The revenue gaps of the four DISCOMs for the FY 2013-14 considering the approved BSP are given below:

CESU	-	(+) 29.12
NESCO	-	(-) 15.22
WESCO	-	(+) 2.69
SOUTHCO	-	(+) 18.71

The surplus revenue likely to be earned by CESU, WESCO and SOUTHCO should be treated towards liquidation of past power purchase dues of GRIDCO. In case of NESCO since they have been left with negative gap of Rs.15.22 crore this would be treated as Regulatory Asset.

268. 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 – 62
Bulk Supply Price and Quantum of Energy for FY 2013-14

Name of the DISCOMs	Quantum of Energy for FY 2013-14 (MU)	Total Revenue for FY 2013-14 (Rs. Crore)	Bulk Supply Price for FY 2013-14 (P/U)	Existing Bulk Supply Price i.e. approved for the FY 2012-13 (P/U)
CESU	7937.00	2055.68	259.00	261.00
NESCO	5269.00	1528.01	290.00	301.00
WESCO	6655.00	1956.57	294.00	300.00
SOUTHCO	3187.00	573.66	180.00	182.00
Total	23048.00	6113.92	265.27	270.74

269. As against GRIDCO's total net revenue requirement of Rs.6112.35 crore after adjustment of miscellaneous receipts of Rs.66.50 crore, it will recover Rs.6113.92 crore through energy charge for the year 2013-14 from DISCOMs.

270. The above approved revenue has to be realized by GRIDCO from the DISCOMs through escrow mechanism indicated earlier. In case of any default in monthly BSP dues by the DISCOMs, they are liable for imposition of power regulations. It is directed that GRIDCO should resort power regulation to the DISCOMs to the extent of non-payment of monthly BSP dues.
271. Consequent upon the reform of the power sector in 1996, the assets of GRIDCO and OHPC were revalued and handed over to these entities. As a result there was substantial increase in provision towards depreciation, interest on State Govt. loans/Bonds and Return on Equity which has a direct bearing on Retail tariff. Based on the recommendation of Kanungo Committee, the State Govt. vide Notification No.1068/E dated 29.1.2003 kept the up-valuation of asset in abeyance since financial year 2005-06 or till sector turns around whichever is earlier. Due to various reasons, the power sector has not turned around yet. Accordingly, as per the recommendation of OERC, the State Govt. extended the benefit till the financial year 2010-11, vide Govt. Notification No.R&R-I-15/2009/81 dated 06.1.2010. **Further, in response to Commission's letter No.4440 dated 19.7.2010, the Energy Department, Govt. of Odisha vide their letter No.R&R-1-9/2010/2404 dated 21.3.2011, extended the support till financial year 2012-13 and stated that a review should be made by the State Govt. and on that basis a view could be taken on the need for further extension of these measure.**
272. The Commission is therefore, of the opinion that the policy decision of the State Govt. in the matter as stated above has a substantial bearing on Retail Supply Tariff. Accordingly, Commission in letter vide No.JD(FIN)/175/02/4617 dated 28.12.2012 recommended the Govt. of Odisha to extend the same concession for FY 2013-14 and onwards so that effect of up-valuation is not considered while determining the tariff for the ensuing year.
273. The State Govt. is yet to give reply to this letter of the Commission. Pending any reply from the State Govt. the Commission assumes the extension of benefit for FY 2013-14 and onwards at least upto the end of 12th Plan Period i.e. upto FY 2016-17.

Charges for Overdrawl of Energy

274. 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 2013-14 (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.
275. 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 2013-14 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 UI rate applicable to Inter-state ABT.

Rebate

276. 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

277. 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

278. 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

279. 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 Intra-State ABT(Phase-I) is in operation since 01.04.2012. The Intra-State ABT (Phase-II) including Generators & Captive & Co-generation plants will be implemented shortly.
280. The Bulk Supply Price in respect of GRIDCO as indicated in Para- 268 will become effective from 1st April, 2013 and shall continue until further orders.
281. The application of GRIDCO in Case No. 101/2012 is disposed of accordingly.

(S. P. SWAIN)
MEMBER

(B. K. MISRA)
MEMBER

(S.P. NANDA)
CHAIRPERSON