

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

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**Present : Shri S. P. Nanda, Chairperson
Shri S. P. Swain, Member
Shri A. K. Das, Member**

Case No. 68/2014

Date of Hearing : 10.02.2015

Date of Order : 23.03.2015

IN THE MATTER OF : Application for approval of Aggregate Revenue Requirement and determination of Bulk Supply Price of GRIDCO under Section 86(1) (A) & (b) and other applicable provisions of the Electricity Act, 2003 read with OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004 and OERC (Conduct of Business) Regulations, 2004 for the year 2015-16.

AND

IN THE MATTER OF : Further proceeding on remand as per judgment dated 02.09.2014 in Appeal No. 29 of 2009 of the Hon'ble APTEL for determination of differential BSP as per the methodology given in the said order within six months from the date of the communication of their above judgment.

ORDER

Section 86(1) (b) of the Electricity Act, 2003 requires the Commission to determine the procurement price structure for distribution companies operating in the state of Odisha. Under the existing Bulk Supply Agreements with GRIDCO, the Distribution Utilities (hereinafter called as DISCOMs) are under obligation to purchase power solely from GRIDCO Ltd. In determining the procurement price, the Commission has to hear not only the buyers (DISCOMs) but also the seller (GRIDCO Ltd.). No meaningful hearing of GRIDCO is possible unless GRIDCO files its Aggregate Revenue Requirement and expected revenue. GRIDCO Ltd. has done so. The Commission has taken the filing of GRIDCO Ltd. into consideration even though GRIDCO Ltd. as a deemed trading licensee

under the 5th Proviso to Section 14 of the Electricity Act, 2003 (hereinafter referred to as “the Act”) is outside the purview of Section 62 of the said Act. The prices at which GRIDCO Ltd. 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 Ltd. would supply power has to be determined by reference to the Aggregate Revenue Requirement (ARR) of GRIDCO Ltd. Hence GRIDCO Ltd. was called upon to file its Aggregate Revenue Requirement (ARR) for ensuing Financial Year i.e for FY 2015-16.

PROCEDURAL HISTORY (Para 2 to 8)

2. The Commission directed GRIDCO Ltd. to publish its Aggregate Revenue Requirement (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.orienc.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 Ltd.’s website. The Commission directed GRIDCO Ltd. to file its rejoinder to the objections filed by the various objectors before the Commission and to serve copy to them.
3. The Commission had also published a paper as a part of further proceeding on remand consequent upon the judgment dated 02.09.2014 in Appeal No. 29 of 2009 of the Hon’ble APTEL for determination of differential BSP according to the methodology given in the said judgment.
4. In response to the aforesaid public notice in respect to the Aggregate Revenue Requirement (ARR) and BSP application of the GRIDCO Ltd. for FY 2015-16, the Commission received 11 nos. of objections/ suggestions from the following persons/ associations/ institutions/ distribution utilities: -

Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012 (2) M/s. Sesa Sterlite

Limited, 1st Floor, Fortune Tower, Chandrasekharpur, Bhubaneswar-751023. (3) Sri M.V. Rao, Resident Manager, M/s Ferro Alloys Corporation Limited, (FACOR), GD-2/10, Chandra Sekhar Pur, Bhubaneswar-751023 (4) Shri Akshya Kumar Sahani, Retd. Electrical Inspector, GoO, B/L-108, VSS Nagar, Bhubaneswar (5) M/s. Swain & Sons Power Tech Pvt. Ltd., Swati Villa, Surya Vihar, Link Road, Cuttack-753012. (6) Sri G.N. Agrawal, Convenor-cum-Gen. Secy., Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetraipur, Sambalpur-768003 (7) Shri R.P. Mahapatra, Retd. Chief Engineer & Member (Gen., OSEB, Plot No.775(Pt.), Lane-3, Jayadev Vihar, Bhubaneswar-751013 (8) M/s. Utkal Chamber of Commerce & Industry Ltd. (UCCI), N-6, IRC Village, Nayapalli, Bhubaneswar-751015 (9) Shri Prashanta Kumar Das, President, State Public Interest Protection Council, 204, Sunamoni Appartments, Telenga Bazar, Cuttack-753009. (10) Shri A K Bohra, Chief Executive Officer (Comm), NESCO, WESCO & SOUTHCO, Regd. Office- Plot No. N-1/22, IRC Village, Nayapalli, Bhubaneswar-15 (11) Shri Alekh Chandra Mallick, S/o. Sri Harekrushna Mallick, VR-13, Unit-6, Bhubaneswar, Khurda. The applicant submitted its reply to issues raised by the various objectors.

5. In exercise of the power conferred under S.94(3) of the Electricity Act, 2003 and in order to protect the interest of the consumers of Odisha, the Commission appointed World Institute of Sustainable Energy (WISE), Pune, as Consumer Counsel for objective analysis of the licensee's Aggregate Revenue Requirement (ARR) and Bulk Supply Price proposal for FY 2015-16. The Consumer Counsel presented its views on the matter in the hearing.
6. The date for hearing was fixed as 10.02.2015 at 3.30 PM and it was duly notified in 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. The Commission also decided to hear the matter on remand in Appeal No. 29 of 2009 dated 02.09.2014 of the Hon'ble APTEL analogously with the application of

GRIDCO for fixation of ARR and Bulk Supply Price basing on the paper already published.

7. In its consultative process, the Commission conducted a public hearing at its premises on 10.02.2015 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 Ch. Satpathy, Secretary, National Institute of Indian Labour, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012 (2) M/s. Sesa Sterlite Limited, 1st Floor, Fortune Tower, Chandrasekharpur, Bhubaneswar-751023. (3) Sri M.V. Rao, Resident Manager, M/s Ferro Alloys Corporation Limited, (FACOR), GD-2/10, Chandrasekharpur, Bhubaneswar-751023 (4) Shri Akshya Kumar Sahani, Retd. Electrical Inspector,GoO, B/L-108, VSS Nagar, Bhubaneswar (5) M/s. Swain & Sons Power Tech Pvt. Ltd., Swati Villa, Surya Vihar, Link Road, Cuttack-753012. (6) Sri G.N. Agrawal, Convener-cum-Gen. Secy., Sambalpur District Consumers Federation, Balaji Mandir Bhawan, Khetrajpur, Sambalpur-768003 (7) Shri R. P. Mahapatra, Retd. Chief Engineer & Member (Gen., OSEB, Plot No.775(Pt.), Lane-3, Jayadev Vihar, Bhubaneswar-751013 (8) M/s. Utkal Chamber of Commerce & Industry Ltd. (UCCI), N-6, IRC Village, Nayapalli, Bhubaneswar-751015 (9) Shri Prashanta Kumar Das, President, State Public Interest Protection Council, 204, Sunamoni Apartments, Telenga Bazar, Cuttack-753009. (10) Shri A K Bohra, Chief Executive Officer (Comm), NESCO, WESCO & SOUTHCO, Regd. Office- Plot No. N-1/22, IRC Village, Nayapalli, Bhubaneswar-15.(11) Shri Alekh Chandra Mallick, S/o.Sri Harekrushna Mallick, VR-13, Unit-6, Bhubaneswar, Khurda. Nobody was present on behalf of Shri Prasanta Kumar Das, President, State Public Interest Protection Council, 204, Sunamoni Apartments, Telenga Bazar, Cuttack-753009 but its written objection/suggestion which was filed in the above case was taken in to consideration by the Commission.

8. The Commission convened the State Advisory Committee (SAC) meeting on 25.02.2015 at 3.30PM in the Conference Hall of the OERC on Bulk Supply Price

proposal of the licensee for FY 2015-16. 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 & BULK SUPPLY PRICE (BSP) FOR THE
FY 2015-16 (Para 9 to 24)**

9. According to the applicant GRIDCO Limited (hereinafter called as GRIDCO) is a Deemed Trading Licensee under the 5th Proviso to Section 14 of the Electricity Act, 2003 and carries out the business of Bulk Supply of electricity to the four Electricity Supply Utility Companies (hereinafter called as 'DISCOMs') by utilizing the transmission network of OPTCL, the State Transmission Utility (STU) and others. GRIDCO continues to procure power from various generators located inside Odisha and the State share from central generator for supply the same to DISCOMs. GRIDCO also supplies emergency power to the 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 from time to time and other related Regulations and as per Section 86 (1) (a) & (b) and other applicable provisions of the Electricity Act, 2003, GRIDCO is required to submit its Annual Revenue Requirement (ARR) and Bulk Supply Price (BSP) proposal to the Commission for approval, before 30th November of each year for the ensuing year. Accordingly, GRIDCO has filed an application for approval of its proposed Annual Revenue Requirement and revision of Bulk Supply Price for the FY 2015-16 to enable it to

carry out its functions of bulk supply to DISCOMs and emergency supply to CGPs.

Projection of Demand and Energy

10. The Simultaneous Maximum Demand (SMD) of DISCOMs for the FY 2015-16 has been projected at 4447 MVA per month and energy requirement has been projected as 26156 MU for consumption of DISCOMs for FY 2015-16. GRIDCO has also projected emergency power drawl by CGPs (NALCO & IMFA) as 10 MU for the same period.

Power Procurement Projected by GRIDCO

11. The proposed energy available to GRIDCO is 29304.60 MU. The estimated surplus energy of about 2119.14 MU is proposed to be utilised for power trading.

**Table – 1
Demand and Energy Projection for FY 2015-16**

ITEMS	Projection for FY 2015-16
SMD for DISCOMs (MVA per month)	4447.00
Energy Demand of DISCOMs (MU)	26156.00
Emergency Power to CGPs (MU)	10.00
Transmission Loss @ 3.75% in OPTCL system (MU)	1019.45
Total Energy Required to be Purchased (MU)	27185.45
Total Energy Availability (MU)	29304.60
Surplus energy (MU)	2119.14

Power Purchase Cost Projected for 2015-16

12. The detailed cost of power purchase as furnished by GRIDCO for FY 2015-16 is reproduced hereunder in Table below.

**Table – 2
Summary of Proposed Power Procurement Cost during FY 2015-16**

Stations	Availability (After Transformation Loss and Auxiliary Consumption deduction) (MU)	Rate (P/U)	Total Cost (Rs. Cr.)	Approved rate for FY 2014-15 (P/U)
HHEP	662.54	131.93	87.41	
CHEP	297.00	79.80	23.70	
Rengali	693.00	82.48	57.16	
Upper Kolab	825.66	51.15	42.23	
Balimela	1172.16	89.61	105.03	

Stations	Availability (After Transformation Loss and Auxiliary Consumption deduction) (MU)	Rate (P/U)	Total Cost (Rs. Cr.)	Approved rate for FY 2014-15 (P/U)
OHPC(Old)	3650.36	86.44	315.53	84.39
Indravati	2026.53	78.43	158.95	80.42
Sub-Total OHPC	5676.89	83.58	474.48	
Machhkund	262.50	33.86	8.89	41.68
Total State Hydro	5939.39	81.38	483.36	81.17
OPGC	2838.35	210.84	598.44	212.24
TTPS	3177.25	290.07	921.61	198.14
Small Hydro	320.00	368.00	117.76	368.00
Biomass Energy (Shalivahan)	100.00	532.00	53.20	555.67
Biomass Energy (Octant)	60.00	566.00	33.96	
Solar Energy	127.00	804.25	102.14	870.30
CGPs	0.00	275.00	0.00	275.00
Co-generation Plants	1224.62	275.00	336.77	275.00
IPPs	7,053.00	214.18	1,510.59	212.46
Total State	20839.61	199.52	4157.83	181.20
TSTPS Stg.-I	2138.42	301.31	644.33	277.77
TSTPS Stg.-II	1332.44	292.34	389.53	275.89
FSTPS- I & II	1470.92	485.09	713.54	457.65
FSTPS- III	566.02	557.97	315.83	529.35
KhSTPS Stg.-I	838.09	456.84	382.88	424.18
KhSTPS Stg.-II	225.19	454.88	102.44	434.79
Barh STPS – I & II	975.90	663.94	647.94	
Total Central Thermal	7546.99	423.54	3196.47	365.53
Chukha	263.00	220.04	57.87	197.54
TALA	142.00	238.42	33.86	241.56
Teesta - V	513.00	302.37	155.12	265.95
Total Central Hydro	918.00	268.89	246.84	242.61
Total EREB	8464.99	406.77	3443.31	349.31
SoC & MoC charges			3.38	
Total power purchase cost	29304.60	259.50	7604.52	227.05

Pass through of arrear dues paid / to be paid during FY 2015-16

13. GRIDCO proposes to consider pass through of expenses, already incurred or to be incurred till FY 2015-16 in the ARR for the FY 2015-16. This expenses amount to Rs.1051.93 crore consisting of total arrear estimation of NTPC-TTPS till FY 2015-16 as per its filing before CERC (Rs.956.35 crore), arrear estimation of NTPC-ER thermal power stations for the period October 2013 to Sept 2014

(Rs.29.60 crore), arrear POC charges in respect of PGCIL (Rs.15.16 crore), and arrear of Teesta-V in respect of revision of AFC, FERV and tax (Rs.50.82 crore).

Special Appropriation of repayment of principal for FY 2015-16

14. GRIDCO has proposed a sum of Rs.882.06 crore on account of repayment of principal of bank loans to be recovered through tariff of the FY 2015-16. GRIDCO proposes deferment of repayment of Govt. dues of Rs.1486.32 crore also.

Interest, Financing & Other expenses

15. GRIDCO has proposed to recover Rs.505.32 crore during the FY 2015-16 towards interest on loans and financial charges, employee cost, A&G cost, R&M cost and depreciation as detailed in Table below.

Table – 3
Interest, Financing & Other expenses for FY 2014-15 (Rs. Crore)

Particulars	Amount
1. Interest & Financial Charges	493.13
2. Other Costs:	
a. Employee Cost	5.97
b. A&G Cost (including ERLDC charges)	5.50
c. Repair & Maintenance Cost	0.30
Sub-Total - Other Costs	11.77
3. Depreciation	0.42
Total (1+2+3)	505.32

Return on Equity

16. GRIDCO has proposed RoE of Rs.92.27 crore @ 16.00 % on its equity capital of Rs. 576.71 crore.

Other Income / Miscellaneous Receipts

17. GRIDCO expects to earn an amount of Rs. 6.70 crore (at existing approved tariff) from proposed sale of 10 MU emergency power to NALCO and IMFA.

Receivable from DISCOMs and other parties

18. DISCOMs have defaulted in payment of Rs.1771.96 crore towards securitized dues, Rs.625.17 crore towards Year-end-Adjustment (YEA) Bills and Rs. 1113.96 crore towards BSP bills from FY 2011-12 to FY 2014-15 (upto September 2014). Further, Rs.196.45 crore towards NTPC Bonds is due from DISCOMs.

Annual Revenue Requirement

19. The proposal for Annual Revenue Requirement of GRIDCO for FY 2015-16 is summarised in the Table below.

**Table - 4
Annual Revenue Requirement of GRIDCO for FY 2015-16**

(Rs. Crore)			
	Item	OERC approval for 2014-15	GRIDCO's Proposal for 2015-16
a)	Power Purchase Cost	5788.75	7604.52
b)	Pass through expenses and Special Appropriation	243.97	1933.99
c)	Interest, Financing and other expenses	426.81	505.32
d)	Return on Equity	-	92.27
e)	Revenue Requirement (a+b+c+d)	6459.53	10136.10
f)	(-) Misc. Receipts	6.70	6.70
g)	(-) Revenue from trading of surplus power	-	847.66
h)	Net Revenue Requirement (e-f-g)	6452.83	9281.74

Proposed Revenue Earning at Existing BSP Rates

20. GRIDCO proposes to earn revenue of Rs 6882.82 crore during FY 2015-16 from the anticipated sale of 26156 MU to DISCOMs at the existing BSP rates for 2014-15, the details of which is given in Table below.

**Table – 5
Expected Revenue for FY 2015-16 with anticipated sale to DISCOMs
at Existing BSP Rates**

	Energy (MU)	Existing BSP Rate (P/U)	Amount (Rs. Cr.)
CESU	9401	265	2491.27
NESCO	5625	280	1575.00
WESCO	7500	286	2145.00
SOUTHCO	3630	185	671.55
TOTAL	26156		6882.82

Excess / Deficit in the ARR for FY 2015-16

21. GRIDCO has proposed that it would suffer revenue deficit of Rs.2398.92 crore considering the proposed ARR and the revenue to be earned from sale of the proposed energy of 26156 MU to DISCOMs during FY 2015-16 at the existing BSP Rate for FY 2014-15, the details of which are shown in the Table below.

Table - 6
Excess / Deficit on Revenue Requirement for FY 2015-16

		(Rs. Crore)
	Item	GRIDCO's Proposal for 2015-16
a)	Total Revenue Requirement	10136.10
b)	Less: Misc. Receipts	6.70
c)	Less: Revenue from trading of surplus power	847.66
d)	Net Revenue Requirement	9281.74
e)	Revenue Receipt from DISCOMs (at existing BSP)	6882.82
f)	Excess (+) or Deficit (-)	(-) 2398.92

Summary of Tariff Filing for FY 2015-16

22. GRIDCO has prayed the Commission to approve the following for FY 2015-16 and make the same effective from 1st April, 2015.
- i) Bulk Supply Price (BSP) @ 354.86 P/U to recover net revenue requirement of Rs.9281.74 crore from DISCOMs.
 - ii) Demand charges @ Rs.250 /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 2015-16 to be recovered on monthly basis subject to final adjustment at end of the year considering the highest Power Purchases rate/ cost including the rate/s of energy drawn through U.I. / Deviation Settlement of the month plus transmission charges and transmission loss.
 - 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 BSP subject to maximum of 25% of the approved Average BSP.

- v) Rebate @2% if payment is made in full within two working days and @1% if the payment is made within thirty days of serving of the bills on DISCOMs. No rebate will be allowed for part payment of the bills as well as on non clearance of outstanding bills.
 - 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.
 - viii) To frame and approve suitable Intra-State UI / Deviation Settlement Mechanism / Rates by which GRIDCO will be in a position to recover its dues payable to the generators from the BSP Bills charged to the DISCOMs.
23. 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 2015-16. World Institute of Sustainable Energy (WISE), Pune appointed as consumer counsel put up certain queries and objections regarding ARR and BSP filing of GRIDCO. The objectors also made a number of comments/observations regarding the submission of the licensee.
24. 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 2015-16. Based on their nature and type, these objections have been categorized broadly as indicated below:

VIEWS OF THE CONSUMER COUNSEL AND OBJECTORS ON THE BULK SUPPLY PRICE PROPOSAL FOR FY 2015-16 (Para 25 to 102)

Consumer Counsel

25. 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 charges in case of TTPS, review of cost components of OPGC, review of all charges in case of Central thermal stations, review of transmission loss and transmission charges in case of Central sector projects, power procurement rates for IPPs may be reviewed, power procurement rate for co-generation may be determined, review of pass through and special appropriation, repayment of loans may be verified, interest on proposed new OHPC loan may be verified, employee cost, R&M cost, A&G cost and RoE may be reviewed, and proposed trading income of GRIDCO may be reviewed.

Views of Objectors

Legal Issues:

26. GRIDCO is deemed trader as per Electricity Act 2003. Electricity Act, National Electricity Policy, Tariff Policy do not have any provision for such an entity responsible for bulk procurement and supply to the distribution utilities. Consequently, the application for approval of annual revenue requirement (ARR) of GRIDCO is not maintainable in its current form.
27. The Commission may determine the status of GRIDCO, as the consumers of state are facing uncalled for increase in tariff due to the inept and imprudent commercial practices of GRIDCO. The Commission in its publication has designated GRIDCO as 'GoO Trading Company' and GRIDCO itself also admits that it is a 'Deemed Trading Licensee' under 5th proviso to Section 14 of EA 2003. The Commission may only allow a trading margin of 4 P/U. The cost of power procured by GRIDCO is also to be approved by the Commission, in accordance with Section 86(1)(b) of EA 2003.

28. Odisha Power Generating Corporation being the important producer of thermal power of the state ought to have come forward with their details for past production, present and future plan for proper appreciation about ground reality.

Energy Availability and Procurement

29. Power availability from OHPC may not be considered on design energy only and it should be based on actual performance of previous years with additional capacities built up. State hydro availability including Machhkund would be 7462 MU.
30. There is no reason for projection of lesser energy than design energy for Chiplima whose renovation is completed.
31. GRIDCO being a trading agency is to prevail upon OHPC for more production and to have proper up-gradation of their reservoir.
32. OPGC in many of the previous months of FY 14-15 has already maintained the PLF over 90% and therefore the same may be considered. DISCOMS have projected the availability from TTPS taking into consideration an average PLF of 90% and auxiliary consumption is fixed at 10% looking to the past trends. The distribution utilities submit that the estimated drawal from OPGC and TTPS would be 3030 MU and 3265 MU respectively.
33. GRIDCO has to produce the list of IPPs those are going to generate power during the FY 2015-16.
34. GRIDCO may be advised to 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.
35. The Commission may scrutinize the projections given by GRIDCO regarding power availability from generating stations in the state and procurement proposed by GRIDCO from high cost central sector power stations.
36. Looking into the tariff at which GRIDCO buys from NTPC, it will be always beneficial for GRIDCO to procure all available surplus power from CGP as the CGP power is not associated with any transmission loss, POC / STU transmission

charges, POC losses and other associated cost. Specified quantum of power may be fixed by the Commission to be purchased from CGPs and the tariff for the same may be approved looking onto the present cost of generation. The off take from CPPs will be in the tune of 610 MU in FY 2015-16 as per actual drawl during FY 2013-14.

37. DISCOMs submitted that considering maximum PLFs attained by the Central Sector Thermal Stations in the first part of the current year, the CGS stations will achieve average PLF of 90% in the ensuring year and the energy available from CGSs (thermal) would be 8376.27 MU.
38. GRIDCO may be advised to take action for development of solar plants in the State. The Commission may also entrust responsibility on GRIDCO for development of Energy from waste management. Govt. of Odisha may be asked to submit an action taken report on development of solar power as well as other renewable energy sources in the State so far.
39. GRIDCO should clarify whether it has availed any power from NVVNL and if so, the year wise quantum of power availed. The quantum of solar and thermal power should be segregated and only the solar portion should be considered under RPO. GRIDCO may not avail power from ACME in FY 2015-16 and therefore GRIDCO has to clarify the status of ACME SPV power plant and its schedule date of commissioning.
40. GRIDCO has not considered the shortfall in RPO for the previous years in the present ARR. GRIDCO is to submit the year wise RPO obligation and compliance status. GRIDCO is also to clarify whether it has submitted any quarterly report and annual report regarding its RPO compliance to the state designated agency OREDA.
41. GRIDCO has proposed 1224.62 MU to meet its co-generation obligation which is not acceptable in view of recent order of ATE in case no 53 of 2012 in which it was viewed that co-generation from fossil fuel is not to be considered as renewable source.

42. GRIDCO has projected the co-generation energy purchase considering it as renewable energy, which is not acceptable as per draft RPO regulations. As non-solar resource is limited, GRIDCO has to purchase non-solar REC in order to comply with the new draft RPO regulations. So, GRIDCO may be directed to recast their RPO requirement in line with draft regulations and revise the summary of energy availability accordingly.
43. GRIDCO has to aggressively procure power from non-solar sources. Unfortunately, many developers are facing difficulties in finalizing the PPA, due to insistence of GRIDCO to include / modify clauses of the PPA, contrary to the provisions in the EA 2003, regulations, orders, and directions of the Commission. Procurement of REC to meet RPO obligations is not in the interest of the state.
44. The Commission is requested to properly examine the enhancement of consumption pattern and allow realistic consumption figure of DISCOMS.
45. It is highly necessary to find out exact energy requirement of the state and how to meet it ensuring quality and quantity of power supply, requirement at the year under consideration and also long term requirement, generation and supply.
46. The DISCOMs do not agree with the projected energy availability of 29304.6 MU as proposed by GRIDCO and estimated that the total availability of power would be 32546 MU during FY 2015-16. Therefore 5360.55 MU would be surplus energy available with GRIDCO.

Power Procurement Cost

47. OHPC in its ARR application stated that it can not generate more power as per GRIDCO prediction and projects higher rates than previous year. GRIDCO has to explain the reasons for rise of OHPC tariff to the tune on almost 90% and find out the actual rate for OHPC power. The DISCOMs proposed the average tariff as 54.43 P/U for OHPC stations.
48. GRIDCO has to produce plans and proposals to purchase low cost power to reduce the bulk supply tariff. The rate of high cost power purchased during the peak period in last six years should not be included in the tariff.

49. GRIDCO should be directed to go for efficient and effective calculation to achieve the power procurement cost as low as possible so that the final cost of power to consumers should be less.
50. The Commission may scrutinize the power cost projected by the state generating stations both hydro and thermal and allow the procurement from central power stations on merit order to meet the power requirement of the state. The Commission may direct GRIDCO to purchase power from Independent and Captive Generating Plants in the state and from power exchanges under open access instead of procuring costlier power from central sector.
51. GRIDCO's projected rate for OPGC may not be accepted as OPGC has not submitted their ARR before Commission. PLF of OPGC should be increased to 90%.
52. OPGC tariff ought to be examined in further details – the cost wise break up of generating power and the difference in the rates, if any, in the price at which it is sold to other persons by OPGC.
53. The fixed cost element in OPGC tariff ought to reduce in each subsequent year due to repayment of principal loan which would offset any increase in O&M expenses in each year. The DISCOMs submitted that the truing up exercise is essential to find out the actual fixed cost paid by GRIDCO to OPGC in comparison to the fixed cost allowed in the ARR of GRIDCO in each year. The fixed cost of OPGC may be estimated for FY 2015-16 separately and that 8% escalation on O&M expenses ought to be made on the audited O&M expenses.
54. Use of imported coal in OPGC and TTPS may be maximized as the cost of power will still be less than the rate of CGP power (275 P/U) and also cheaper than other sources of thermal power.
55. The DISCOMs do not agree with the submissions made by GRIDCO for estimating the AFC of Rs.398.21 crore in respect of TTPS for the FY 2015-16. The petition for revision of fixed charges is pending and AFC as fixed by CERC for FY 2013-14 should be considered. The assumption of 20% escalation on the

- highest variable cost for TTPS during April- Sept, 2014 should not be allowed and it should be average variable cost without any escalation and also the UI charge component is on higher side and needs to be revised.
56. While infusing funds through R&M for TTPS and at the same time proposing to retire the plant is unacceptable as the plant is running with full satisfaction.
 57. The Commission should scrutinize the power procurement proposed by GRIDCO to avoid procurement of costlier energy from central sector stations as average cost of supply to the consumers will increase by 60-70 paisa of all categories of consumers taking into consideration the BSP proposed by GRIDCO, increase in transmission charges of OPTCL and the distribution losses of the DISCOMs.
 58. As per CERC Regulations, in case of shortage of coal and uncertainty in assured coal supply, the NAPAF for recovery of fix charges shall be 83%. In the working capital, the generators are allowed interest on the coal stock for 45 days for which the generators are supposed to maintain adequate stock. In the name of shortage of coal, the reduction of NAPAF from 85% to 83% is double benefit for the generators. It should be opposed by GRIDCO before CERC. In the present case, NAPAF should be taken as 85% as Govt. is taking adequate steps to ensure proper availability of coal.
 59. The Commission may direct GRIDCO to purchase cheap power available from power exchange under open access instead of procuring costly power from central sector and to follow merit order scheduling to meet power requirement of the state. To chalk out five year plan, looking at power availability from IPPs and future load demand, GRIDCO needs to explore the possibility to surrender the allocation of costly central sector power in order to avoid payment of fixed charges in the event of non-drawl. GRIDCO has appointed consultants to carry out a feasibility study for projected power demand; the report of the same may be furnished.
 60. GRIDCO in its application stated that it has made supplementary PPA for 50 MW. However GRIDCO has not submitted the rate and whether Commission has approved the same.

61. GRIDCO is purchasing power from NTPC at substantially higher cost. The price of coal in the international market has fallen by over 30% which substantially reduces cost of generation of power by 60-70%. When there is higher component of international coal in the blend, there would be a substantial drop in the variable cost of power production.
62. As per CERC norms, fuel cost is pass through; and therefore due diligence and cost control becomes paramount to ensure the interest of consumers. It is important that GRIDCO demands a month wise break-up of the quantity and price of coal procured by NTPC both domestically and internationally.
63. The DISCOMs submit that the final CERC orders are ought to be considered for arriving at the fixed costs and the energy charge rate may be determined on the basis of 10% escalation on the average ECR in the period from April 2014 to Sept 2014.
64. NTPC power from its new generating stations has reached the level of 600 P/U. The power from conventional source may not allowed if cost of generation is more than 350 P/U. Downsizing the central thermal requirement from 83% to further lower level needs to be exercised. Further, NTPC in contrary to the FSA and GoI principle is pooling the cost of coal through supply of power generated by usage of coal sources from higher cost and pass the burden on beneficiaries.
65. M/s Sesa Sterlite Limited (SSL) submitted that availability from M/s SSL plant should be considered as 5% of power sent out at the variable cost. GRIDCO can avail the power at variable cost, provided station generation of M/s SSL-IPP exceeds 80% PLF.
66. The provisional tariff of M/s SSL considered by GRIDCO for FY 15-16 is much lower than the tariff prayed for approval by them. The provisional tariff should be determined on the basis of the petition submitted by M/s SSL. Also, water cess and water transfer charges incurred by M/s SSL for bringing water to the site has to be reimbursed by GRIDCO. Further, GRIDCO has not considered the past projected arrears to M/s SSL on the account of tariff revision.

67. Bundling of solar power lost its value as the cost of bundled power is very high and GRIDCO is struggling to sell its surplus power at low price in trading market. Bundling can be done only with cheap power. GRIDCO may clarify if they have taken any initiative in this regard.
68. The trading margin to the trader in case of free power from existing small hydel plants was allowed by OERC, though GRIDCO has repeatedly brought the same to notice of OERC, which is contrary to the Govt Notification of 2005 that provides free power of 12% to the state.
69. Power from IPPs are also found to be preferable from price point of view while necessary evacuation facility is not in place to draw such power. GRIDCO should be very cautious with IPPs having linked to deliver their generation. Declarations of generation will cost more to GRIDCO as Fixed Cost is loaded to tariff, whereas actually the generating units are not able to generate its name plate capacity.

PGCIL Charges

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

Interest on Long Term Liabilities

71. Some objectors submit that no interest charges on loan amount from Govt / Banks be considered.
72. The DISCOMs do not agree with the submissions of GRIDCO on the interest cost of Rs.493.13 crore. The proposed loan may be considered only after the receipt of the same. Zero percent interest should be allowed on Govt. Loan. The Govt. have to consider for waiver of the guarantee commission to GRIDCO.

Employee Cost

73. GRIDCO has to justify whether accounts are being audited as per statutory provision of the Companies Act. The Commission should direct the management of GRIDCO to recruit adequate number of manpower as the existing staff will not

be able to handle the workload coming up in future. Otherwise GRIDCO may be allowed to outsource its activities to third party.

74. One of the objectors proposed higher compensation structure, innovative incentive schemes, and monetary benefit to the staff based on their rating in order to attract and retain talent. Employee cost may be approved at Rs 5 to 6 crore after prudence check.

A&G Expenses

75. GRIDCO has always crossed the approved A&G expenses without obtaining necessary consent from the Commission. GRIDCO should justify whether truing up exercise is being carried out each year and accounts are being audited as per statutory provision. The Commission may allow 6% increase on the approved figure of A&G expenses in the last year, which comes around Rs 4 crore.

Depreciation & R&M Expenses

76. The Commission may allow Rs 0.26 crore as depreciation and Rs 0.3 crore as R&M expenses in the ARR of GRIDCO for FY 2015-16.

Special Appropriation

77. In line with previous BSP orders, GRIDCO may earn revenue through trading and Deviation settlement and this will be utilized for repayment of the principal amount of loan. As of now DISCOMs are not having details of separate account, as directed by OERC for accounting of revenue from trading, and repayment liabilities may be only met through amortization of Regulatory Assets and hence not considered as a pass through in the ARR till the details are furnished. DISCOMs submitted that repayment of principal is a part of cash management of GRIDCO and not a part of ARR. There is no provision for the pass through of repayment of principal in the ARR. The repayment is to be met from the collection from the outstanding dues of DISCOMs and outside states. The amount equivalent to the amount required to be paid by DISCOMs to GRIDCO may be amortized in the DISCOMs ARR, which in turn will be paid to GRIDCO by DISCOMs for clearing their outstanding dues. If recovery of principal is allowed

to recover through BSP without simultaneously effecting a reduction in outstanding BST dues in the books of GRIDCO, it will imply that, in future the recovery of the BST will lead to a double payment for the same liability.

78. The shortfall of funds for repayment loan may be re-phased for a longer tenure / moratorium by GRIDCO. The interest on the rephrased loans may be allowed in the ARR of GRIDCO which is ultimately paid by the DISCOMs. The Hon'ble ATE in their several judgments has held the view that repayment of principal cannot form as a part of the ARR and ought to be dealt separately.

Past Losses and Pass through Expenses

79. Some of the objectors oppose the proposal of GRIDCO to consider past losses, securitization of arrear while approving the ARR of GRIDCO.
80. With regard to arrears payable to NTPC, GRIDCO has paid four installments even though an appeal has been filed before ATE, but adequate steps were not taken for obtaining stay. The DISCOMs suggest that as arrear payment to NTPC in respect of retrospective revision of annual fixed charges of TTPS will lead to considerable increase in tariff, GRIDCO may expedite the hearing against this CERC order before the Hon'ble ATE and await adjudication of the matter prior to its payment.
81. Arrear charges to PGCIL may be considered after proper scrutiny of the reconciliation statement between PGCIL and GRIDCO before approval.

Return on Equity

82. The DISCOMs submits that Hon'ble ATE has upheld the view of OERC that GRIDCO is not entitled to any return on equity. This order of ATE may be followed.

Trading income

83. The Commission may allocate least cost power in order of preference for the state and leave the costly power to GRIDCO for their trading activities. GRIDCO should produce year wise status report of power trading to outside state since 2008-09 till date.

84. Procuring high cost power from central sector and selling the same at a price of 400 P/U is not justified. Saving of Rs 396 crore can be possible by not selling / trading the surplus power.
85. In view of future availability of power from IPPs under construction, it is not understood why such costly power from central sector should be purchased and traded with loss of 263.94 P/U.

Revenue Gap and BST

86. 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 and also on LT industry consumers.
87. Regulations or methods for determination of differential BSP need to be spelt out by the Commission while fixing the BSP for DISCOMs as per ATE judgment.
88. Energy charges in BST for the DISCOMs should remain at par with reduction in power purchase cost, especially because CAPEX system is to work properly. The reservoir levels of OHPC stations have been improved, Chiplima is functioning well, local CGPs are committed to supply, hence no need to take much burden by purchasing high cost NTPC power.
89. Miscellaneous receipts of GRIDCO during FY 2013-14 was Rs 79.55 crore, which may be projected for the ensuing year.

Implementation of Intra-State ABT

90. The DISCOMs submitted for implementation of intra-state ABT only after inclusion of state generators including CGPs / IPPs. Till date Phase II mock mode operation has not been started by SLDC. The inclusion of all the power sector players in the intra-state ABT is highly essential to bring discipline in the system and achieve all the benefits of ABT mechanism. There may not be intra-state ABT in place till the 2nd phase being implemented.
91. SLDC helping in inter-state trading and UI gain from ER-pool to GRIDCO and hiding the quantum of day ahead inter-state trading schedule. State generators,

CGPs, IPPs are not giving realistic day ahead availability and generating without any proper dispatch schedule.

92. OERC has not amended the intra-state ABT regulation in line with UI / Deviation settlement regulations of CERC.

Over Drawl Charge and Year End Adjustment

93. GRIDCO is making additional revenue in the name of UI trading / Deviation charges at the cost of DISCOMs and general consumers. GRIDCO should have no claim on the loss / profit arising due to Deviation Charges.
94. SLDC should not calculate the UI charges payable / receivable by DISCOMs based on the Deviation Settlement Mechanism of CERC as the settlement should be carried out by SLDC based on existing OERC Intra-State ABT Regulations, 2007. Even if SLDC links the drawl of DISCOMs with ISGS drawl, then the deviation settlement charges receivable from and payable to ER pool by GRIDCO should be equally shared with DISCOMs or otherwise there will be huge commercial implications on the DISCOMs. Hence, GRIDCO should stop billing of overdrawl energy and revise the bills for previous period as directed by OERC.

Rebate

95. A rebate of 2% may be allowed to the DISCOMs for prompt payment of BSP bills on 8th of next month excluding Sundays and Holidays as per Negotiable Instrument Act from the date of presentation of the BST bills.

Escrow mechanism and surcharge

96. The present escrow mechanism does not provide any opportunity to DISCOMs in managing their cash flow. The DISCOMs prayed that escrow relaxation towards employees cost and R&M expenses may be allowed on a pari passu basis with BST bills. The requirement of servicing the counterpart loans to be raised for CAPEX should be allowed on priority basis.
97. All revenue arising from sale of power escrowed to GRIDCO, there is almost zero chance of any willful default in payment of BSP bills. The existing escrow

mechanism has an inbuilt feature of instilling commercial discipline. There is no need for introducing surcharge for delayed payment of bulk supply bills.

Other Issues

98. GRIDCO is not recovering the arrear payments from the DISCOMs and is also not regulating power supply based on the Commission's BST order for FY 2013-14.
99. GRIDCO has to produce the details outstanding against DISCOMs, different Govt. consumers and private industries till 31st Dec 2014 along with action taken report.
100. GRIDCO has to clarify why it is not releasing the assets to DISCOMs for the purpose of hypothecation. Early action from GRIDCO will help the DISCOMs to implement the CAPEX project in a time bound manner. The Commission may direct GRIDCO to explain the reason for not allowing escrow relaxation.
101. The revenue of DISCOMs are not enough to meet the urgent running expenses after payment of current monthly BST. The DISCOMs prays that a comprehensive financial restructuring plan for the sector involving all entities in the value chain be considered.
102. The DISCOMs submits that interest cost of borrowings of GRIDCO, either attributable or not to DISCOMs, have been fully allowed as pass through and DISCOMs are subjected to bear this additional burden.

GRIDCO's RESPONSE TO THE OBJECTORS (Para 103 to 154)

103. In response to the views of the objectors on GRIDCO's application for approval of the Annual Revenue Requirement and Bulk Supply Price for FY 2015-16, 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

104. In view of repeated questions being put from several quarters regarding the legal status of GRIDCO, the Commission has extensively dealt with the status of GRIDCO in the ARR & BSP Order for FY 2011-12 (Para-277 to Para-287) and that for ARR & BSP Order FY 2012-13 (Para-278 to Para-287), so that the reasoning are clearly noted by the all concerned. A close reading of Para-278 to 287 of the ARR & BSP Order for FY 2012-13 not only justifies the status of GRIDCO in Odisha Power Sector but also dispels any doubt regarding continuance of GRIDCO towards greater interest of the Odisha Power Sector. The clarifications provided in the previous two ARR & BSP Orders properly justify the legal existence and continuance of GRIDCO in the Odisha Power Sector and that its application for approval of Annual Revenue Requirement & Bulk Supply Price Application also follows due process of the Law.
105. GRIDCO's status is very much consistent with the Law but its filing of ARR & BSP Application for approval before the Commission is also tenable because of the following reasons:
- GRIDCO happens to be a Deemed Trading Licensee under 5th proviso of Section-14 of the Electricity Act, 2003. Before the enactment of The Electricity Act, 2003, GRIDCO was a "Transmission & Bulk Supply Licensee" under the Orissa Electricity Reform Act, 1995. As such, GRIDCO has entered into Long Term Power Purchase Agreements (PPAs) with the Generating Companies and also Bulk Supply Agreements (BSAs) with the DISCOMs. Under the said Agreements, GRIDCO is obliged to sell power on priority basis to the DISCOMs up to their full requirement and the DISCOMs are obliged to buy power from GRIDCO only. This arrangement is called as the "Single Buyer Model" of power procurement for DISCOMs in Odisha that prevails in the State as a matter of Historical Legacy.
 - After hiving off the Transmission function from GRIDCO to OPTCL by virtue of the Govt. of Odisha Transfer Notification No. 6892 dated

09.06.2005, only the bulk purchase of electricity for sale to DISCOMs in Odisha remained with GRIDCO. This satisfies the definition of Trading under Sec 2(71) of the Electricity Act, 2003. Besides, Bulk Supply activity by a Trader is not repugnant to any provisions under the Electricity Act, 2003. Such an activity is tenable under the Law.

- Above all, the Govt. of Odisha vide Notification No. 7948 dated 17.08.2006 have notified GRIDCO as the “State Designated Entity” for execution of Power Purchase Agreements with the Developers generating energy like Hydro Power, Wind Power, Power from Agricultural wastes etc. along with the thermal power. Therefore, the Legal Status of GRIDCO which is a State Govt. Undertaking cannot be questionable.
- The Commission is empowered under Sec.- 86(1) (a) & (b) of the Act to regulate the price for procurement of power by the DISCOMs. Thus, this provision enables the Commission to fix the regulated price for procurement of power by the DISCOMs under the existing Bulk Supply Agreement with GRIDCO. Incidentally the approval of Regulated Price of power purchase for DISCOMs happens to be the Bulk Supply Price of GRIDCO under the present arrangement and as such, the Commission is empowered to approve the ARR & BSP of GRIDCO. Hence, GRIDCO submitting its ARR & BSP Application before the Commission for approval is quite consistent and very much tenable under the law.

106. The Trading Margin of 4 Paise per Unit, which is relevant to Inter State Power Traders, is not applicable to GRIDCO as the power trading by GRIDCO is Intra-State in nature. In fact, GRIDCO’s Power Trading function is of “Intra-State in nature” has been upheld by the Hon’ble Supreme Court of India in Civil Appeal No. 5722 of 2006 (Gajendra Haldea vrs. GRIDCO & Others). Hence, the view that GRIDCO is entitled to trading margin of 4 P/U only is not correct and hence, may not be considered.

Energy Availability and Procurement

107. GRIDCO is obliged to procure the contracted power from the organizations as per the Power Purchase Agreements, Memorandum of Understanding (MOUs) and as per the allotment made from the Central Generating Stations from time to time etc. based on the methodology of Least Cost Combination of power purchase for supply of power to the DISCOMs. Considering the above, GRIDCO projected its quantum of power procurement from different sources for 2015-16 to meet the projected demand of the Long Term Customers like the DISCOMs, M/s. IMFA and M/s. NALCO including the transmission loss of 3.75% by considering the following, which are subject to the prudent check by the Commission:
- I. Projection from OHPC, OPGC & TTPS has been taken as per the generation plan submitted by them and also in line the OERC (Generation Tariff) Regulations, 2014.
 - II. Projection from Machhkund is assumed as per the allotment.
 - III. Projection from Samal and Meenakhi small HPSs has been assumed as per the PPAs.
 - IV. Projection from Central Generating Stations at 83% NAPAF has been considered based as per the present CERC Tariff Regulations, 2014.
 - V. Projection from Chukha HPS & Tala HPS has been taken by considering the trend of supply during the past years.
 - VI. Projection from Teesta HPS has been considered based on the annual saleable energy.
 - VII. Projection from the IPPs has been taken as per the PPA.
108. GRIDCO may not be in a position to answer as to why OPGC is not coming forward to submit their detailed plans and projects although it is an important producer of thermal power in the State. In fact, in the past the Commission has been directing OPGC to submit its Tariff Proposal for its approval, but to no effect.

109. GRIDCO during hearing of the CERC Tariff Regulation by the Hon'ble CERC submitted that the NAPAF may be fixed at higher level i.e. at 90%. However, the Commission finally approved the NAPAF at 83%. Similarly, GRIDCO submitted before the CERC that the benefit of interest on account of Working Capital be allowed to the Generators based on actual days of coal stock instead of blanket 45 days, but to no avail.
110. GRIDCO had a temporary allocation of 50 MW from FSTPS-III for period of 24 months from August, 2012 to September, 2014. This additional drawal was in fact resorted to deal with the then power deficit situation of the State.
111. CGPs power is not a firm source of power. While drawing power from different sources, GRIDCO is also committed to draw its share of firm power from the State and Central Sector Organizations as per the existing PPAs. It is only after maximizing the drawl from these State and Central Sector Entities that GRIDCO will try to draw power from CGPs; otherwise GRIDCO will have to bear the burden of Fixed Cost of the said entities even without drawing any power. However, this does not mean that GRIDCO will not draw power from the CGPs. GRIDCO can purchase power from captive projects based on the need and after following the Merit Order Policy of Power Procurement and subject to availability of commensurate demand along with the favourable economics justifying such procurement.
112. GRIDCO is drawing solar power bundled with thermal power from NVVNL. The Year-wise Bundled Solar Power procured by GRIDCO (15MW from NVVNL through New Projects Scheme under JNNSM, Phase-1) is given as under:

Table -7

Year	Bundled Solar Power procured (MU)
2012-13	8.1899
2013-14	20.602042
2014-15 (April' 14 to Nov' 14)	19.81835

113. As per the PPA with M/s. ACME Ltd. on 06.03.2013, the 25 MW SPV Project would be commercially operational within thirteen months from the date of

signing the PPA. The work of the Plant is progressing well. GRIDCO is hopeful that the plant would be commercially operational during FY 2015-16.

114. GRIDCO has estimated the procurement of Renewable Energy based on the RPO fixed by the Commission for FY 2015-16 GRIDCO has projected procurement of 1831.62 MU of Renewable energy during FY 2015-16 which is 7% of the projected energy demand of about 26166 MU in the State. Higher procurement of RE beyond the limit of RPO, may be possible provided the economics and availability of RE works out in GRIDCO's favour.
115. GRIDCO is finalizing the PPAs with RE Developers as per the OERC RE Regulation prevalent in the State. All the PPAs have been filed before the Commission for approval under Section 86 of the Electricity Act, 2003.

Sales Projection

116. GRIDCO, in its ARR & BSP Application for FY 2015-16 has considered the demand projection of the DISCOMs as submitted by them and 10 MU towards Emergency Sales to CGPs and added the Intra State Transmission loss (3.75% as projected by OPTCL for FY 2015-16) 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

117. GRIDCO has estimated the availability, the rates and the quantum of power procurement during FY 2015-16 based on the approval of the various relevant Regulators, viz., OERC, CERC etc., and in doing so, GRIDCO has followed the principle whereby the costs are kept at minimum. Besides, the ARR & BSP Application will be subjected to further scrutiny by this Commission for approval.
118. GRIDCO strictly follows the Merit Order Policy of Power Procurement from various Generators including the State entitled sources whereby the least cost power is first allocated towards the State consumption and the surplus power, if

any after meeting the State demand is traded in order to garner surplus revenue that helps in reducing the tariff burden on the State consumers. At the same time GRIDCO is also bound by the Long term PPAs signed with NTPC to source power from its various Stations. Normally Long term PPAs are signed by the beneficiary States with the Central Generators beforehand based on which the Generating Plants come up. Afterwards, it becomes difficult to back out from the signed PPAs as by that time the Generators have invested substantial amount in setting up of the Plant.

119. GRIDCO has proposed the rate of 83.58 P/U for OHPC power, which in fact, is the approved rate for FY 2014-15 plus Electricity Duty on Auxiliary Consumption, Water Cess & SLDC Charges. Under the Regulatory regime, the generation tariff of OHPC is being approved by the Commission at which GRIDCO purchases power from OHPC. The projected tariff of 152.14 P/U by OHPC will be subject to scrutiny and approval by the Commission.
120. The average availability of hydro power from OHPC is calculated at 4975.44 MU in last five years which has been much less than its design energy of 5676 MU. However, the Commission has all along been approving the power procurement by GRIDCO from OHPC mostly at design energy. In reality, as the actual power procurement from OHPC is falling short of the approval, GRIDCO has been facing an uphill task to finance the shortfall in hydro power to recoup the same through procuring the costly thermal power. The revenue shortfall on this account is carried forward as deficits for replenishment during the subsequent years.
121. The projected tariff of OPGC (210.84 P/U) is based on the OERC (Generation Tariff) Regulations, 2014-19 whereas OPGC has projected tariff as 264 P/U in the submission with regard to its tentative generation plan and the tariff for FY 2015-16. OPGC is not filing its ARR & Tariff Application for FY 2015-16 before the Commission even after withdrawal of the SLP before the Hon'ble Supreme Court. The Commission may take cognizance of such a default on the part of OPGC and accordingly may consider exercising its jurisdiction and determining the ARR as well as Tariff for OPGC based on prudence. GRIDCO will abide by the tariff in

- respect of power procurement from OPGC as may be approved by the Commission for FY 2015-16. However, GRIDCO has been impressing upon OPGC to maximize the use of domestic coal, as it will result in availability of cheaper power for the consumers of the State.
122. GRIDCO has considered 20% escalation over the highest ECR during FY 2014-15 (April'14 to Septemeber'14) for NTPC-TTPS Station in order to safeguard itself from the year-end Charges which may be raised after increase in the fuel charges. Also, projection given by GRIDCO is subject to final adjustment through truing-up where the actual charges / costs would be allowed in the tariff.
 123. Considering that the available share to GRIDCO in some of the NTPC stations is relatively high like that of the FSTPS, KhSTPS & Barh etc., GRIDCO is pursuing with the Govt. of India to surrender such costly power from all the up-coming NTPC Thermal Stations (only except North Karanpura Station).
 124. Projected procurement from Barh-II has been shown as 975.90 MU at a rate of 663.94 P/U. However, having signed the Long Term PPA, it is difficult to back out as otherwise even without drawing any power, the payment of fixed cost is required to be borne by GRIDCO as per the terms of the PPA. Therefore, the better option is to lessen the burden by drawing the power by paying the Energy Charge as the payment of Fixed Cost is due on GRIDCO irrespective of any energy drawal.
 125. GRIDCO has projected the Energy Charge Rate (ECR) from various NTPC Stations by applying 20% hike on the Weighted Average ECR of respective Stations during first six months of FY 2014-15, that have been recasted on the basis of the New CERC Tariff Regulations, 2014-19. As per the new Regulation, Monthly Energy Charges are being recovered on actual basis and it includes only the actual coal expenditures without the concept of Base Energy Charges and FPA. Further, the SFO expenditures are no more recovered in variable charges on monthly basis, which is now included in the Annual Fixed Cost.
 126. GRIDCO has sought for the details of coal consumption, blending and prices etc. from each of the NTPC Generating Stations in order to see that the tariff in

respect of any of such Stations is not unduly high because high price or uneconomical use of fuel. The Commission is also equally concerned for the rise in tariff due to improper use of fuel, either through blending or excessive use of e-auction coal etc. GRIDCO has written letters to Regional Offices of NTPC-ER to furnish the fuel coal related information. The Commission may consider to take appropriate action as it may deem fit in order to ensure optimal coal use at NTPC-Kaniha and NTPC-Talcher Stations so as to keep the tariff at affordable level.

127. Regarding return / un-willingness to source the costly bundled solar power, GRIDCO is bound by the PPAs and at the same time, also obligated to meet the RPO Obligation. Therefore, returning/ refusing to source the Solar Power bundled with Thermal Power may not be convenient for GRIDCO at present. However, as the cost of such power falls over a period of time, GRIDCO may not find it difficult to procure such renewable energy.

IPPS

128. GRIDCO has proposed to procure 4199MU of power from M/s SSL during FY 2015-16 based on the generation plan submitted by them without any detail clarification on the fact that whether it is inclusive of 7% power at variable cost or not. As per the PPA, GRIDCO is entitled to 7% of ESO from the IPP and till date they are not supplying the same in spite of a number of communications from GRIDCO and thus in absence of physical delivery of such entitlement of GRIDCO, only the adjustment in cost of 7% power at variable rate is being made by GRIDCO against payment of monthly energy bills. Regarding cancellation of coal blocks, M/s SSL had never intimated the same in writing to GRIDCO.
129. M/s. SSL has appealed to the Hon'ble APTEL for considering 400MW (instead of 600MW) as the installed capacity for calculation of monthly /annul fixed cost in respect of its Unit #2 from FY 2010-11 till 2013-14 as per formula mentioned at Para 47 (OERC order dated 12.06.2013 in Case No.117/2009, 31/2010 & 56/2012) based on the observation of the Commission at Para 16 of said order. Such misinterpreted consideration for working out fixed charges is having huge/substantial financial impact on GRIDCO as well as the consumers of the

State. In spite of GRIDCO's contentions and submissions in interim applications against APTEL's order dated 28.03.2014, it has been kept as such in its judgment 29.11.2014 which has been challenged by GRIDCO before the Hon'ble Apex Court. In view of the above facts, it is very critical at this juncture and essential to seek clarification from the Commission regarding the installed capacity of Unit #2 to be considered for calculation of Annual Fixed Cost for the past period as well as for FY 2015-16 onwards.

130. As per the Order of the Commission dated 12.06.2013, GRIDCO had paid the proportionate water charges in respect of Unit#2 out of the total water charges paid in a month. However, the claim of water transfer charges i.e. the proportionate power charges paid to the distribution utility for bringing water to the site of IPP (electricity consumption by common pump house facility for both CGP & IPP of M/s. SSL) has not been paid by GRIDCO as the same expenditure is considered to be covered under normative O& M expenditure allowed to the IPP.
131. M/s. SSL has been allotted sufficient coal linkage to operate its Unit-#2 and connected to STU to supply State share of power. However, the rate of Rs.2.0732/kWh is provisional and subject to change based on assessment of tariff petition filed by M/s. SSL in Case No.95/2013 in accordance with OERC (Terms & Conditions of Tariff) Regulations, 2014.

PGCIL Transmission Charges

132. GRIDCO has projected the PGCIL transmission charges as per the new Hybrid methodology called the Point of Connection Charges (PoC Charges) which is relatively higher as compared to the earlier transmission charge. GRIDCO has taken into consideration the Open Access Charges which has been deducted while calculating the Projected Transmission Tariff of PGCIL.

Interest on long term Liabilities

133. As the Bulk Supplier of power to the four DISCOMs in the State under the Single Buyer Model, GRIDCO has borrowed heavily and has been paying interests

thereon in order to keep supplying power even though the DISCOMs have not fully cleared the power purchase dues. Unless GRIDCO settles the power purchase bills of the generators, the State will be subjected to Power Regulation which otherwise will affect the economic activities in the State and seriously jeopardize the public interest. In fact, GRIDCO was forced to source power from costly thermal sources in order to ease the power crisis during continuous hydrology failures during last 4-5 years. GRIDCO does not have any other avenues of income except tariff (BSP) which can compensate the payment of interest on loans. Therefore, the suggestion of not to allow GRIDCO the interest on Government as well as other loans to purchase high cost power is without any sound logic and not justifiable, as it will deprive GRIDCO's legitimate claim which helped the State to solve the crisis of power deficit.

134. GRIDCO has borrowed huge sum of money in order to pay the dues of the Generators in the face of failure of DISCOMs to pay the outstanding dues of GRIDCO although power so purchased by GRIDCO has been utilized by the DISCOMs for onward retail sale. It is therefore quite logical that GRIDCO is required to be paid towards its receivables as it has purchased such power by utilizing funds including the borrowed funds. Non-payment of outstanding / borrowing would result in financial indiscipline and break-down of system which does not deserve to be followed.

Other Expenses

135. Administrative & General Expenses (about Rs. 4 Crore to Rs. 7 Crore) are minimal forming 0.06% of its huge turnover of about Rs.6000 Crore. Therefore, GRIDCO is of the opinion that its A&G expenses are minimum by any standards.
136. GRIDCO has claimed the RoE @16% on its paid-up equity of Rs.576.71 Crore in line with the Regulations in force. Although the DISCOMs are being allowed RoE @16% for quite some time now, GRIDCO has been debarred of such a return as of date.

Past Losses and Special Appropriation

137. The past losses of GRIDCO have arisen for the main reason that the DISCOMs have not been able to pay the power purchase dues of GRIDCO and all the claims of GRIDCO have not been passed through in the BSP although most of them have been recognized by the Commission in the Truing-up Exercise. The revenue gap has been financed through loans from banks / FIs. Unless such costs are allowed in the BSP, GRIDCO is very likely to fall into the “Debt Trap” and its operations may come to a halt.
138. The impact of Final Tariff Order dated 15.05.2014 in respect of TTPS pronounced by the CERC, is Rs.740 Crore (Principal plus Interest) for the period of 2009-14. Such financial burden is mainly on account of increase in Annual Fixed Cost in view of Additional Capital Expenditure on account of R&M Expenditure and Normative O&M Expenditure allowed as per the CERC Tariff Regulations, 2009-14. GRIDCO had raised pertinent issues before CERC through its various submissions, which are not being properly addressed in the impugned said Order.
139. However, GRIDCO resorted to challenge the Order before the APTEL and the CERC Tariff Regulations, 2009 before the Hon’ble High Court that are sub-judice at present. Simultaneously, GRIDCO had also challenged the CERC Order Dated 07.06.2013 before the APTEL in the matter of in-principle approval allowed to NTPC to carry out Phase-IV R&M. Thus, the said Appeal has been rejected by the APTEL vide Order dated 09.10.2014 that has been challenged before the Hon’ble SCI. GRIDCO has been praying before the Commission to allow Differential Fixed Cost (based on Tariff Application of NTPC filed before the CERC) in the respective Financial Years which, if were allowed during the respective years, could have rescued GRIDCO from such a sudden financial shock being imposed at one go. GRIDCO has to make payment of a portion of arrear amount on account of Differential Fixed Cost, not in full and based on outcome of the Appeals, the excess / balance payment shall be adjusted accordingly.
140. The major reasons for which GRIDCO has borrowed a huge sums are as follows:

- (i) 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.
- (ii) Due to purchase of high cost power during the years of hydrology failure and also purchase of high cost thermal power due to increased State Demand, have added to the operational losses of GRIDCO.
- (iii) BSP approved by the Commission is incidentally less than the corresponding power purchase rate in some of the years; a revenue gap is left out in each year in the ARR of GRIDCO as indicated in the Table below:

Table – 8
ARR, BSP, Power Purchase Rate & Revenue Gap approved by OERC in past years

Financial Year	ARR Appvd. by OERC (Rs. Cr.)	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
2013-14	6111.85	2.07*	265.27	229.01
2014-15	6452.83	3.59*	263.21	227.05

* The purported approval of surplus of Rs.2.07 Crore during FY 2013-14 and Rs.3.59 Crore during FY 2014-15 is due to non-admittance of Principal (Loan) Repayment of Rs.709.67 Crore for FY 2013-14 and Rs.887.87 Crore for FY 2014-15 by the Commission. If the principal repayment is taken into account, then the ARR approved by the Commission will have huge negative revenue gaps almost equal to that of the Principal Repayment.

- (iv) The R-Infra Managed DISCOMs are failing to pay the dues of GRIDCO for which GRIDCO's cash flow is seriously affected. The provisional outstanding dues of these DISCOMs as on September, 2014 payable to GRIDCO are furnished below:

Table - 9
Outstanding Dues of R-infra Managed DISCOMs
as on Sept., 2014 (Provisional)

DISCOMs	Outstanding Dues (Rs. Cr.)
WESCO	1008.65
NESCO	972.53
SOUTHCO	728.05
Total	2709.24

141. GRIDCO was forced to borrow from Banks / FIs to settle the generators' dues to avoid power regulation and primarily the default lies with the DISCOMs who at the very first instance inflicted the disease of default to the system. Had DISCOMs paid the power dues to GRIDCO in time, there would not have been any borrowings by GRIDCO and there might not have been the question of allowance / dis-allowance of principal repayment in the ARR / BSP.

Miscellaneous Receipt

142. Trading income of GRIDCO is given in the table below.

Table -10
Power Trading by GRIDCO from 2008-09 to 2014-15 (April-Sept'14)
(Provisional)

Year ⇔	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14 (Provn.)	2014-15 (Apr-Sept.)
Power Trading (MU)	34.88	0.90	64.20	40.33	810.68	1565.42	629.08
Value (Rs. Cr.)	24.43	0.79	32.05	15.82	414.59	663.80	295.43

143. The projected surplus energy of 2119.14 MU is proposed to be traded at estimated tentative price of 400 P/U. This Proposed Power Trading Rate is less than the proposed power procurement Rate from Central Sector. GRIDCO submitted that it is strictly guided by the Merit Order Power Procurement and the least cost will be allocated for the State consumption and hence, the burden of trading is / will be kept alienated from the State consumers in a way that the benefit of surplus trading is reaped by the State consumers in the form of reduced power tariff.
144. GRIDCO has projected Misc. Receipts of Rs.6.70 Crore from sale of emergency power to NALCO & IMFA and Rs.847.66 Crore from surplus power trading.

Thus, GRIDCO has in fact projected Rs.854.36 Crore as Misc. Receipts in its ARR & BSP Application for FY 2015-16.

BSP

145. BSP has undergone downward revision during FY 2013-14 and further during FY 2014-15. Bulk Supply Price (BSP) of GRIDCO has been reduced by 2.02% from 270.74 P/U in FY 2012-13 to 265.27 P/U during FY 2013-14 and further to 263.21 P/U during FY 2014-15. The trend of BSP change is given in the table below.

Table-11

Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Average BSP (P/U)	125.84	120.85	119.92	122.15	122.2	170.25	231.65	270.74	265.27	263.21
% Change	-3.85%	-3.96%	-0.77%	1.85%	0.04%	39.32%	36.07%	16.87%	-2.02%	-0.78%

146. The projected Net ARR and the proposed BSP of GRIDCO for FY 2015-16 have undergone upward revision to Rs.9319.80 Crore and Revised BSP as 356.32 P/U as per GRIDCO's Compliance dated 16.01.2015 (in place of earlier submission of Net proposed ARR as Rs.9281.74 Crore and BSP of 354.86 P/U on 01.12.2014) due to payment of Reactive Energy Charges of Rs.1.72 Crore for the period from April'14 to December'14 and the proposed payment of Rs.36.34 Crore to M/s. Sesa Sterlite Ltd. on account of differential cost of coal for FY 2013-14 in terms of the Para 55 & 56 of OERC Order Dated 12.06.2013 in Case Nos.117/2009, 31/2010 & 56/2012.

Miscellaneous Issues

147. GRIDCO has been persistently following up with the DISCOMs to settle the power purchase and other dues which have now touched to about Rs.4617 Crore as on September, 2014. However, despite GRIDCO's all-out efforts, the DISCOMs have been failing in their duties to pay the dues.
148. The outstanding dues against different Government consumers and industries are matters concerning the DISCOMs. However, with regard to payables and

receivables of GRIDCO concerning the Government of Odisha, GRIDCO is liable to pay about Rs.1189 Crore (provisional) to the Government of Odisha as on September, 2014.

149. With regard to the Escrow Relaxation, GRIDCO has been allowing Escrow Relaxation as per the provisions of the Escrow Agreement and the relevant / related Orders of the Hon'ble Courts / Commission from time to time.
150. GRIDCO, through its representation in the Board of Directors, always advises the management of DISCOMs to improve the operational performance through various means. The CMD of GRIDCO guides the MDs / CEOs for enforcing various measures so as to reduce the losses as per targets given by OERC. However, since the majority in the Board hangs in favour of the DISCOMs, the advices of GRIDCO, is fully dependent on the discretion of the DISCOMs.
151. GRIDCO has been constantly taking up with the DISCOMs for payment of its receivables; however, despite all persuasions, DISCOMs maintain their indifference. Power Regulation, as a remedy, may not lead to any conclusive solution as the honest consumers will be the worst suffer in the event, power regulation is resorted to.
152. The UI has now been repealed by CERC (Deviation Settlement Mechanism and related matter) Regulations, 2014 w.e.f. 17.02.2014. Since it is a central legislation, this ought to be followed by the States without alterations. However, GRIDCO also supports the views of the DISCOMs that the Intra-State ABT should be applied to all the Stakeholders instead of selective inclusion of GRIDCO & the DISCOMs leaving the State Generators out of its fold.
153. The receivable dues towards Rs.400 Crore NTPC Bonds of GRIDCO are genuine and the DISCOMs have to pay such dues to GRIDCO. These Securitised Dues have arisen just because the DISCOMs defaulted in paying the power dues to GRIDCO and the Commission froze the payment of DPS after 31.03.2005. Had DPS been allowed, the amount would have stood at much more. Even though the Commission allowed installments spreading over 10 years, the DISCOMs have avoided paying the amount and now conveniently saying that they cannot pay at

all. This is against any sound business practice as GRIDCO has been suffering the most because of such indifference of DISCOMs. Therefore, the DISCOMs should pay the legitimate dues which have been duly recognized by the Commission. Similarly, the RIL managed DISCOMs should also pay the balance dues on account of the Rs.400 Crore NTPC Bond dues considering GRIDCO's precarious financial position.

154. DISCOMs are required to pay overdrawal charges, rebates, escrow mechanism and surcharges for late payment such charges and get such benefits in line with the commercial practice in place as per the relevant OERC Orders and there should not be any meddling in this regard by the DISCOMs.

VIEWS OF THE GOVT. OF ODISHA (Para 155)

155. Govt. of Odisha vide their Letter No. 1808 dated 28.02.2015 have communicated their views/suggestions on various issues involving tariff setting for FY 2015-16. However, the issues those affect the Bulk Supply Price of GRIDCO are indicated below:

- (a) The convertible bonds worth Rs.766.20 crore of OHPC issued to Govt. of Odisha which shall not carry interest upto 2014-15 (50% of the bond shall be converted to equity from 2015-16 and 50% shall remain as loan carrying interest @ 7% per annum w.e.f. 2015-16 until repayment). The interest impact of the zero coupon bond in respect of different old power stations should be considered in ARR of 2015-16.
- (b) As regards moratorium of debt services of OHPC, Govt. has allowed the same for repayment of loan and payment of interest for UIHEP Govt. loan as per notification dt.06.01.2010. The Commission may include both payment of interest and repayment of principal in the ARR of UIHEP. Interest for the period 2006-07 to 2014-15 may be kept as regulatory asset of OHPC to be paid in future tariff.
- (c) Govt. desires to restructure the amount of Govt. investment in UIHEP as Rs.821.47 crore including IDC as on 31.3.2001 and OHPC has considered the

same as revised baseline figure in tariff application for 2015-16. Approved project cost at Rs.1194.79 crore of UIHEP however remain fixed and equity and loan components have been adjusted accordingly and submitted in ARR of 2015-16 by OHPC, which may be considered by the Commission.

- (d) Further, Govt. has intimated that they have requested GoI for de-allocation of share to Odisha from Barh-I & II of NTPC-ER thermal power station.

**OBSERVATIONS OF THE STATE ADVISORY COMMITTEE (SAC)
(Para 156)**

156. The State Advisory Committee (SAC) was convened on 25.02.2015 to discuss about the proposed ARR and Tariff Applications of different utilities in the state for FY 2015-16. The members of the SAC deliberated on the various issues and the observations /suggestions of the SAC Members pertaining to ARR & Tariff of GRIDCO are mentioned hereunder.

- (a) OPTCL and GRIDCO had proposed marginal rise in tariff where as there is an alarming arise in the tariff of the DISCOMs. The proposed stiff rise in administrative and general expenses, bad debts, depreciation and interest need to be clarified.
- (b) There is no justification for increase in tariff when Odisha has ample hydro power and also coal prices are falling in the national market.
- (c) Since GRIDCO is a deemed trader, it shall be allowed only a trading margin. Further, GRIDCO should recover its huge outstanding dues from DISCOMs at the earliest possible, which would reduce its borrowing from financial institutions to meet to shortfall.
- (d) The Commission should not allow escrow relaxation to DISCOMs and BSP should be fully recovered first and DISCOMs should bring additional funds of their own to meet their obligations.

COMMISSION'S OBSERVATIONS & ANALYSIS OF GRIDCO'S PROPOSAL (Para 157 to 355)

Legal Status of GRIDCO

157. The legal status of GRIDCO has been clarified by the Commission in its ARR and BSP order for FY 2011-12 and 2012-13 vide orders dtd.18.03.2011 and 23.03.2012 respectively. That GRIDCO is a valid legal entity has also been upheld by the Hon'ble Supreme Court of India in Civil Appeal No.5722 of 2006 (Gajendra Haldia Vrs. GRIDCO and Others). GRIDCO by acting as a Single Buyer State designated entity has been ensuring supply of cheap and quality power to the DISCOMs which ultimately protects the interest of the consumers. GRIDCO, in its role of single buyer model, acts as a shock absorber and protects DISCOMs from possible Power Regulation by the Generator(s) due to any cash-flow problem. Therefore, the Commission has rightly recognized GRIDCO as a "Deemed Trading Licensee". The issue of trading margin is not applicable to GRIDCO who sales power to the DISCOMS inside the State of Odisha after resolving the cost of all power suppliers.
158. On detailed scrutiny and examination of the Annual Revenue Requirement and Bulk Supply Price Application of GRIDCO for FY 2015-16 and subsequent rejoinders filed by them, 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 2015-16

159. The Commission, for determination and approval of the ARR of GRIDCO for FY 2015-16 continues to follow the same principles as in the previous year. For the purpose of tariff setting for FY 2015-16, 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.
160. Tariff determination involves adoption of various assumptions and principles to arrive at the individual ARR components for a future year and hence, is liable to be at variance to actual turn of events. The Commission has also accepted the concept of truing-up in order to insulate the licensee from any eventuality. The

Commission, as in the previous years, has continued to determine the ARR for the FY 2015-16 using the following principles.

161. The cost of power purchase for GRIDCO, which constitutes more than 95% of the total cost structure of GRIDCO has been considered on a merit-order basis, with 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/OERC 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.
162. 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.
163. 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 debt servicing liabilities from the non-core activities of GRIDCO, namely earnings from export of power and un-scheduled interchanges charges, after meeting the full requirement of DISCOMs.

164. The Commission has scrutinised in detail the energy requirement proposed by the DISCOMs for FY 2015-16. 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 2015-16, 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.

Quantum of Power Purchase

165. 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.
166. The estimate for purchase of power for a financial year is worked out in accordance with the principles laid down in Regulation 5(4) of OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004.
167. GRIDCO Ltd. as well as DISCOMs have submitted their ARR for FY 2015-16 to the Commission for approval. The figures filed by GRIDCO and DISCOMs in their ARR for 2015-16 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 2015-16 for EHT & HT industries and RGGVY & BGJY consumers.
168. The Distribution Companies have furnished projections for drawl of power from GRIDCO during FY 2015-16 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.

169. The quantum of power to be purchased during the FY 2015-16 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. 69/2014 (CESU), 70/2014 (WESCO), 71/2014 (NESCO) and 72/2014 (SOUTHCO) by following the guidelines of the Regulations quoted above. The Commission has approved the quantum of power to be purchased for the FY 2015-16 relating to CESU, WESCO, NESCO and SOUTHCO as 8780 MU, 7350 MU, 5250 MU and 3420 MU respectively totaling to 24800 MU.
170. The Commission has also approved 3.75% towards transmission loss in the OPTCL system for the FY 2015-16. The details of transmission loss have been furnished in the tariff order for OPTCL for the FY 2015-16 in Case no 67 of 2014.
171. 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 10 MU for 2015-16 after considering the submission of GRIDCO and actual drawal of CGPs during the first six months of the current FY 2014-15. The details on the estimated requirement of power purchase for use within the State is indicated in the table below:

Table –12
Purchase of Power by GRIDCO for State Use for FY 2015-16

(In MU)

Name of the DISCOMs	Commission's Approval for 2014-15	GRIDCO's Proposal in ARR 2015-16	DISCOM's Proposal for 2015-16	Commission's Approval for 2015-16
CESU	9040.00	9401.00	9451.10	8780.00
NESCO	5330.00	5625.00	5624.57	5250.00
WESCO	6820.00	7500.00	7500.00	7350.00
SOUTHCO	3340.00	3630.00	3630.00	3420.00
TOTAL DISCOMs	24530.00	26156.00	26205.67	24800.00
CGP	10.00	10.00	-	10.00

Name of the DISCOMs	Commission's Approval for 2014-15	GRIDCO's Proposal in ARR 2015-16	DISCOM's Proposal for 2015-16	Commission's Approval for 2015-16
TOTAL SALE	24540.00	26166.00	-	24810.00
Transmission loss at EHT in MU (DISCOMs Purchase only)	955.71 (@ 3.75% Transmission loss)	1019.45 (@ 3.75% Transmission loss)	-	966.23 (@ 3.75% Transmission loss)
Total Purchase	25495.71	27185.45	-	25776.23

172. The Commission has approved the energy drawal by DISCOMs for FY 2015-16 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

173. GRIDCO in its filing has submitted that they have considered SMDs of each DISCOM as submitted by the DISCOMs to GRIDCO. GRIDCO has indicated the OERC approval of SMD for FY 2014-15 along with the highest SMDs recorded during the 1st six months of FY 2014-15, the final projection of SMDs furnished by the DISCOMs for FY 2015-16 on 27th&28th, November, 2014, based on which GRIDCO has made the projection of SMDs in respect of each DISCOMs for FY 2015-16 as under:

Table – 13
DISCOM-WISE Projection of SMDs for FY 2015-16

DISCOMs	OERC approval for 2014-15	Highest SMD (MVA per month) recorded during FY 2014-15 (Apr.'14 to Sept'14)	DISCOMs Projection of SMD for FY 2015-16	GRIDCO's Projection of SMD of DISCOMs for FY 2015-16
	(MVA/Month)	(MVA/Month)	(MVA/Month)	(MVA/Month)
CESU	1490.00	1385.894	1657.00	1657.00
NESCO	870.00	857.94	940.00	940.00
WESCO	1100.00	1209.353	1250.00	1250.00
SOUTHCO	560.00	533.125	600.00	600.00
TOTAL	4020.00	3986.313	4447.00	4447.00

GRIDCO has prayed the Commission to suitably determine and approve the SMDs for each of the DISCOMs for FY 2015-16 keeping in view of their actual SMDs during FY 2014-15 and the likely load growth in the near future, as the projections of SMD given by the DISCOMs for FY 2015-16 seem to be on the higher side.

174. Bulk Supply Price (BSP) contains a component of demand charge which is calculated on the basis of average system demand of the distribution companies. In its ARR application GRIDCO has indicated that the simultaneous maximum demand as submitted by DISCOMs to GRIDCO is reflected in the application, but it appears to be at higher side. The DISCOMs in their ARR filing have also 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'14 to Dec'14 is furnished in the table below:

Table - 14
Demand in MVA during 2014-15 (Upto Dec' 14)

	CESU	NESCO	WESCO	SOUTHCO	ALL ODISHA
Apr-14	1368.87	857.94	1207.01	533.13	3966.95
May-14	1385.89	851.66	1182.70	527.14	3947.39
Jun-14	1371.76	837.76	1209.35	531.97	3950.84
Jul-14	1339.98	854.68	1159.36	530.49	3884.50
Aug-14	1304.34	810.93	1127.82	507.60	3750.69
Sep-14	1365.49	828.25	1190.73	530.46	3914.92
Oct-14	1377.92	851.25	1046.19	525.20	3800.57
Nov-14	1284.68	755.85	1145.15	524.78	3710.46
Dec-14	1221.96	772.70	1119.89	527.55	3642.09
AVERAGE (4/14 to 12/14)	1335.65	824.56	1154.24	526.48	3840.93

175. 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 3966.95 MVA in the month of April, 2014. However, the sum of the maximum demand of each DISCOMs comes to 3986.31 (CESU-1385.89 + NESCO-857.94 + WESCO-1209.35 + SOUTHCO-533.13) during the period from April to December, 2014.

176. The Commission analysed the demand pattern of DISCOMs during the current FY 2014-15 (upto December, 2014) and observed that the Average SMD of the DISCOMs (except WESCO) has been reduced from what was approved by the Commission for the FY 2014-15, but in case of WESCO there is an increase in Average SMD. 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 1208.40 MU by the DISCOMs during FY 2015-16. Thus, for meeting this additional demand of 1208.40 MU, the additional MVA requirement has been worked out to 153.27 MVA. So, the Commission has estimated the Demand of the DISCOMs for FY 2015-16 taking the maximum demand during April, 2014 to December, 2014 plus the estimated demand on account of additional load growth during FY 2015-16. Accordingly, the total estimated demand approved by the Commission works out to 4140.00 MVA for DISCOMs, the details of which are given in the table below:

Table - 15
Demand in MVA 2015-16

DISCOMs	OERC Approval for 2014-15	Proposal by DISCOMs for 2015-16	Proposal by GRIDC for 2015-16	Actual avg SMD during 4/14 to 12/14	Maximum SMD during 4/14 to 12/14	Additional Load growth as estimated for 2015-16 (MU)	Additional load growth converted to MVA at 0.9 power factor	Maximum SMD during 4/14 to 12/14 + Additional load growth	OERC Approval for 2015-16
CESU	1490.00	1656.00	1657.00	1335.65	1385.89	548.98	69.63	1455.53	1460.00
NESCO	870.00	940.00	940.00	824.56	857.94	181.83	23.06	881.00	880.00
WESCO	1100.00	1250.00	1250.00	1154.24	1209.35	275.51	34.95	1244.30	1240.00
SOUTHCO	560.00	600.00	600.00	526.48	533.13	202.09	25.63	558.76	560.00
All Odisha	4020.00	4446.00	4447.00	3840.93	3986.31	1208.40	153.27	4139.59	4140.00

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

177. Taking into account the SMD in different months of 2014-15 and the additional load projected by the DISCOMs, the SMD for 2015-16 has been fixed at 4140 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

178. GRIDCO's proposal and Commission's approval on drawal of power from various stations of OHPC for the FY 2015-16 are given in the table below, the details of which have been dealt in Case No.65/2014 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 –16
Drawal from State Hydro Stations (in MU)

Source of Generation	FY 2014-15	FY 2015-16	
	Commission's Approval	GRIDCO's Proposal	Commission's Approval
OHPC (Old Stations)	3676.86	3650.36	3676.86
Upper Indravati	1942.38	2026.53	1942.38
Machhkund	262.50	262.50	262.50
Total Hydro	5881.74	5939.39	5881.74

179. 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)

180. 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 3177.25 MU at the plant availability of 88.10% with adjustment of Auxiliary Consumption of 10.50%. The NTPC will get full capacity charge at normative plant availability 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 3177.32 MU from TTPS for the FY 2015-

16, taking into account the projected plant availability of 88.10% & Auxiliary Consumption of 10.50%.

IB Thermal Power Station of OPGC

181. Orissa Power Generation Corporation (OPGC) owns IB Thermal Power Station at Banharpalli in Dist. Jharsuguda with an installed capacity of 2x210 MW at present.
182. Like the previous years, OPGC has not filed its ARR and Tariff application with the Commission for the year 2015-16. However, GRIDCO in its tariff application has stated that as per the State Govt. notification dtd.21.06.2008, the Amended PPA in respect of PPA dated 13.08.1996 has been signed between OPGC and GRIDCO on 19.12.2012 and Amendment with respect to the TPA dated 18.10.1998 has been signed between GRIDCO, Govt. of Odisha and OPGC on 06.09.2012. Further, the SLP filed by OPGC before the Hon'ble Supreme Court of India has been withdrawn and based on the same, stay has been vacated by the Hon'ble Apex Court vide its order dated 14.02.2013. Accordingly, approval of PPA has come under the jurisdiction of OERC and the amended PPA, TPA as well as the Escrow Agreement dated 30.11.1998 has been filed before the Commission for regulatory approval. The Commission has been determining the tariff for procurement of power from Unit 1 & 2 of OPGC by GRIDCO till FY 2014-15, based on the tentative tariff projection and generation plan submitted by OPGC on request by GRIDCO, in line with the provisions of subsisting PPA dated 13.08.1996 (in respect of Unit 1 & 2) as well as the Government Notifications dated 21.06.2008 and 12.10.2009. However, the day to day transaction of power sale and purchase is being done based on the mutually agreed tariff (variable cost and fixed cost) determined by the parties, in line with the provisions of PPA as well as the Task Force Notification dated 21.06.2008.
183. 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 Utility, 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.

184. 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 so 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.

185. OPGC, in its generation plan for FY 2015-16, has submitted to GRIDCO that the net energy sent out from OPGC would be 2780.06 MU based on target generation of 3102.023 MU at the PLF of 84.31% & auxiliary consumption of 10.38%. However, based on the normative auxiliary energy consumption of 8.5% (as per the Terms and Conditions of for Determination of Generation Tariff Regulation, 2014) and PLF of 84.31% as projected by OPGC for the FY 2015-16 for generation of 3102.023 MU, GRIDCO has worked out net drawal (ESO) of 2838.35 MU from OPGC during FY 2015-16 considering use of domestic coal only. 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. Hence, the Commission considers it appropriate to take the Plant Availability of 84.31%, as considered by both OPGC and GRIDCO, for estimating the energy drawal from IB TPS of OPGC and approves a net drawl of 2838.27 MU from OPGC during the FY 2015-16 considering Plant Availability of 84.31% and 8.50% auxiliary consumption as considered by GRIDCO.

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

186. GRIDCO in its filing has proposed not to procure any energy from the CGPs during the FY 2015-16 in view of adequate availability of power due to State share in various existing & up-coming Power Plants in the State. However, GRIDCO has indicated that procurement of power from CGPs may be resorted to depending upon exigencies / force majeure conditions. Further, GRIDCO has proposed to procure 1224.62 MU from the Co-generation Plants during FY 2015-16 which may be considered as Renewable Energy as it is generated from waste heat. However, in its reply to the Commission's query, GRIDCO has submitted that M/s. Bhusan Steel & Power Ltd., Jharsuguda has a committed co-generation capacity of 100 MW (equivalent to 745 MU) and it has committed to supply this power to GRIDCO during the FY 2015-16 vide its letter dated 29.04.2014, which

forms a part of the 1224.62 MU of total projected procurement of Co-Gen. energy during FY 2015-16. The balance Co-Gen. energy of 479.62 MU (1224.62 MU-745 MU) is proposed to be procured from the rest of the CGPs having Co-gen. facilities. Since the generation of Co-gen energy is not certain and varies from time to time during the year, it may not be possible to exactly predict the generation and purchase of such energy by GRIDCO from each of the CGP / Co-Gen Plants. However, it may be possible to source the required quantum of Co-gen energy during the whole year depending upon the availability of such energy.

187. The Commission observed that based on the total energy purchase by DISCOMs from GRIDCO for State use, a quantum of 1166.07 MU of energy from Co-generation Plants is required to meet the Co-generation power purchase obligation for the ensuing year 2015-16. 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 1224.62 MU from Co-generation Plants during the FY 2015-16 for state consumption. Besides, GRIDCO in its filing has projected not to procure any power from the CGPs during the FY 2015-16 due to the availability of low cost power from IPPs. But, it is understood that a good quantum of surplus CGP power is available in the state. Hence, 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:

188. GRIDCO has submitted to procure around 320 MU of renewable energy from small hydro sources that would be available to GRIDCO during FY 2015-16 as given in the table below.

Table – 17
Proposed Drawal from Small Hydro Sources for FY 2015-16

Sl. No.	Name of the SHEPs	Installed Capacity (MW)	Energy drawal during the 1st six months of 2014-15 (MU)	Proposed Energy procurement for FY 2015-16 (MU)
1.	Meenaskhi Small Hydro	37	128.86	210.00
2.	SAMAL Small Hydro	20	55.45	110.00
	Total		184.31	320.00

189. Considering the above proposal of GRIDCO, the Commission allows GRIDCO to purchase 320 MU of renewable energy from these two SHEPs for consumption in the state during FY 2015-16.

Bio-mass Energy:

190. GRIDCO in its ARR application had proposed to purchase 160 MU of renewable energy from biomass sources ie. 100 MU from M/s. Salivahan Green Ltd. and 60 MU from M/s. Octant Industries Ltd. during the FY 2015-16. However, in a reply to the Commission's query, GRIDCO submitted that as per the latest Status Report furnished by M/s. Octant Industries Ltd., the 10 MW Biomass Plant, being developed by them at Sansinghari near Sambalpur is expected to be commissioned by September 2015. Hence, GRIDCO is expected to procure about 25 MU of power from this Biomass Plant during FY 2015-16 in place of 60 MU proposed earlier. Accordingly, the energy availability from both the plants is estimated at 125 MU during FY 2014-15. The commission approves the above proposal of GRIDCO as given in the table below.

Table – 18
Drawal from Bio-mass Energy Sources for FY 2015-16

Sl. No.	Name of the Plants	Installed Capacity (MW)	Proposed Energy procurement for FY 2015-16 (MU)	Available Energy Approved by OERC for FY 2015-16 (MU)
1.	M/s. Shalivahan Green Energy Limited	20	100	100
2.	M/s Octant Industries Ltd.	10	25	25
	Total	30	125	125

Solar Energy:

191. In its submission, GRIDCO is hopeful to procure 127 MU of Solar Energy from the following sources to meet its Solar Power Purchase Obligation during the FY 2015-16.

- (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) 25 MU from 15 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 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 in U.P. & Faridabad Solar PV Project in Haryana.
- (iv) 8 MU will be made available to GRIDCO from the 5 MW Solar PV Project developed by M/s Alex Green Energy Ltd. under OREDA State Scheme at Patnagarh in Bolangir district.
- (v) 42 MU will be made available to GRIDCO from 25 MW Solar PV Project to be developed by M/s ACME Odisha Solar Power Pvt. Ltd. in Bolangir district under OREDA State Scheme Phase-II.

- (vi) 22 MU is expected to be available to GRIDCO during FY 2015-16 from 30 MW Solar Capacity allocated to GRIDCO under Viable Gap Funding (VGF) Scheme under JNNSM Phase-II which is expected to be commissioned by the second half of FY 2015-16.

192. The above proposal of GRIDCO is summarised in the Table below:

Table - 19
Proposed Drawal of Solar Power during FY 2015-16

Sl. No.	Solar RE Sources	Energy Proposed for procurement during FY 2015-16 (MU)
1.	8 Nos. of Solar PV projects of 1 MW each under RPSSGP	13.00
2.	15 MW from NVVN through 'New Projects scheme' under JNNSM, Phase-I	25.00
3.	10 MW through NTPC from Solar PV projects at Dadri & Faridabad of 5 MW each	17.00
4.	5 MW from M/s Alex Green Energy Ltd. under OREDA State Scheme	8.00
5.	25 MW from M/s ACME Odisha Solar Power Pvt. Ltd. under OREDA State Scheme Phase-II	42.00
6.	30MW through Solar Energy Corporation of India (SECI) under JNNSM, Phase –II, Batch-I	22.00
	Total	127.00

193. The Commission approves the above proposal of GRIDCO to procure 127.00 MU from Solar RE Sources. Thus, the total procurement of Renewable Energy during FY 2015-16 from Solar, Bio-mass & Small Hydro Sources comes to 572.00 MU. The procurement of energy from Co-generation Plants has been approved at 1224.62 MU. Hence, the total estimated power procurement for the purpose of RCPO comes to 1796.62 MU which is approved by the Commission for State use. The source-wise power procurement from Renewable and Co-generation sources are indicated in the Table below:

Table - 20
Drawal from Renewable Energy Sources during FY 2015-16

Sl. No.	RE Sources	Energy approved for Procurement during FY 2015-16 (MU)	Percentage w.r.t. the total estimated drawl of DISCOMs (%)	RCPO fixed in the Regulation for FY 2015-16 (%)
A.	Non-Solar RE			
(i)	Small Hydro Electric Project (SHEP)	320.00	1.29	
(ii)	Energy from Bio-mass	125.00	0.50	
	Sub-Total (Non-Solar)	445.00	1.79	2.00
B.	Solar RE	127.00	0.51	0.30
C.	Total (Solar & Non-Solar)	572.00	2.31	2.30
D.	Energy from Co-Generation Plants	1224.62	4.94	4.70
E.	Total Energy for RCPO	1796.62	7.24	7.00

(*) Total purchase of DISCOMs has been estimated to 24800 MU.

194. However, the Commission observed that the estimated sale of power to DISCOMs is 24800 MU for state consumption and the estimated quantum of energy available to GRIDCO from Co-generation and Renewable Sources in total is just to meet the Renewable and Co-gen purchase obligation fixed by the Commission for the FY 2015-16. However availability from the non-solar renewable sources falls short from the target fixed by the Commission in its regulation. Therefore, the Commission directed GRIDCO to make reasonable endeavour to encourage renewable power producers and facilitate them for setting up of renewable power plants such as small hydro, solar, wind and biomass etc., those are available in our State. Otherwise GRIDCO has to purchase REC to compensate the shortfall of renewable energy to meet the RPO, which will put an extra burden on the consumers of our State.

Independent Power Producers (IPPs)

195. In its submission, GRIDCO has stated that they have executed PPA with M/s Sesa Sterlite Limited (M/s SSL) to purchase power from its 4x600 MW IPP. Accordingly M/s SSL shall provide GRIDCO 25% of the power sent out at the tariff approved by OERC i.e. at fixed charge plus variable charge and 7% of the power sent out at variable charge only. The Unit-2 of the IPP having 600 MW

- capacity is dedicated to the State and connected to OPTCL network through 220 KV VAL-Budhipadar D/C Line. Considering the past as well as present trend of injection and generation plant submitted by M/s SSL, GRIDCO has proposed to procure about 4199 MU of energy from its share at 85% PLF with the auxiliary consumption of 6%) from M/s SSL during FY 2015-16.
196. GRIDCO has further submitted that they have executed PPA with M/s GMR Kamalanga Energy Ltd. (M/s GKEL) to purchase power from its 4x350 MW Thermal Power Plant (IPP). As per PPA, GRIDCO is entitled for 25% of power sent out from the IPP of M/s GKEL at the tariff determined by OERC and also power generated in excess of 80% PLF shall be made available in the State at variable cost. With the present grid connectivity i.e. through LILO of 400 KV Kaniha-Meramundali Ckt-1, only 550 MW can be injected by M/s GKEL as permitted by ERLDC. Therefore, considering the State share of 25%, PLF of 85% and auxiliary consumption of 8%, energy availability to GRIDCO during FY 2015-16 would be 1798 MU based tentative on the generation plan submitted by M/s GKEL.
197. As per the PPA executed by GRIDCO with M/s Nava Bharat Ventures Limited (M/s NBVL) GRIDCO is entitled for 12% of power sent out from its 64 MW IPP at variable cost. Considering the generation plan submitted by M/s NBVL GRIDCO has purposed to procure 54 MU from the IPP which is 12% of the total energy of 453.63 MU considering PLF of 85% and 6.5% auxiliary consumption.
198. As per PPA with M/s Jindal India Thermal Power Limited (M/s JITPL) GRIDCO is entitled for 12%/14% of the energy sent out from the IPP of M/s JITPL with installed capacity of 2x600 MW. Accordingly GRIDCO has proposed to procure 1002 MU from M/s JITPL with annual PLF of 85% Central Transmission Loss of 2.62% (provisional) and auxiliary consumption of 6%.
199. 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 1360 MW was scheduled to be commissioned by the end of FY 2014-15 with Odisha Share of 163.20 MW. However, keeping in view the uncertainty of

commissioning of the forthcoming IPPs, GRIDCO has restricted its proposal to procure power from the aforesaid IPPs which are fully or partly in operation for the purpose of estimation of ARR. Hence, the total estimation of GRIDCO is 7053 MU, which to be procured from the IPPs during the FY 2015-16 as indicated in the table below.

Table - 21
Proposed Power Procurement from IPPs during FY 2015-16

IPPs	Proposed Drawal by GRIDCO for FY 2015-16 (MU)		
	At F.C + V.C	At V.C	Total
Sesa Sterlite Limited (SSL)	3,905	294	4,199.00
GMR Kamalanga Energy Ltd.	1,798	-	1,798.00
Nava Bharat Ventures Limited	-	54.00	54.00
Jindal India Thermal Power Limited	-	1,002.00	1,002.00
Total	5,703	1,350	7,053.00

200. The Commission scrutinised the above proposal of GRIDCO and it is observed that as per the PPA between GRIDCO and M/s. SSL, GRIDCO has the share of 25% of the energy sent out from the IPP of M/s. SSL (4X600 MW) at the full tariff and 7% of the energy sent out at variable charge only, since coal block is allotted to the IPP. Accordingly, the state share would be 5375.42 MU in a year, if all the four units run at 85% PLF. But it is seen that only one unit i.e. the unit-II of M/s.SEL is connected to the state grid at present. Hence, the energy availability from this unit only is approved for state drawl during the FY 2015-16 which comes to 4199.54 MU. However, GRIDCO is directed to purchase its full share out of the total generation of M/s. SSL for trading purpose after meeting the State requirement.
201. Out of the 1400 MW (4x350 MW), three generating units having installed capacity of 1050 (3x350 MW) of the IPP M/s. GMR Kamalanga Energy Ltd. (GKEL) have already been commissioned and the fourth unit is scheduled to be commissioned at the end of 12th plan. As per the PPA with M/s. GKEL the State share is 25% of the energy sent out. Accordingly the present energy availability from M/s. GKEL comes to 1798 MU with 85% PLF and 8% auxiliary consumption, which is approved by the Commission for state during FY 2015-16.

202. The Commission approves the proposal of GRIDCO to procure 54 MU from the IPP of M/s Nava Bharat Ventures Limited (M/s NBVL) at variable cost during FY 2015-16.
203. The Commission observed that out of the 1200 MW (2X600 MW) IPP of M/s Jindal India Thermal Power Ltd. (M/s JITPL), GRIDCO has the right to purchase the State share of 12% from Unit-1 (using coal from other sources than allocated coal block) and 14% from Unit-II (using coal from allocated coal block) at variable cost. Considering the above State share, PLF of 85% and auxiliary consumption of 6.5%, energy availability to the state from this IPP is estimated to 1086.07 MU (584.81 MU from unit-II and 501.26 MU from unit-I). Out of the availability of total 1086.07 MU, the Commission considers the low cost power of 584.81 MU only for State use during FY 2015-16 and GRIDCO may trade the balance power available to the State from this IPP.
204. Out of the total availability of 8313.17 MU from the above IPPs, the Commission approves 6636.35 MU to be purchased by GRIDCO during the FY 2015-16 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 should draw the full quantum of State's share of power from the IPPs as per the PPA to have export earnings after meeting the State's requirement.

Power Purchase from Central Generating Stations

Transmission Loss:

205. The constituents of power utilities of the Eastern Region share the losses occurring in the Central Transmission System. In the ARR filing for 2015-16, GRIDCO has projected different percentage of transmission loss in the Eastern Region Power System in respect of power procurement from different Central Generating Stations.

206. 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, GRIDCO submitted that as per the new Inter-state transmission charges sharing Regulation (POC Regulation) total transmission loss of the CTU are to be divided equally among the injectors (Generators) and Drawees (Beneficiaries). The loss component attributable to Generators is regarded as the “Injection Loss”. In the instant case, since the Generates are different their injection loss are different based on the load flow study conducted by NLDC. These losses are determined in weekly basis and are published in NLDC site. Similarly, GRIDCO being a beneficiary has to bear the “withdrawl loss” towards the central sector drawl. This again is determined by NLDC based on load flow study for the withdrawl zone Odisha on weekly basis and published in their site. Further, GRIDCO have entered into agreements with ISGSs (FSTPS, KHSTPS and TSTPS) to draw power on cost plus basis. As such, GRIDCO is bearing the injection losses of these stations in addition to its withdrawl losses.
207. The Commission scrutinised proposal of GRIDCO on Central Transmission Losses with reference to the figures published in NLDC site and it is observed that the scheduled PoC loss in the eastern regional system varies from week to week for Odisha injection and Odisha withdrawal. After scrutiny, the Commission accepted the average transmission loss for drawal of power from individual central generating stations as proposed by GRIDCO for FY 2015-16 for estimation of power purchase cost of GRIDCO, which is given below:

Table - 22
Percentage of System Loss considered for Central Stations

Name of power stations	Central Transmission Loss proposed by GRIDCO and considered by the Commission for FY 2015-16 (%)
TSTPS Stage-I	2.390
TSTPS Stage-II	2.780
FSTPS- I, II & III	2.100
KHSTPS Stage-I & II	2.080
Barh-I & II	2.080
Chhuka & Tala	2.100
Teesta-V	2.100

Central Hydro Generating Stations

208. **Chukha:** Odisha has been assigned a share of 15.19% from ER allocation of 270 MW out of the installed capacity of 336 MW (4x84 MW) of Chukha Hydro Power Station, Bhutan. Drawl from Chukha has been projected by GRIDCO at 268.84 MU for FY 2015-16 considering the average drawal of last 6 years i.e. from FY 2008-09 to 2013-14. After deducting central sector loss of 2.10%, the net availability to GRIDCO is projected at 263.19 MU for the FY 2015-16.
209. The Commission scrutinized the proposal of GRIDCO and observed that though the drawal of GRIDCO from Chukha was 275.41 MU during the FY 2013-14 against the approval of 268.08 MU, the same was 260.39 MU during the FY 2011-12 and 237.58 MU during the FY 2012-13 against the approval of 279.79 MU and 279.53 MU respectively. So the Commission approves the drawl from Chukha hydro station at 265.93 MU for FY 2015-16 considering the average drawal of last 5 years i.e. from FY 2009-10 to 2013-14. After deducting the Central Loss of 2.10%, the net drawal of GRIDCO comes to 260.35 MU for FY 2015-16.
210. **TALA:** GRIDCO has an allocated share of 4.25% i.e 43.35 MW from Tala HEP, Bhutan having installed capacity of 1020 MW (6X170 MW). GRIDCO has proposed to draw 142.00 MU of energy from Tala HEP during FY 2015-16 by averaging previous 5 years drawal i.e. from 2009-10 to 2013-14. After deducting Central Sector Loss of 2.10%, the net availability to GRIDCO is projected as 141.60 MU during FY 2015-16. After scrutiny, the Commission estimates the same drawal of 141.60 MU from Tala Hydro Power Station.
211. **TEESTA:** GRIDCO in its ARR application 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 23.40% from the saleable energy, GRIDCO proposes to procure

512.42 MU of energy during the year 2015-16 after deducting the Central Sector loss of 2.10% as shown in the table below.

Table - 23

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 @ 2.10% (MU)	512.42
Proposed drawal for FY 2015-16 (MU)	510.58

212. 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 2.10%, the Commission approves the net drawl of 512.37 MU from Teesta HEP during FY 2015-16.

Central Thermal Generating Stations

213. 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.
214. GRIDCO has submitted that Clause 36 (A) of CERC (Determination of Terms & Conditions of Tariff) Regulations, 2014 effective from 01.04.2014 to 31.03.2019 stipulates “Normative Annual Plant Availability Factor (NAPAF)” as under:
- “(a) *All Thermal Generating Stations, except those covered under clauses (b), (c), (d), & (e) - 85%*

Provided that in view of shortage of coal and uncertainty of assured coal supply on sustained basis experienced by the generating stations, the NAPAF for recovery of fixed charges shall be 83% till the same is reviewed.”

The above provision shall be reviewed based on actual feedback after 3 years from 01.04.2014.”

Based on the above provision of CERC Tariff Regulations, 2014, NTPC has been raising bills on 83% NAPAF for recovery of Fixed Charges from 01.04.2014 onwards.

The actual Plant Availability Factor for the months from April’14 to Sept’14 and the percentage of Cumulative Availability of power from CGSs for the 1st six-months of FY 2014-15 varies from 74.29% to 86.89% as given in the Table below. However, based on the afore-said new CERC Tariff Regulations, 2014, GRIDCO proposes NAPAF of 83% for the NTPC-ER Stations for FY 2015-16 as per the bills raised by NTPC at present.

**Table-24
Cumulative Availability %of CGSs for the 1st six-months of FY 2015-16**

Stations	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Cumulative Availability %	Cumulative Availability % (NAPAF%) proposed by GRIDCO for FY 2015-16
TSTPS Stage-I	93.19	96.89	90.49	85.99	49.72	54.50	78.46	83
TSTPS Stage-II	97.92	97.75	74.60	71.11	85.18	94.79	86.89	83
FSTPS-I&II	89.68	84.90	75.18	77.17	70.06	65.87	77.14	83
FSTPS-III	37.86	92.91	78.86	85.34	76.73	74.02	74.29	83
KhSTPS St-I	95.08	77.31	75.60	78.51	91.52	94.84	85.48	83
KhSTPS St-II	96.42	95.64	80.87	57.47	62.72	66.93	76.68	83

215. The projection of net power procurement from the Central Thermal Generating Stations (CGSs) of Eastern Region for FY 2015-16 is estimated by GRIDCO as 7546.98 MU considering the allocated share of GRIDCO, NAPAF of 83%, Auxiliary Consumption as per the CERC Tariff Regulations, 2014 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 - 25
Availability of Power from Central Generating NTPC Stations for FY 2015-16

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 -I	1000	5.75	83	6,852.73	31.97	2,190.78	2.390%	2,138.42
TSTPS -II	2000	5.75	83	13,705.46	10.00	1,370.55	2.780%	1,332.44
FSTPS-I & II	1600	6.47	83	10,880.61	13.81	1,502.48	2.100%	1,470.92
FSTPS-III	500	5.75	83	3,426.36	16.87	578.16	2.100%	566.02
KhSTPS -I	840	9.00	83	5,557.80	15.40	855.89	2.080%	838.09
KhSTPS -II	1500	5.75	83	10,279.09	2.24	229.98	2.080%	225.19
Barh STPS-I&II	1157	5.75	83	7,928.61	12.57	996.63	2.080%	975.90
TOTAL				58,630.66		7,724.45		7,546.98

216. The Commission scrutinised the proposal of GRIDCO and observed that as per the CERC Tariff Regulations, 2014, though the NAPAF of the Central Thermal generating stations is fixed at 85%, in view of shortage of coal and uncertainty of assured coal supply on sustained basis experienced by the generating stations, the NAPAF for recovery of fixed charges shall be 83% till the same is reviewed based on actual feedback after 3 years from 01.04.2014. Therefore, the Commission accepts the proposal of GRIDCO for considering NAPAF of the central thermal power stations at 83% for FY 2015-16 for estimation of the ARR of GRIDCO. The Commission observed that GRIDCO is purchasing bundled solar power from Dadri & Faridabad, which includes thermal power from the unallocated quota of the NTPC stations. Hence, the share of thermal power purchase by GRIDCO from NTPC station increases accordingly. The matter has been discussed with GRIDCO officials during tariff proceedings and accordingly they have submitted the state share of power from ER-NTPC stations inclusive of this said bundle thermal power which has been considered by the Commission while estimating the quantum of power purchase by GRIDCO from ER-NTPC stations. Considering the Central Sector transmission loss provisionally as stated earlier

and NAPAF of 83%, the details of GRIDCO's drawl from Central Thermal Stations, estimated for the FY 2015-16 are given in the table below:

Table - 26
Drawal From Central Thermal Generating Stations for FY-2015-16

Central Thermal Stations	Installed Capacity (MW)	Aux. Cons. (%)	Availability considering 83% PLF & Auxiliary Consum. (MU)	GRIDCO Share (%)	GRIDCO Share (MU)	Estimated Share excluding Central Sector Transmission Loss (MU)	GRIDCO's proposal excluding Central Sector Transmission Loss (MU)
TSTPS –I	1000	5.75	6852.73	32.332	2215.65	2162.69	2,138.42
TSTPS –II	2000	5.75	13705.46	10.000	1370.55	1332.44	1,332.44
FSTPS-I& II	1600	6.47	10880.75	14.172	1541.99	1509.61	1,470.92
FSTPS-III	500	5.75	3426.36	17.138	587.21	574.88	566.02
KhSTPS –I	840	9.00	5557.80	15.763	876.08	857.86	838.09
KhSTPS–II	1500	5.75	10279.09	2.609	268.16	262.58	225.19
Barh STPS-I&II	1320	5.75	7918.00	14.788	1170.93	1146.58	975.90
TOTAL	8365		58,630.66		8030.55	7846.63	7,546.98

NTPC-Barh Super Thermal Power Station-Stage-I & II

217. In its ARR & BSP application for the FY 2015-16 GRIDCO has submitted that Ministry of Power (MoP), Govt. of India vide its letter dated 03.07.2012 has allocated a share of 21.11% to Odisha from Barh STPS Stage-I (3x660 MW) and 12.57% from Barh STPC Stage-II (2x660 MW) of NTPC in Bihar. As per the ERPC letter dtd. 14.11.2014, Unit-IV (i.e. 1st Unit of Barh Stage-II) has been commercially operated from 00:00 hrs of 15.11.2014. At present GRIDCO is availing power from this unit w.e.f. 15.11.2014. Further, as per the Petition filed by NTPC before the CERC, 2nd Unit of Barh Stage-II would be commercial operated from 30.06.2015. Accordingly, GRIDCO has calculated to draw 975.90 MU during the FY 2015-16 from this new central thermal power station. Further, based on the petition filed by NTPC before CERC for Barh Stage-I&II power stations, GRIDCO has projected the landed cost of power from this station at 663.94 Paisa/unit for the FY 2015-16 including the central transmission charge of 32.09 Paisa/unit.

218. The Commission further observed that Deptt. Of Energy, Govt. of Odisha vide their letters dated 28.06.2014, 23.08.2014 and 12.11.2014 have requested Ministry of Power, Govt. of India to de-allocate the NTPC power from the upcoming stations located outside of the Odisha except North Karanpura Super Thermal Power Station of NTPC situated in Bihar. Apart from this, Deptt. of Energy, Govt. of Odisha vide Letter dated 14.01.2015 have specifically requested Ministry of Power, Govt. of India for immediate de-allocation of power from Barh Stage-I&II station of NTPC. It is further observed that the cost of power from this new generating station is very high as compare to the rate of power available from IPPs and other sources inside the State. Therefore, the Commission does not considered the proposal of GRIDCO for drawal of 975.90 MU from Barh Thermal Power Station of NTPC for State use during the FY 2015-16 and also direct GRIDCO and the State Government to expedite the matter with Ministry of Power, Govt. of India for immediate de-allocation of power to the State of Odisha from this thermal generating station.

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

219. As mentioned above, the total estimated availability of power from different sources comes to 30768.07 MU. However, the total power requirement for drawal by DISCOMs for State use comes to 25776.23 MU. Since, the least cost power is available for state consumption, this costly power from Central Thermal Generating Stations has not been considered in the ARR of GRIDCO for consumption inside the State. However, GRIDCO may trade this power and earned some revenue to bridge the past gap. Hence, taking the least cost power procurement for the state from different generating stations, the Commission approves quantum of purchase for FY 2015-16 as given in the table below:

Table – 27
Quantum of Power Purchase from Various Sources for FY 2015-16
(Figures in MU)

Sources of Purchase	Commission's Approval for State Drawl for 2014-15	GRIDCO's Proposal for 2015-16	Estimated Availability for 2015-16	Commission's Approval for State Drawl for 2015-16
HYDRO (OLD)	3676.86	3650.36	3,676.86	3,676.86
Indravati	1942.38	2026.53	1,942.38	1,942.38
Machakund	262.50	262.50	262.50	262.50
Total Hydro	5881.74	5939.39	5881.74	5,881.74
OPGC	2663.74	2838.35	2838.27	2838.27
TTPS (NTPC)	3105.55	3177.25	3177.32	3177.32
IPPs	5205.24	7053.00	8313.17	6636.35
Total CGPs	-	-	-	-
Co-Generation Plants	1160.00	1224.62	1224.62	1224.62
Total Small Hydro	300.00	320.00	320.00	320.00
Biomass Energy	141.91	160.00	125.00	125.00
Solar Energy	105.00	127.00	127.00	127.00
TOTAL STATE	18563.18	20839.61	22007.12	20330.30
CHUKHA HPS	261.15	263.00	260.35	260.35
Tala HPS	142.96	142.00	141.60	141.60
Teesta-V HPS	510.53	513.00	512.37	512.37
Total Central Hydro	914.64	918.00	914.32	914.32
TSTPS St-I	2168.62	2138.42	2162.69	2162.69
TSTPS St-II	1346.04	1332.44	1332.44	1332.44
FSTPS I & II	1434.95	1470.92	1509.61	-
FSTPS III	-	566.02	574.88	-
KhTPS St-I	850.37	838.09	857.86	773.89
KhTPS St-II	217.92	225.19	262.58	262.58
Barh STPS-I & II		975.90	1146.58	-
Total Central Thermal	6017.89	7546.99	7846.63	4531.61
Total Central Sector	6932.53	8464.99	8760.95	5445.93
TOTAL GRIDCO	25495.71	29304.60	30768.07	25776.23

Power Procurement Cost

220. 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

221. OHPC has submitted the application for approval of its Annual Revenue Requirement and Tariff of its individual power stations separately for the FY 2015-16 in terms of Section-62, 64 and 86 of the Electricity Act, 2003 which has registered as Case No.65/2014. 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.
222. Accordingly, the cost of power purchase by GRIDCO from each of the power stations of OHPC is given in the table below:

Table – 28
Cost of Power Purchase from OHPC Stations for FY 2015-16

Name of the Power Station	Quantum of Power Purchase for 2015-16 (MU)	Approved Average Tariff for 2015-16 (P/U)	Cost of Power Purchase for FY 2015-16 (Rs. Cr.)
Burla	677.16	132.54	89.75
Chipilima	485.10	48.73	23.64
Balimela	1171.17	89.51	104.83
Rengali	519.75	112.89	58.67
Upper Kolab	823.68	52.92	43.59
Upper Indravati	1942.38	73.87	143.49
Sub-Total	5619.24	82.57	463.98
Machhkund	262.50	34.38	9.02
Total	5881.74	80.42	472.99

Talcher Thermal Power Station (TTPS)

223. Talcher Thermal Power Station is owned and operated by NTPC and tariff for this generating station is determined by Central Electricity Regulatory Commission (CERC).
224. **Fixed Charges:** GRIDCO has submitted that as per the final Tariff Order dated 15.05.2014 in Petition No.304 of 2009, the year wise Annual Fixed Charges for the period 2009-10 to 2013-14 have been fixed by the CERC. Further, NTPC-TTPS has filed the Tariff Petition before the CERC for the period 2014-19 as per the CERC Tariff Regulations, 2014. However, NTPC-TTPS is currently claiming the Monthly Fixed Charges provisionally as per the Annual Fixed Charge (AFC) of Rs.373.5929 Crore as applicable for FY 2013-14. However, in the present application, GRIDCO has considered the Fixed Cost of TTPS as Rs.398.2111

Crore for FY 2015-16 based on the Petition filed by NTPC-TTPS for fixation of Tariff for the period from 2014-19. Accordingly, GRIDCO has worked out the Fixed Cost per Unit of energy from TTPS as 125.33P/U at projected PLF of 88.10% and Aux. Energy Consumption of 10.50% for the proposed drawal of 3177.25 MU for FY 2015-16.

225. After scrutiny of the submissions of GRIDCO, the Commission observed that CERC vide its Order dated 15.05.2014 in Petition No.304 of 2009 has determined the Annual Fixed Charge (AFC) of Rs.373.5929 Crore for FY 2013-14 in respect of TTPS (NTPC), on which NTPC is currently claiming the Monthly Fixed Charges bills to GRIDCO provisionally. However, GRIDCO has filed an appeal before APTEL, New Delhi against the said Order dated 15.05.2014 which has been admitted as Appeal No.180 of 2014 and also GRIDCO has also filed a Writ Petition before Hon'ble High Court of Orissa against the CERC Tariff Regulation, 2009 in the matter of high normative O & M expenditures and relaxed norms of operation of Thermal Power Plant of TTPS. Both the petitions of GRIDCO are now sub-judice before the respective Forums. Further, the submission of NTPC before CERC for determination of fixed charges of TTPS for the period 2014-19 is yet to be finalized. Hence, the Commission provisionally consider the fixed cost of TTPS at Rs.373.593 crore for the FY 2015-16 as per the latest approval of CERC subject to decision of the judicial forums. Accordingly, the fixed charge per unit comes to 117.58 p/u for drawal of 3177.32 MU from TTPS during the FY 2015-16.

226. **Energy Charges:** GRIDCO has stated that as per the final Tariff Order by the CERC dated 15-05-2014 in Petition No. 304 of 2009 in consonance with the CERC Tariff Regulations, 2009, the Base Energy Charge for TTPS has been fixed as 108.475 P/U. Further, in the said Tariff Order, it has been mentioned that NTPC-TTPS is entitled to compute and recover the energy charges in accordance with Clause 21(6)(a) of the CERC Tariff Regulations, 2009. Accordingly, NTPC-TTPS is claiming the Energy Charges every month based on the Price and GCV of Coal and Oil for that month. However, taking into account the ever-increasing trend of cost of fuels, GRIDCO has considered 20% escalation over and above the

monthly highest Energy Charge of 131.30 P/U during April' 14 to September' 14 and proposes 157.56 P/U towards projected Energy Charges for FY 2015-16 as given in the table below:

Table –29
Fuel Price Adjustment (FPA) OF TTPS (in P/U)

Apr-14	May-14	June-14	July-14	Aug-14	Sept-14	Monthly Average Energy Charge	Monthly Highest Energy Charge	GRIDCO's proposal for FY 2015-16 considering 20% escalation on 131.30 P/U
111.5	109.8	116.0	124.8	128.8	131.3	120.0	131.3	157.56

227. The Commission scrutinized the proposal of GRIDCO and observed that the Base Energy Charge for TTPS has been fixed at 108.475 P/U in accordance with the CERC Tariff Regulations, 2009 and NTPC-TTPS is entitled to compute and recover the energy charges as per Clause 21(6)(a) of the said Regulations. Accordingly, NTPC-TTPS is claiming the Energy Charges every month based on the Price and GCV of Coal and Oil for that month. However, for computation of ARR & BSP of GRIDCO for the FY 2015-16, the Commission provisionally approves the variable charge of TTPS @ 129.41 P/U considering 5% escalation over 123.25 P/U i.e., the average of eight months of energy charges claimed by NTPC during the period from April, 2014 to November, 2014 in respect of TTPS.
228. **Year-end Charges:** GRIDCO has projected the year-end charges of TTPS to the tune of Rs.22.80 crore for the FY 2015-16 based on the actual charges paid by GRIDCO during 1st six months of the FY 2014-15, which includes electricity duty, charges towards water cess, UI overdrawl, SLDC charges and incentive. The Commission on examination of the claims approves (i) Electricity duty of Rs.7.46 crore calculated @ 20 paise/unit on auxiliary consumption of the generation at 88.10% PLF, (ii) Water Charge / Cess of Rs.0.25 crore, (iii) SLDC Charges of Rs.0.38 Crore and (iv) Rs.6.25 Crore towards incentive on excess generation beyond the normative PLF. The claim for UI overdrawl is not being allowed in the tariff since the possibility of overdrawl or underdrawl cannot be predicted at this moment Thus, the year-end charges approved for 2015-16 comes

to Rs.14.33 crore. The year-end charges proposed by GRIDCO and approved by the Commission for the FY 2015-16 is shown in the table below:

**Table – 30
Year-End Charges of TTPS**

ITEM	(Rs. in crore)		
	OERC approval for FY 2014-15	GRIDCO's Proposal for FY 2015-16	OERC approval for FY 2015-16
Electricity duty@ 20P/U	7.29	7.84	7.46
Water Cess / Charge	0.24	0.25	0.25
UI overdrawl	0.00	0.38	0.00
SLDC charges	0.38	9.30	0.38
Incentive	3.71	5.04	6.25
Total (Rs. Crore)	11.61	22.08	14.33
ESO(MU)	3105.55	3177.25	3177.32
Per unit cost P/U	3.74	7.18	4.51

229. After taking into account all the above estimated cost, the approved tariff for TTPS power comes to 251.50 p/u comprising of fixed cost of 117.58 p/u, variable charges of 129.41 p/u and year end charges of 4.51 p/u.

IB Thermal Power Station of OPGC

230. OPGC has not filed its ARR & Tariff application with OERC for the year 2015-16. GRIDCO has submitted that they had requested OPGC to file the ARR application for FY 2015-16 before the Commission, to which they have intimated to await the order of the Commission on the joint application filed as per the settlement notified by the Govt. of Odisha. In the tariff order for the previous year, the Commission has directed that the bulk purchase price based on tariff determined by it shall be applicable to sale of OPGC's power to GRIDCO under the single buyer model. Thus, GRIDCO had proposed a tentative tariff of OPGC in its ARR application for FY 2015-16 after detail scrutiny of the tariff calculation submitted by OPGC to GRIDCO. Accordingly, GRIDCO has proposed the Fixed Charge of 71.55 P/U and Energy Charge of 122.57 P/U for the power procurement from OPGC considering the energy drawal of 2838.35 MU.
231. After scrutiny of the above proposal, the Commission provisionally accepts the submission of GRIDCO and calculate the Fixed Charge at 70.58 P/U and Energy

Charge at 122.57 P/U towards purchase of power from OPGC during FY 2015-16 considering the energy drawal of 2838.27 MU at the PLF of 84.31% and Auxiliary Consumption of 8.5% as per OERC (Terms and Conditions of for Determination of Generation Tariff) Regulations, 2014.

232. **Year-end Charges:** In its application, GRIDCO has proposed the total year-end charges of OPGC to the tune of Rs.50.26 crore on account of water tax/cess, electricity duty, income tax, incentive, land rent/cess, Electrical Inspection Fees and SOC & MOC for SLDC. GRIDCO has mentioned that, this projection of Year End Charges for FY 2015-16 is as per the projection submitted by OPGC in its tentative tariff calculation sheet for FY 2015-16 to GRIDCO. However, the expenditures towards ESP,CHP,EPE, ash pond C with HDPE lining and Ash utilisation and ash utilisation expenses as projected by OPGC in its tariff calculation, have not been considered by GRIDCO as such expenditures are subject to scrutiny after accordance of regulatory approval of amended PPA (of Unit #1 and #2) by the Commission.
233. After scrutiny, the Commission accepts the proposal of GRIDCO and provisionally estimated the total amount of Rs.50.26 Crore towards year-end charges for the drawl of power from OPGC during FY 2015-16.
234. After taking into account all the above estimated cost, the provisionally approved price for OPGC power comes to 210.85 p/u for the FY 2015-16 comprising of fixed cost of 70.58 p/u, energy charges of 122.57 p/u and year end charges of 17.70 p/u.

Captive Generation Plants (CGPs) and Co-generation Plants

235. GRIDCO in its submission has proposed that, to meet its RPO, it will procure 1224.62 MU from Co-generation plants at the rate of Rs.2.75 per unit in line with the orders of the Commission dtd.23.11.2010, 29.08.2011 and 1.10.2012. Since no further revision of CGP and Co-generation price has been made, the Commission accepts the proposal of GRIDCO for adopting the average price of 275 p/u provisionally towards procurement of power from CGP and Co-generation plants for the purpose of computation of ARR of GRIDCO for the FY 2015-16.

Accordingly, the cost of power purchase from these sources comes to Rs.336.77 cr. for the approved energy drawl of 1224.62 MU. In case of any revision in CGP price for FY 2015-16 the revised price shall be applicable and any adjustment in revenue due to such price revision will be considered in the truing up exercise.

Power Purchase from Renewable Sources

236. In its ARR for FY 2015-16, GRIDCO has projected to procure 210 MU from Meenakhi Small Hydro Electric Project and 110 MU from Samal Small Hydro Electric Project @ Rs.3.68 per unit during FY 2015-16. The total procurement cost of this 320 MU of small hydro Renewable Energy amounts to Rs.117.76 crore.
237. The Commission in its Order dtd.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.117.76 Cr towards procurement of 320 MU of power at the rate of 368.00 P/U from the said small hydel sources during FY 2015-16 is approved by the Commission.
238. The Commission has approved 125.00 MU to be procured from biomass sources. The rate will be governed by the order of the Commission dtd.15.01.2014 where the Commission has determined the generic tariff for biomass energy for the control period 2013-14 to 2015-16 and order dtd. 01.03.2014 where the tariff for Biomass energy has been re-determined for the previous control period 2010-11 to 2012-13. Accordingly the Commission approves cost of Rs.71.95 cr. at the average of 575.60 p/u for procurement of 125.00 MU from Biomass renewable sources for the purpose of computation of ARR of GRIDCO for the FY 2015-16.
239. GRIDCO has proposed to procure 127 MU of solar energy from different sources at the total cost of Rs.102.14 cr. with an average rate of 804.25 p/u as indicated in the Table below:

Table -31
Procurement & Cost of Solar Power during FY 2015-16

Sl. No.	Solar RE Sources	Energy (MU)	Rate (P/U)	Total Cost (Rs. Cr.)
1	8 Nos. of Solar PV projects of 1 MW each under RPSSGP	13	628	8.16
2	20 MW from NVVN through 'New Projects scheme' under JNNSM, Phase-1	25	1070	26.75
3	5 MW through NTPC from Solar PV project at Dadri	8.5	1294	11.00
4	5 MW through NTPC from Solar PV project at Faridabad	8.5	935	7.95
5	5 MW from M/s Alex Green Energy Ltd. through OREDA State Scheme	8	700	5.60
6	25 MW from M/s ACME Odisha Solar Power Pvt. Ltd.	42	728	30.58
7	30MW through Solar Energy Corporation of India (SECI) under JNNSM, Phase –II, Batch-I	22	550	12.10
	Total	127	804.22	102.14

240. The Commission scrutinized the above proposal of GRIDCO along with the energy bills raised by the solar generators in recent past and approves the same for the computation of ARR of GRIDCO for the FY 2015-16. Accordingly, the procurement cost comes to Rs. 102.14 crore at an average rate of 804.22 p/u for procurement of total 127 MU of solar power during the FY 2015-16.

IPPs

241. With regard to power purchase cost from M/s. Sesa Sterlite Ltd. (M/s. SSL), GRIDCO has submitted to procure 4199 MU at an average rate of 210.56 p/u and a total cost is estimated at Rs.884.14 crore. The tariff order for M/s. SSL, (the then M/s SEL) passed by the Commission for the period from FY 2009-10 to 2013-14 has been challenged before the APTEL and the order is awaited. Further M/s. SSL has filed the tariff petition before the Commission from the FY 2014-15 to 2018-19 which is pending before the Commission. However, pending disposal of the aforesaid appeal before the ATE and the tariff petition before OERC, while considering the ARR of GRIDCO for the FY 2014-15, the Commission has fixed a provisional tariff of 207.32 P/U towards procurement of power by GRIDCO from M/s SSL consisting of fixed charge of 90.25 P/U, energy charge of 114.94

P/U and year end charges of 2.13 P/U. Keeping the fixed and year-end charges constant and by increasing the variable charge by 10%, GRIDCO has proposed the variable charge for FY 2015-16 as 125 P/U. M/s. SSL shall provide GRIDCO 25% of the power sent out at the tariff approved by the Commission and 7% of the power sent out variable cost. Hence out of the total energy of 4199 MU GRIDCO has projected 294 MU @ 125 Paisa/Unit i.e. at variable charge and balance 3905 MU @ 217 Paisa/Unit i.e. fixed charges plus variable charges. Accordingly total power procurement cost has been projected at Rs. 884.14 Crore for procurement of 4199 MU at an average rate of 210.56 P/U during FY 2015-16.

242. The Commission observed that the tariff petition filed by M/s. SSL is yet to be disposed by the Commission. Hence for the purpose of computation of ARR of GRIDCO for the FY 2015-16, it will be prudent to provisionally consider the fixed cost as approved by OERC for FY 2013-14 to be applicable for the FY 2015-16. Similarly for energy charge, the average energy charge for the period April, 2014 to December, 2014 of the FY 2014-15 of Talcher Super Thermal Power Station of NTPC in Odisha to be applicable for the IPP of M/s SSL. In this order the Commission has considered the variable charge of TSTPS-I at 147.10 P/U. In view of the above, the Commission fixes the provisional tariff for the IPP of M/s. SSL for the FY 2015-16 at 237.36 p/u comprising of the energy charge of 147.10 p/u and fixed charges of 90.25 p/u. Further, though the Commission has approved 4199.54 MU towards drawal from M/s SSL for state use, the availability towards state share has been computed at 5375.42 MU. Out of which 1175.87 MU i.e. 7% of the state share of 5375.42 MU will be charged at variable cost and balance procurement of power for state use will be charged at the full tariff i.e. fixed cost plus variable cost. Accordingly, the power procurement cost comes to Rs.890.66 crore at an average rate of 212.09 p/u considering the approved quantum of 4199.54 MU to be procured from M/s. SSL for state use during the FY 2015-16. As stated earlier this figures are provisional and the final tariff will be determined by the Commission after disposal of the petition filed by M/s.SSL before the Commission.

243. Further, GRIDCO has submitted that pending approval of tariff by the Commission, they have proposed to procure 1798 MU from the IPP of M/s. GMR Kamalanga Energy Ltd. during FY 2015-16 at a cost of Rs.494.45 cr. @ 275 p/u provisionally. However, the Commission observed from the submission of the GRIDCO that as per PPA with M/s. GMR Kamalanga Energy Ltd., GRIDCO is entitled to procure 25% of the power sent out at the tariff to be determine by the Commission and the power generated in excess of 80% PLF shall be made available to the state at variable cost. The estimation of 1798 MU is found to be at 85% PLF. Hence, the Commission considers 1692 MU i.e. generation at 80% PLF at a provisional rate of 275 p/u and the balance power of 106 MU @147.10 p/u i.e. at variable charge considered for the TSTPS-I in our state for the purpose of computation of ARR of GRIDCO for FY 2015-16. Accordingly, the power procurement cost comes to Rs.480.92 crore at an average rate of 267.48 p/u considering the approved quantum of 1798 MU to be procured from M/s. GMR Kamalanga Energy Ltd. for state use during the FY 2015-16.
244. Further, GRIDCO has proposed to procure 1002 MU from M/s Jindal India Thermal Power Ltd. (M/s JITPL) during FY 2015-16 for state use at the variable cost of 125 p/u with the total cost of Rs. 125.25 Crore. However, the Commission has earlier approved for purchase the low cost power of 584.81 MU from the IPP of M/s JITPL during the FY 2015-16 for State use at variable cost. Pending finalisation of the tariff of such power from M/s JITPL, the Commission considers a provisional rate of 147.10 p/u for the energy to be procured from the IPP of M/s JITPL during the FY 2015-16 as considered for the other IPPs. Accordingly, the power procurement cost comes Rs.86.03 cr. @ 147.10 p/u for purchase of 584.81 MU by GRIDCO for State use.
245. Furthermore, GRIDCO has proposed to procure 54 MU from M/s Nava Bharat Ventures Limited (M/s NBVL) during the FY 2015-16 for state use at a provisional price of 125 p/u with a total cost of Rs. 6.75 Crore. The Commission has earlier approved for purchase of 54 MU from the IPP of M/s NBVL during the FY 2015-16 for State use at variable cost. Pending finalisation of the tariff of such power from M/s NBVL, the Commission considers a provisional rate of

147.10 p/u for the energy to be procured from the IPP of M/s NBVL during the FY 2015-16 as considered for the other IPPs. Accordingly, the power procurement cost comes Rs.7.94 cr. @ 147.10 p/u for purchase of 54 MU by GRIDCO for State use.

246. Thus, the procurement cost of total 6636.35 MU from the above four IPPs is Rs.1465.55 cr. at an average rate of 220.84 p/u as shown in the Table below:

Table -32
Power Procurement & Cost from IPPs during FY 2015-16

IPPs	Quantity	Provisional Rate	Cost
	(MU)	(P/U)	(Rs. Crore)
M/s. Sterlite Energy Ltd.	4199.54	212.09	890.66
M/s GMR Kamalanga	1798.00	267.48	480.92
M/s Jindal India Thermal Power Ltd.	584.81	147.10	86.03
M/s Nava Bharat Ventures Ltd.	54.00	147.10	7.94
Total	6636.35	220.84	1465.55

247. Pending the finalization of the tariff for the aforesaid IPPs, the Commission considered the above price provisionally only for the purpose of computation of ARR of GRIDCO for the FY 2015-16. However, GRIDCO may make payment of the energy bill of these IPPs after due scrutiny as per the PPA. 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

248. **Chukha:** GRIDCO has stated that the procurement cost of power from Chukha for FY 2015-16 has been calculated based on the rate claimed in the bill served to GRIDCO for September, 2014, which comes to 184.00 P/U including trading margin @ 4 paise/unit to be paid to PTC India as Nodal Agency. GRIDCO has, therefore, proposed a rate of energy charges at 187.95 paise/unit for 2015-16 including Central Transmission Loss of 2.10%. Thus, the power purchase cost of 263.00 MU from Chhuka Hydro Station @ 187.95 P/U has been worked out by GRIDCO to Rs.49.43 crore for FY 2015-16 excluding transmission charges of PGCIL.

249. The Commission scrutinized the application of GRIDCO and approves the rate of 187.95 paise/unit considering the central transmission loss @ 2.10% for the power procurement from Chukka for FY 2015-16 as proposed by GRIDCO. So the cost for Chukka power comes to Rs.48.93 crore for the approved drawal of 260.35 MU for FY 2015-16. The details are given in Table below.

Table – 33

	GRIDCO's Proposal for FY 2015-16	Commission's Approval for FY 2015-16
Net Energy Drawal (MU)	263.00	260.35
Energy Charge (P/U)	184.00	184.00
Energy Charge incl. Tr. Loss (P/U)	187.95 (C.T.L. of 2.10%)	187.95 (C.T.L. of 2.10%)
Cost of Chukka Power (Rs. Crore)	49.95	48.93

250. **TALA:** GRIDCO has submitted that the rate of 202 P/U including trading margin @ 4 paise/unit paid to PTC India as Nodal Agency has been considered for estimating the power purchase cost from TALA during the FY 2015-16. This rate of 202 P/U is based on the bills served to GRIDCO w.e.f. 24.11.2011. Considering Central Transmission Loss of 2.10%, the rate of TALA Power comes to 206.33 p/u. Taking the drawl of 142.00 MU, the power purchase cost from TALA HEP comes to Rs.29.30 crore for the FY 2015-16 excluding transmission charges of PGCIL.

251. The average rate per unit of TALA power is worked out by GRIDCO to 206.33 p/u considering central transmission loss of 2.10% for FY 2015-16, which is accepted by the Commission. Hence, the total cost of TALA Power comes to Rs.29.22 crore for the approved drawal of 141.60 MU for FY 2015-16. The details are given in Table below.

Table – 34

	GRIDCO Proposal for 2015-16	Commission's Approval for 2015-16
Net Energy Drawal MU	142.00	141.60
Energy Charge (P/U)	202.00	202.00
Energy Charge incl. Tr.Loss (P/U)	206.33 (C.T.L. of 2.10%)	206.33 (C.T.L. of 2.10%)
Cost of Tala Power (Rs. in Cr.)	29.30	29.22

252. **TEESTA:** GRIDCO has stated that the Energy Charge Rate (ECR) being claimed by NHPC–TEESTA in the present bills is 132.30 P/U. The ECR in case of TEESTA station constitute 50% of the total charges and balance 50% constitute the fixed charges. Thus, the per unit fixed charge for TEESTA station works out to be 132.30 p/u, the total per unit cost being 264.60 p/u. Considering the central sector loss @ 2.10% the proposed rate for TEESTA works out to be 270.28 p/u. So, the estimated power purchase cost from TEESTA–V HEP comes to Rs.138.65 crore considering the proposed drawl of 513.00 MU for FY 2015-16.
253. After due scrutiny, the Commission observed that CERC vide its Order dated 23.01.2014 has approved the Annual Fixed cost of TEESTA-V at Rs. 497.10 crore for the FY 2013-14 and accordingly the capacity charge comes to 111.12 P/U. Considering the saleable energy of 2236.78 MU. Further the modified ECR comes to 116.90 P/U. Accordingly the average rate of TEESTA Power comes to 228.02 p/u. Hence, the Commission considers the same provisionally and calculate the average rate per unit of TEESTA power @ 232.91 P/U inclusive of central transmission loss of 2.10% for FY 2015-16. Accordingly, the cost of TEESTA power comes to Rs.119.34 crore for the approved drawal of 512.37 MU during FY 2015-16. The details are given in Table below.

Table – 35

	GRIDCO Proposal for FY 2015-16	Commission's Approval for FY 2015-16
Net Energy Drawal MU	513.00	512.37
Energy Charge (P/U)	264.60	228.02
Energy Charge incl. Tr. Loss (P/U)	270.28 (C.T.L. of 2.10%)	232.91 (C.T.L. of 2.10%)
Cost of Teesta Power (Rs. In Crore)	138.65	119.34

Central Sector Thermal Power Stations:

254. GRIDCO in its ARR filing submitted that the Capacity Charges (Fixed Cost) of respective NTPC Stations are being claimed by NTPC as per the relevant Tariff Order / Regulations notified by the CERC applicable from time to time. NTPC have filed Petitions before the CERC as per the new CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Fixed Cost for its various Generating Stations which is pending before the CERC. However, the

Capacity Charges of the relevant NTPC Stations are now being billed on GRIDCO by applying the Fixed Cost already determined by the Central Commission as per the earlier CERC (Terms and Conditions of Tariff) Regulations, 2009 valid for the period from 2009-14. Since the Tariff Petitions have already been filed by NTPC before CERC for determination Fixed as well as Variable Cost as per the CERC (Terms and Conditions of Tariff) Regulations, 2014, CERC may finalise the revised Tariff including the Fixed Cost of central thermal stations at any point of time. Hence, GRIDCO has considered the revised Fixed Cost as per the Petitions filed before CERC for different NTPC Stations.

255. Accordingly, GRIDCO has projected to pay about Rs.820.67 Crore as Capacity Charge (Fixed Charge) towards its share from NTPC Stations at the availability of 83% irrespective of the drawl from these Stations during FY 2015-16. 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 -36
Fixed Cost proposed by GRIDCO for CGS NTPC -ER Stations for FY 2015-16

Central Thermal Stations	Annual Fixed Cost for FY2014-15 as per CERC Order (Rs. Cr.)	Annual Fixed Cost projected by GRIDCO for FY 2015-16 (Filed by NTPC) (Rs. Cr.)	Proposed GRIDCO Share (%)	GRIDCO F.C. share for FY15-16 at normative availability of 83% (Rs. Cr.)	GRIDCO's Proposed drawal for FY15-16 after C.S. Loss (MU)	Fixed Cost (P/U)
TSTPS -I	583.601	611.738	31.97	195.570	2138.420	91.450
TSTPS -II	1113.100	1135.160	10.00	113.520	1332.440	85.190
FSTPS-I&II	941.582	975.847	13.81	134.750	1470.920	91.610
FSTPS-III	586.62	563.699	16.87	95.120	566.020	168.050
KhSTPS-I	552.844	579.059	15.40	89.170	838.090	106.400
KhSTPS-II	1261.550	1216.080	2.24	27.210	225.190	120.820

256. **Fixed Cost:** Tariff of Central Thermal Generating Stations is governed by CERC tariff notifications. Though NTPC have filed Petitions before the CERC as per the CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Fixed as well as Variable Cost for its Generating Stations, CERC have not yet issued the tariff Orders. Further, the Capacity Charges of the relevant NTPC

Stations are now being billed on GRIDCO based on the Fixed Cost already determined by the Central Commission as per the previous CERC (Terms and Conditions of Tariff) Regulations, 2009. However, GRIDCO in its ARR Application for the FY 2015-16 has considered the revised Fixed Cost as per the filing of NTPC based on the new CERC Tariff Regulations, 2014. The Commission scrutinised the proposal of GRIDCO and observed that the fixed cost for the Central Thermal Generating Stations is yet to be determined by CERC for the period 2014-19, hence calculate the fixed cost of power purchase from central sector thermal stations provisionally based on Orders already issued by CERC for these stations considering the latest share allocation to the state by MoP as is shown in table below:

Table – 37
Fixed Cost considered by the Commission for Central Thermal Stations for 2015-16

Name of Power Station	Fixed cost approved by CERC (Rs. In Cr.)	GRIDCO share estimated by the Commission (%)	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 2015-16 (Rs. In Cr.)	Estimated energy Drawal after Central Tr. Loss (MU)	Commission's approval including Central Tr. Loss (P/U)
TSTPS –I	583.601	32.332	195.57	85.16	188.69	2162.69	87.25
TSTPS –II	1113.100	10.000	113.52	81.22	111.31	1332.44	83.54
FSTPS-I&II	941.582	14.172	134.75	86.54	133.44	1509.61	88.39
FSTPS-III	586.62	17.138	95.12	171.21	100.53	574.88	174.88
KhSTPS- I	552.844	15.763	89.17	99.47	87.15	857.86	101.58
KhSTPS–II	1261.550	2.609	27.21	122.73	32.91	262.58	125.34

257. In view of the latest development in case of NTPC-TTPS interest levied on revised fixed cost, GRIDCO should plead before CERC for early decision on fixed cost and exemption of interest component for the revised fixed cost. For the other NTPC stations, the matter is pending before CERC for the next control period, GRIDCO shall plead before CERC proactively so that the consumer are not affected.

258. **Energy Charge Rate (ECR):** GRIDCO stated that as per the CERC Tariff Regulation, 2009-14, the cost of Secondary Fuel Oil (SFO) was included in fixed cost of the Thermal Central Generating Stations (CGS). However, as per the new CERC Tariff Regulations, 2014-19, it will now be included in the Energy Charges of CGS Stations. However, at present, NTPC is raising bills as per the previous

Regulations, 2009-14. Since NTPC has already filed Tariff Petition before the CERC based on the new Tariff Regulations, 2014-19, GRIDCO in its ARR application has proposed 20% escalation in ECR over the weighted average ECR of first six months of FY 2013-14 by recasting the same as per the new CERC Tariff Regulations, 2014-19 as shown in the table below:

Table – 38
Energy Charge Rate (ECR) of NTPC Stations for FY 2015-16 Projected by GRIDCO

Central Thermal Stations	Weighted Avg. ECR of 1st six months of FY 2014-15 as per the NTPC bills in terms of Old CERC Tariff Regulations, 2009 (P/U)	Weighted Avg. ECR of NTPC Stations recasted by GRIDCO as per the New CERC Tariff Regulations, 2014 (P/U)	Projection for FY 2015-16 (20% hike over Wtd. Avg. ECR of 1st six months of 2014-15) calculated as per New Regulation(P/U)
TSTPS Stage-I	147.82	146.46	175.75
TSTPS Stage-II	145.86	144.06	172.87
FSTPS-I&II	302.11	300.41	360.49
FSTPS-III	333.95	297.72	357.26
KhSTPS Stage-I	266.85	265.00	318.00
KhSTPS Stage-II	249.99	251.40	301.68

259. 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, 2014 to December, 2014 are given in the table below:

Table-39
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 Rs./ KWH	ECR Rs./ KWH	Cost of Coal (Rs./MT)	GCV of Coal Kcal/Kg	ECR Rs./ KWH	ECR Rs./ KWH	Cost of Coal (Rs./MT)	GCV of Coal Kcal/Kg	ECR Rs./ KWH
Apr-14	3607.2	3111.0	3.044	2.904	2637.9	2704.0	2.670	2.520	1734.2	2907.0	1.541
May-14	3599.6	3198.0	2.955	2.791	2468.9	2700.0	2.502	2.362	1714.1	3078.0	1.439
Jun-14	3694.2	3089.3	3.140	2.928	2383.0	2570.0	2.537	2.395	1801.2	3181.0	1.463
Jul-14	3986.4	3208.0	3.263	3.234	2982.0	2766.0	2.950	2.785	1842.5	2959.0	1.608
Aug-14	3843.3	3100.0	3.255	3.227	2702.9	2790.0	2.651	2.502	1675.4	3051.7	1.418
Sep-14	3812.4	3242.0	3.087	3.060	2963.1	2721.0	2.980	2.813	1563.1	3074.0	1.314
Oct-14	3478.1	3233.0	2.824	2.800	2813.7	2775.0	2.775	2.619	1907.6	3281.0	1.502
Nov-14	3515.4	3314.0	2.785	2.761	2522.0	2865.0	2.409	2.274	1911.4	3108.5	1.588
Dec-14	3942.9	3392.0	3.052	3.025	2579.2	2812.0	2.510	2.369	1791.7	3353.0	1.380
Avg from 4/14 to 12/14	3719.9	3209.7	3.043	2.969	2672.5	2744.8	2.664	2.515	1771.2	3110.4	1.471

260. From the above table it is found that the ECR for FSTPS-I & II are varied from 278.50 p/u to 326.30 p/u, for FSTPS-III it varies from 276.10 p/u to 323.40 p/u, for KhSTPS-I, it varies from 240.90 p/u to 298.00 p/u, for KhSTPS-II, it varies from 227.40 p/u to 281.30 p/u and for TSTPS-I & II, it varies from 131.40 p/u to 160.80 p/u for the period from April, 2014 to December, 2014. It is observed that the ECR have varied inconsistently. Hence it is difficult to assess the actual ECR for the ensuing year 2015-16. The comparisons of ECR of different years are given below.

Table – 40
Energy Charge Rate (ECR) in Paise /Unit

	Approval for 2013-14	Actual Average for 2013-14	Approval for 2014-15	GRIDCO Proposal for 2015-16 (20% hike over 1st Six months of Current Year)	Avg. actual for 2014-15 upto Dec,14	Max ECR from 4/14 to 12/14	Min ECR from 4/14 to 12/14	Avg ECR of last 6 months i.e. 7/14 to 12/14
	ECR P/U	ECR P/U	ECR P/U	ECR P/U	ECR P/U	ECR P/U	ECR P/U	ECR P/U
TSTPS-I	167.82	148.20	148.23	175.75	147.10	160.85	131.35	146.84
TSTPS-II		148.29		172.87				
FSTPS- I & II	293.84	311.27	320.61	360.49	304.29	326.25	278.51	304.44
FSTPS- III	291.28	308.41	319.50	357.26	296.90	323.40	276.07	301.78
KHSTPS-I	247.78	278.45	277.02	318.00	266.44	298.00	240.89	271.24
KHSTPS-II	233.90	260.88	266.34	301.68	251.51	281.29	227.39	256.04

261. The wide variation in ECR in recent times was due to use of different types of coal used by NTPC in its Plants for power generation. The Commission further observed that the coal and oil price at present is in a decreasing trend. It may further decrease due to re-allotment of coal mines and prioritizing the supply of coal to the central sector power stations. Therefore, the Commission estimated the ECR for FY 2015-16 without any escalation over the average of actual ECR of the last nine months i.e. from April, 2014 to December, 2014, as indicated in Table below.

Table – 41
Energy Charge Rate (ECR) of CGSs for 2015-16

(Figs in Paise/Unit)

Stations	GRIDCO's proposal with 20 % hike over Wtd. Avg. ECR of 1st six months of FY 2014-15	Actual Average ECR for the period from April, 2014 to Dec,14 (excluding central Tr. Loss)	Approval of the Commission considering the Avg. of actual ECR for the period from April, 2014 to Dec,2014 (excluding central Tr. Loss)	Approval of the Commission including central Tr. Loss
TSTPS-I	175.75	147.10	147.10	150.70
TSTPS -II	172.87	147.10	147.10	151.31
FSTPS- I & II	360.49	304.29	304.29	310.82
FSTPS - III	357.26	296.90	296.90	303.27
KHSTPS -I	318.00	266.44	266.44	272.10
KHSTPS - II	301.68	251.51	251.51	256.85

262. In case of any variation in ECR during 2015-16 over and above the rate approved 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 2016-17.
263. **Year-end Adjustment Charges (YEA):** GRIDCO had proposed the year-end adjustment charges of central generating stations for FY 2015-16 to the tune of Rs.9.24 crore with the projected Central Sector loss based on the actual payment of Year end Charges for FY 2013-14 and for the 1st six months of FY 2014-15.
264. The Commission scrutinized the above proposal of GRIDCO and accepted the Year End Charges of Rs.7.40 Cr. for the FY 2015-16 which is at the level of the actual Year End Charges for the FY 2013-14. However, for Electricity Duty, the Commission approved Rs.4.38 Crores prorating actual figure for 1st six month of Current Year FY 2014-15. Accordingly, the year-end charges approved by the Commission including central transmission loss are given in the table below.

Table – 42

Year End Charges Approved for the FY 2015-16

Central Generating Stations	Water/ Pollution Cess (Rs. Cr.)	Electricity Duty (Rs. Cr.)	SOC & MOC charges (Rs. Cr.)	Total (Rs. Cr.)	Estimated energy Drawal including Central Tr. Loss (MU)	Rate including loss (P/U)	GRIDCO Proposal including loss (P/U)
TSTPS -I	0.11	2.70	0.59	3.40	2215.65	1.54	2.02
TSTPS-II	0.06	1.67	0.28	2.01	1370.55	1.47	2.19
FSTPS- I & II	0.96	0	0.34	1.30	1541.99	0.84	0.90
FSTPS - III	0	0	0.32	0.32	587.21	0.54	0.57
KhSTPS -I	0.06	0	0.23	0.29	876.08	0.33	0.35
KhSTPS -II	0.01	0	0.06	0.07	268.16	0.26	0.29
Total	1.20	4.38	1.82	7.40	6859.62	0.92	1.41

Transmission Charge for PGCIL System

265. 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 has been effective 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 rates for every customer (such as generator or demand customer) using the aforesaid method. The Point of Connection (PoC) rates shall be on Rs/MW/Month basis. Subsequently, CERC vide its Order dtd.28.03.2014 have furnished the Slab PoC Rates for the period April to June, 2014 & PoC Loss Slab for New Grid as well as SR Grid.

266. Accordingly, GRIDCO has received first part of the Bill (Bill #1) amounting to Rs.23.30 Crore for the month of April'14 for the approved Long Term Access (LTA) of 1185.67 MW. Based on the bills received during April, 14 to Sep, 14 GRIDCO proposes to pay an amount of Rs.324.47 Crore for the ensuing year 2015-16 including projected PoC Charges of Barh TPS II.
267. GRIDCO has not been receiving any Bill towards the second part of Bill (Bill #2) due to absence of additional Medium Term Open Access. The third part of the Bill (Bill #3), which is basically year end adjustment in nature, has been received by GRIDCO on Quarterly basis. GRIDCO has received the bills on this account amounting to Rs.3.75 Crore for the period from Jan,14 to Mar,14 and Rs. 12.05 Crore for the period from Apr'14 to Jun'14. Assuming the same amount to be received for the entire year, GRIDCO proposes Rs.31.60 Crore towards Bill #3 for the ensuing year 2015-16. PGCIL is also furnishing the deviation bills (Bill #4) as per the provision mentioned in the Regulation which is based on deviation from the approved withdrawal & the exact figure cannot be predicted earlier. However, considering the bills received during the last six months and prorating the same for a year, GRIDCO proposes an amount of Rs. 0.05 Crore payable towards Bill #4 for the ensuing year FY 2015-16.
268. Further, PGCIL is also raising the bills frequently for the Pre PoC period basing upon the CERC Orders revised from time to time. Such bills received during April'14 to Sept'14 are amounting to Rs.0.49 Crore. Considering aforesaid bills, GRIDCO proposes to pay an amount of Rs.0.98 Crore towards such bills during the ensuing year FY 2015-16. Besides the above bills, GRIDCO is also paying for ULDC and Communication Charges amounting to Rs.3.87 Crore for the period from Apr'14 to Sep'14 basing on which GRIDCO proposes to pay an amount of Rs.7.75 Crore for the ensuing year i.e. FY 2015-16.
269. However, GRIDCO has received an amount of Rs. 19.01 Crore towards Short-Term Open Access (STOA) Charges for the period from April,14 to Sept,14. Accordingly, GRIDCO proposes Rs.38.02 Crore to be received on account of STOA Charges for the ensuing year 2015-16. With the above submission,

GRIDCO has estimated the Transmission Charges to Rs.326.83 Crore payable for the ensuing year FY 2015-16. Considering energy drawal of 10,459.34 MU (Gross Energy of 7724.45 MU from NTPC-ER Thermal Stations plus 1798 MU from GKEL plus 936.89 MU from Central Hydro Stations) and after allowing 2.62% of CTU loss, the per unit PGCIL Transmission Charge including loss has been worked out by GRIDCO to 32.09 P/U.

270. Further, in the compliance to Commission's queries on ARR, GRIDCO submitted that the stay on CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 is vacated by the Hon'ble High Court of Delhi and in line with order of the Hon'ble High Court of Delhi pronounced on 30.07.2013, GRIDCO has already paid the arrear PoC charges amounting to Rs.152.716 Crore to M/s. PGCIL in eight monthly mutually agreed installments in FY 2013-14. During the last hearing on 16.10.2014 before the Hon'ble Delhi High Court, CERC sought some more time in order to bring forth some changes in the existing CERC PoC Regulation, 2010 through its proposed 3rd Amendment to the said Regulation. Hon'ble High Court acceded to the request of the CERC and accordingly, adjourned the matter & fixed the next date of hearing on 05.03.2015.
271. 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 CERC (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2010 pertaining to PGCIL transmission charges is sub-judice. However, Hon'ble High Court of Delhi has vacated the stay on the said CERC Regulation. On vacation of the stay by the Hon'ble Court, the Commission feels it prudent to provisionally consider the PGCIL transmission charges in line with the CERC Regulations for the purpose of computation of the ARR of GRIDCO for FY 2015-16. However, any deviation after final judgment of the Hon'ble Court shall be adjusted and effected in the truing up exercise of GRIDCO. Therefore, the Commission scrutinised the submission of GRIDCO and estimated that the PoC charges towards Bill #1 will come to Rs.307.081 crore based on the existing CERC Orders for the FY 2014-15, hence provisionally approves the same for the ensuing year 2015-16. Similarly, the Commission scrutinized the Bill #3 raised bi-annually by

PGCIL for the period from October, 2013 to March, 2014 and another from April, 2014 to September, 2014 and the total amount claimed by PGCIL for a complete year on account of Bill #3 found to be Rs.19.05 crore. The Commission provisionally approves the same for the ensuing year 2015-16. The Commission accepts the amount of Rs.0.05 crore proposed by GRIDCO towards Deviation charges of PGCIL in Bill #4 for the ensuing year 2015-16. Further the Bill #2 has not yet been raised by PGCIL to GRIDCO due to absence of additional medium-term Open Access. Accordingly, the Commission provisionally approves the total amount of Rs.326.18 crores towards transmission charges of PGCIL for the FY 2015-16 on account of Bill #1, Bill #3 and Bill #4 against Rs. 356.12 Crore proposed by GRIDCO.

272. The Commission also scrutinise the ULDC & Communication Charges as proposed by GRIDCO in the ARR for FY 2015-16 and provisionally approves the same for pass through in the tariff. Further the Commission observed that GRIDCO has collected an amount of Rs.24.784 Crore from the Short-term OA Customers during April, 2014 to Nov, 2014. Prorating the same for the whole year (i.e. 12 months), the amount comes to Rs.37.18 Crore. Hence the Commission provisionally considers the amount of Rs.37.18 crore towards collection from Short-term Open Access Customers during the ensuing year 2015-16 and deducts of the same from the total Transmission charges. Further, the commission does not allow the bill pertaining to pre POC period amounting to Rs.0.98 crore as claimed by GRIDCO which will be trued up after completion of financial year.
273. Taking all the above cost into account the Commission approves the PGCIL transmission charge payable by GRIDCO including the average Central Sector Loss of 2.27% for the year 2015-16 at 33.87 P/U. The details of total cost towards PGCIL transmission charges is indicated in the table below:

Table – 43
PGCIL Transmission Charges for FY 2015-16

Particulars	GRIDCO's Proposal	Commission's Approval
Transmission charge payable by GRIDCO for 2015-16 towards Bill#1 (Rs. Cr.)	324.47	307.08
Deviation charges proposed towards bill #4 (Rs. Cr.)	0.05	0.05
Year End Charges proposed towards Bill #3 (Rs. Cr.)	31.60	19.05
Total (Rs. Cr.)	356.12	326.18
ULD and Communication Charges (Rs. Cr.)	7.75	7.75
Bills pertaining to Pre Poc Period (Rs. Cr.)	0.98	0.00
less: allocable to short term customers(Rs. Cr.)	(-) 38.02	(-) 37.18
Net amount payable by GRIDCO towards Transmission Charges (Rs. Cr.)	326.83	296.75
Energy drawal by GRIDCO before Central Sector Loss (MU)	10459.34	8964.49 <small>(considering full share of GRIDCO)</small>
PGCIL Transmission Charge (P/U)	31.25	33.10
Weighted Average Central Sector Transmission Loss %	2.62%	2.27%
PGCIL Transmission Charge including loss (P/U)	32.09	33.87

274. Taking all the above cost into account the summary of power purchase from Central Generating Stations and its cost for GRIDCO estimated for FY 2015-16 is given in the table below.

Table – 44

Sl. No.	Generators	Estimated Energy (MU)	Fixed Cost (Rs. in Crore)	Fixed Cost (P/U)	Energy Charge Rate (P/U)	Other Cost (P/U)	Total Rate (P/U)	TOTAL Cost (Rs Cr)
1	CHUKHA	260.35					221.82	57.75
2	Tala HPS	141.60					240.20	34.01
3	Teesta-V	512.37					266.78	136.69
4	Total Central Hydro	914.32						228.45
5	TSTPS St-I	2162.69	188.69	87.25	150.70	1.57	239.53	518.02
6	TSTPS St-II	1332.44	111.31	83.54	151.31	1.51	236.36	314.93
7	FSTPS I & II	1509.61*	133.44	88.39	310.82	0.86	400.07	603.96
8	FSTPS III	574.88*	100.53	174.88	303.27	0.56	478.71	275.20
9	KhTPS St-I	857.86**	87.15	101.58	272.10	0.34	374.02	320.86
10	KhTPS St-II	262.58	32.91	125.34	256.85	0.27	382.45	100.42
11	PGCIL Tr Charge						33.87	296.75
12	ERLDC Charges						0.62	3.38
NB:	(i) The rates include Central Transmission Loss. (ii) * Not consider for State drawal. Full fixed cost is allowed. (iii) ** 773.89 MU is considered for State drawal. Full fixed cost is allowed.							

275. Further, GRIDCO has projected an amount of Rs.3.38 crore towards payment of ERLDC fees and charges consisting of System Operation Charges (SOC) and Market Operation Charges (MOC) for the FY 2015-16. 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 Utility/ 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.3.38 crore for the ensuing year 2015-16. The Commission approves the same and pass through in the tariff.

276. 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 2015-16 are given in the table below:

Table - 45
GRIDCO's Proposal & Commission's Approval for FY 2015-16

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)	3650.36	86.44	315.53	3676.86	87.17	320.53
Indravati	2026.53	78.43	158.94	1942.38	73.92	143.58
Machakund	262.50	33.86	8.89	262.50	34.38	9.02
Total Hydro	5939.39	81.38	483.36	5881.74	80.44	473.13
OPGC	2838.35	210.84	598.44	2838.27	210.85	598.45
TTPS (NTPC)	3177.25	290.07	921.61	3177.32	251.50	799.10
IPPs	7053.00	214.18	1510.60	6636.35	220.84	1465.55
CGPs	-	-	-	-	-	-
Renewable						
Co-Generation Plants	1224.62	275.00	336.77	1224.62	275.00	336.77
Total Small Hydro	320.00	368.00	117.76	320.00	368.00	117.76
Biomass Energy	160.00	554.75	87.16	125.00	575.60	71.95
Solar Energy	127.00	804.25	102.14	127.00	804.22	102.14

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.)
TOTAL STATE	20839.61	199.52	4157.84	20330.30	195.02	3964.86
CHUKHA	263.00	220.04	57.87	260.35	187.95	48.93
Tala HPS	142.00	238.42	33.86	141.60	206.33	29.22
Teesta-V	513.00	302.37	155.12	512.37	232.91	119.34
Total Central Hydro	918.00	268.89	246.84	914.32	215.99	197.48
TSTPS St-I	2138.42	301.31	644.33	2162.69	239.53	518.02
TSTPS St-II	1332.44	292.34	389.53	1332.44	236.36	314.93
FSTPS I & II	1470.92	485.09	713.53	-	400.07	133.44
FSTPS III	566.02	557.97	315.82	-	478.71	100.53
KhTPS St-I	838.09	456.84	382.88	773.89	374.02	297.98
KhTPS St-II	225.19	454.88	102.44	262.58	382.45	100.42
Barh STPS I & II	975.90	663.94	647.94	-	-	-
Total Central Thermal	7546.99	423.54	3196.46	4531.61	323.36	1465.34
Total Central Sector	8464.99	406.77	3443.30	5445.93	305.33	1662.82
PGCIL Tr Charge	-	-	-	-	33.87	296.75
ERLDC Charges	-	-	3.38	-	0.62	3.38
TOTAL GRIDCO	29304.60	259.50	7604.52	25776.23	229.97	5927.81

Rebate for Prompt Payment from the Generators

277. 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.
278. 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

279. The Commission vide its letter No.Dir(T)-392/2012/1421 dt.17.10.2014 directed the licensee to file the audited accounts for the year ending 31.03.2014 by 30th October, 2014 along with necessary information and data which GRIDCO consider relevant to finalizing the truing up exercise and pass necessary orders separately. GRIDCO in its reply to query has submitted the unaudited accounts for FY 2013-14. GRIDCO further submitted that after receipt of final report of the supplementary audit from the office of C & AG of India, the audited accounts will be submitted before the Commission. The Commission is of the opinion that the figure now appearing in the unaudited account may undergo change after the final audit. As such the Commission will undertake the truing up exercise only after the audited accounts of GRIDCO for FY 2013-14 are available.

Employees cost

280. The Annual Revenue Requirement for the Financial Year 2015-16 filed by GRIDCO includes an amount of Rs.5.97 crores towards employees cost, which is analysed in the table below:-

Table - 46

	2014-15 (Approved)	2015-16 (Proposed)	2013-14 (Unaudited)
Basic Pay+GP	1.71	1.74	1.57
DA	1.89	2.10	1.40
HRA	0.26	0.26	0.22
Medical Reimbursement	0.09	0.19	0.09
Others	0.24	0.28	0.13
Terminal benefits	0.89	1.06	0.58
Contractual engagement	0.65	0.34	0.28
Total	5.73	5.97	4.27

Basic Pay + GP

281. The figure as per the unaudited data for the FY 2013-14 was Rs.1.57 crore. GRIDCO in the reply to queries of the Commission reported that the actual cash outflow from April, 2014 to November, 2014 (for a period of 8 month) was

Rs.1.18 crore. Extrapolating the same for a period of 12 months and factoring in 3% annual increment the figure for the FY 2015-16 works out to Rs.1.82 crore. Commission therefore accepts the figure of 1.74 crore for FY 2015-16 as proposed by GRIDCO.

Dearness Allowance:

282. The present rate w.e.f. 1.7.2014 is 107%. Last time the rise in DA with effect from 1st July, 2014 was to the extent of 7%. Assuming the rise in DA @7% w.e.f. 01.01.2015, 01.07.2015 and 01.01.2016, the annual average DA for the financial year 2015-16 is pegged at 121%. 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 for FY 2015-16 has been allowed at Rs.1.06 crore as proposed by GRIDCO.

With the above principle the approved employees cost for 2015-16 is shown in table below:-

Table - 47

	2014-15 (App)	2015-16 (Prop.)	2015-16 (App)
Basic Pay + GP	1.71	1.74	1.74
DA	1.89	2.10	2.10
HRA	0.26	0.26	0.26
Expenses on contractual engagement	0.65	0.34	0.34
Medical reimbursement	0.09	0.19	0.09
Others	0.24	0.28	0.28
Terminal liabilities	0.89	1.06	1.06
Total	5.73	5.97	5.87

Commission approves an amount of Rs.5.87 crore towards employees cost for 2015-16 as against an amount of Rs.5.97 crore proposed by the licensee.

Repair Maintenance

283. During Financial Year 2015-16, GRIDCO proposes an amount of Rs.0.30 crore towards repair & maintenance under the head air conditioner, computer, vehicle, furniture and office equipment. The Commission approves the same as a pass through in the ARR for FY 2015-16.

Administration & General Expenses

284. During Financial Year 2015-16, GRIDCO proposed an amount of Rs.5.50 crores under the head Administrative and General Expenses, inclusive of an amount of Rs.1.25 crores towards license fee payable to OERC. Thus excluding license fee the A & G expenses would be Rs.4.25 crore (5.50-1.25). The Audited Account for the FY 2013-14 have not been submitted by GRIDCO. In absence of audited accounts the Commission considers the approved figure of Rs.2.63 crore last year and factor in the annual inflation of 0.11% for FY 2015-16. The amount works out to Rs.2.63 crore. Over and above the amount, the licence fee applicable for 2015-16 amounting to Rs.1.50 crore is allowed. Thus the Commission approves an amount of Rs.4.13 crore under the head Administration and General Expenses for FY 2015-16.

Depreciation

285. Under this head GRIDCO has proposed Rs.0.42 crore towards the depreciation on fixed assets (vehicle, furniture and office equipment etc.) for the FY 2015-16. The Commission approves the same as a pass through in the ARR for FY 2015-16.

Interest on Loan

286. During FY 2015-16, GRIDCO proposed an amount of Rs.493.13 cr. towards interest and finance charges. This includes an amount of Rs.7.75 cr. towards guarantee commission and Rs.99.04 cr. towards proposed interest on OHPC outstanding energy dues of Rs.619.00 cr.
287. GRIDCO in its submission stated that OHPC requested GRIDCO to securitize the energy dues of OHPC outstanding against GRIDCO for Rs.619.00 cr. upto 31.03.2013. GRIDCO in its 155th meeting of Board of Directors held on 15.09.2014 approved the securitized dues of OHPC for Rs.619 cr. payable @8%

simple interest per annum over a period of 10 years including moratorium of three years starting from 01.04.2014. GRIDCO on this account proposes additional interest of Rs.99.04 cr. payable to OHPC for the period 2014-15 to 2015-16. Excluding the amount of OHPC interest, the total interest burden works out to Rs.394.09 cr.

288. On scrutiny of the figure submitted by the licensee, it is found that all loans upto 31.03.2008 are inherited by GRIDCO at the time of demerger of GRIDCO into GRIDCO & OPTCL, the interest liability of which has been accepted by the Commission as a pass through in the revenue requirement. After that GRIDCO availed the following loans, year wise details of which is given below:

Table -48

Year	Rs. in cr.
2008-09	300.00
2009-10	1213.00
2010-11	1640.71
2011-12	864.16
2012-13	843.83
2013-14	483.50
2014-15 (projected)	500.00

289. The Commission in line with the earlier order accepts outstanding loan position of GRIDCO upto 31.03.2008 and allows interest on the loan except loan from state Govt. On this account GRIDCO during 2015-16 claimed Rs.104.79 cr. including interest impact of Rs.20.07 cr. towards Govt. loan. The Commission allows an amount of Rs.84.72 cr. (Rs.104.79 – Rs.20.07) for the FY 2015-16.
290. Regarding the claim of Rs.99.04 cr. i.e. interest on securitized dues of OHPC, the proposal by GRIDCO for securitization of OHPC outstanding dues has not been submitted to the Commission for approval at any time. Therefore passing a huge burden of Rs.99.04 cr. in the ARR of 2015-16 may not be prudent. It is pertinent to mention here that OHPC has not shown this interest income in its ARR for the FY2015-16. GRIDCO may discharge the liability of OHPC through collection of arrears of DISCOMs and revenue from trading of surplus power, hence

Commission disallows the entire interest burden of Rs.99.04 cr. payable to OHPC for the FY 2015-16.

291. Besides above the interest burden on new loans availed by GRIDCO from 2008-2009 to 2014-15 amounts to Rs.281.55 cr. (Rs.493.13 – Rs.99.04 – Rs.104.79-7.75). The Commission feels that the loan availed by GRIDCO is because of default in payment of BST dues and securitized dues by DISCOMs affecting the cash flow of GRIDCO seriously. As stated by GRIDCO in its ARR filing, the outstanding dues of DISCOMs are Rs.3511.09 cr. on the following account.

	(Rs. In Cr.)
1. Outstanding securitized dues upto 31.03.2013	Rs.1771.96
2. BSP bill outstanding from 2011-12 to 2014-15 (upto Sep'2014)	Rs.1113.96
3. Year end adjustment bill from 2008-09 to 2010-11	<u>Rs.625.17</u>
Total	Rs.3511.09

GRIDCO prayed to the Commission to prevail upon DISCOMs for making regular payment of BSP dues.

292. Pass through of Interest on Loan in the ARR of GRIDCO for FY 2015-16
- (a) Though the responsibility of collecting dues from the consumers and making prompt payment of BSP is primary responsibility of the DISCOMs, the Govt. and GRIDCO could have definitely played a more pro-active role in creating necessary climate of compliance by providing adequate administration and political support.
- (b) The Commission feels that because of regular default of DISCOMs in payment of BSP dues, GRIDCO could have resorted to Power Regulation following due protocol. The Govt. could have given greater support through energizing Energy Police Stations, liquidating huge arrears of various government departments and installation of prepaid meters in Government Departments. The Government Scheme of prepaid meter unfortunately became a non-starter, thanks to the indifference of District Administration.

- (c) In view of the above, the Commission feels that it will be unjustified to pass on the entire burden of interest to the consumers of the State. GRIDCO and Government in all fairness should share a part of this interest burden. Accordingly, the Commission allows an amount of Rs. 280.25 Crore as per the details given below:

Table-49

(Rs. in Cr.)

Particulars	Approved
On loans upto 31.03.2008 including Govt. loan	84.72
Securitized dues of OHPC	0
On loans availed from 2008-09 to 2014-15	187.78
Guarantee Commission	7.75
Total	280.25

Pass through of Arrear Dues

293. GRIDCO has proposed expenses of Rs.1089.99 cr. incurred/to be incurred till 2015-16 as a pass through in the ARR of 2015-16. The summary of proposed expenses claimed as a pass through is given in table below:

Table – 50

Summary of Expenses Relating to Power Purchase Cost Proposed for Pass Through in ARR & BSP for FY 2015-16

Particulars	Amount in Rs. Crore
(i) Arrear in respect of TTPS (Differential AFC Arrears from FY 2009-10 to FY 2013-14 of Rs.740.00 Cr., Arrear amount towards Differential Annual Fixed Charges for the FY:2014-15 of Rs.158.95 Cr., Differential Annual Fixed Charges for FY:2014-15 & 2015-16 as per petition filed by NTPC before CERC for the period 2014-19 amounting to Rs.28.56 Cr. and Interest Charges Paid by GRIDCO till Sept-14 amounting to Rs.28.85 Crore)	956.35
(ii) Arrear paid to NTPC Stations (TSTPS-I&II, KhSTPS-I&II, FSTPS-I,II & III) for the period from October' 13 to Sept' 14	29.60
(iii) Arrear POC Charges in respect of PGCIL	15.16
(iv) Arrear of Teesta-V in respect of revision of AFC, FERV & Tax	50.82
(v) Reactive Energy Charges to ER Reactive pool Account from April' 14 to Dec' 14	1.72
(vi) Differential Claim of Coal Cost to SSL for FY 2013-14	36.34
Total amount proposed for pass Through in the ARR & BSP for FY 2015-16	1089.99

Arrear payment to NTPC in respect of TTPS:

294. GRIDCO has submitted that CERC vide its Order dated 15.05.2014 in Petition No. 304 of 2009 has pronounced the Final Tariff Order in respect of TTPS, wherein the Annual Fixed Charges for the FY 2009-10 to 2013-14 has been revised. Based on the said Order, NTPC-TTPS had raised the Arrear Bill for an amount of **Rs.740.7249 Crore** (i.e. Principal of Rs.564.5170 Crore+ interest of Rs.176.2079 Crore) in June-2014 pertaining to the period 2009-10 to 2013-14 to be paid in 6 equal monthly instalments. However, after discussion with NTPC, the instalment period has been extended to 18 months and GRIDCO had already paid an amount of Rs.200 Crore till November,14 in five Instalments and would be paid about Rs.411.10 Crore till March, 2015. Further, till September, 2014 GRIDCO has already paid an amount of **Rs. 28.85 Crore** towards interest on the balance arrear amount payable in instalments.
295. Apart from the above, at present, NTPC-TTPS is claiming the Monthly Fixed Charges provisionally based on the Annual Fixed Charges Rs.373.5929 Crore fixed for FY 2013-14 vide CERC Order dated 15.05.2014. The Commission in its ARR & BSP Order dated 22.03.2014 of GRIDCO for FY 2014-15 has allowed Annual Fixed Cost of Rs.214.639 Crore provisionally subject to Final Tariff Order by the CERC. Since, the Final Tariff Order has now been passed by CERC in respect of NTPC-TTPS, GRIDCO has requested to allow the differential Fixed Charges against FY 2014-15 amounting to **Rs.158.9539 Crore** (i.e. Rs.373.5929 Crore- Rs.214.639 Crore) as pass through in the ARR of GRIDCO for FY2015-16.
296. Further, NTPC has filed petition before CERC for determination of tariff in respect of TTPS for the Control Period 2014-19. As per this fresh Petition, the differential fixed charges for FY 2014-15 and 2015-16 will be Rs. 3.9298 Cr. and Rs. 24.6182 Cr respectively with a total of Rs. 28.548 Cr. Thus, the Commission may consider allowing **Rs.28.548 Crore** as pass through of differential arrear against FY 2014-15 and 2015-16 in respect of NTPC-TTPS in the ARR & BSP for FY 2015-16 subject to modification as per Final Tariff Order for the period 2014-19.

297. GRIDCO in its ARR applications for previous years had submitted for recovery of Pass Through of such arrear of TTPS in a staggered manner in order to avoid tariff shock. However, the Commission in the ARR & BSP Order for FY2014-15 has categorically observed that it will consider the arrear amounts only after CERC passes the final order on the Petition of NTPC i.e. Petition No. 304/2009 which has now been disposed off by the CERC vide its Order dated 15-05-2014. GRIDCO has further submitted that pursuant to the notification of CERC Order 15.05.2014 in Petition No.304/2009, they have filed a Petition before the Commission for review of ARR & BSP Order of GRIDCO for FY 2014-15 dated 22.03.2014 to consider and approve the pass through of Fixed Cost Arrear of Rs.899.68 Crore comprising of Arrear FC of TTPS from FY 2009-10 to FY 2013-14 (**Rs.740.7249 Cr.**) and Addl. AFC for FY 2014-15 (**Rs.158.9539 Cr.**) in the ARR & BSP for FY 2014-15 by way of an interim revision. The Petition of GRIDCO was admitted as Case No.57 of 2014 and the Commission after hearing the matter on 28.10.2014, rejected the Review Petition vide its Order Dated 05.11.2014 with an observation that the actual impact of pass through / arrears would be taken care of in the truing-up exercise.
298. It is further submitted that NTPC had already raised the total claim of arrear amount i.e. Rs.740 Crores (principal plus interest) on GRIDCO payable in six equal monthly installments. However, after mutual discussion, the payment of said arrears has been extended to 18 installments starting from June, 2014 without prejudice to GRIDCO's right to file appeal before any legal forum. As GRIDCO has been making payment to NTPC through short-term borrowing, GRIDCO prays before the Hon'ble Commission to allow the repayment of the relevant loan along with interest in the approval of subsequent ARRs & BSPs.
299. Accordingly, GRIDCO prayed the Commission to allow an arrear amount of **Rs.956.35 Crore** as pass through in the ARR for GRIDCO for FY2015-16 as detailed below:

Table-51

		Figures in Rs. Crore
Sl. No.	Description	Arrear Amount
1	Arrear amount towards differential Annual Fixed Charges for the period 2009 to 2014.	740.00
2	Arrear amount towards differential Annual Fixed Charges for the FY:2014-15	158.95
3	Differential Annual Fixed Charges for FY:2014-15 & 2015-16 as per petition filed by NTPC before CERC for the period 2014-19	28.55
4	Interest Charges Paid by GRIDCO till Sept-14	28.85
	TOTAL AMOUNT	956.35

300. The Commission observed that GRIDCO has filed an appeal before APTEL, New Delhi against the CERC Tariff Order dated 15.05.2014 passed in Petition No.304 of 2009 which has been admitted as Appeal No.180 of 2014. Similarly, GRIDCO has also filed a Writ Petition before Hon'ble High Court of Orissa against the CERC Tariff Regulation, 2009 in the matter of high normative O & M expenditures and relaxed norms of operation of Thermal Power Plant of TTPS. Both the petitions of GRIDCO are now sub-judice before the respective Forums. The Commission further observed that since, the CERC Tariff Regulation, 2009 has been notified in March, 2009. GRIDCO could have filed the petition before the Hon'ble High Court of Orissa much earlier on the issues in view of the huge tariff impact on the consumers of the State. Therefore, the Commission expresses its dissatisfaction with GRIDCO for its casual and non-serious attitude in addressing such an important commercial issue. However, the Commission passes through the amount of Rs. 740.72 Crore towards arrear bills of TTPS in the ARR of GRIDCO for FY 2015-16 provisionally subject to outcome of the decision of the Hon'ble High Court of Orissa. The balance amount claimed by GRIDCO may be considered by the Commission in the ARR for the future years after due scrutiny. Further, regarding the interest of Rs.28.85crore as proposed by GRIDCO towards interest Charges, the Commission advises GRIDCO to take up matter with NTPC at appropriate level to waive this amount.

Arrear payment to NTPC in respect of CGS

301. GRIDCO submitted that NTPC had claimed an amount of Rs.29.60 Crore towards arrear bills relating to revision in AFC, Tax, FERV and ULDC Charges pertaining to different NTPC Stations (TSTPS-I&II, KhSTTS-I&II, FSTPS-I,II & III) for the period from Oct'13 to Sept'14, which have already been paid to NTPC. The Commission scrutinised the proposal of GRIDCO and approved the same as pass through in the ARR of GRIDCO for 2015-16 as it has already been paid by GRIDCO.

Arrear payment in respect of TEESTA-V HEP

302. GRIDCO has submitted that on account of CERC Order Dated 23.01.2014 in Petition No.27/GT/2013, NHPC-TEESTA, through Supplementary Bills, raised additional arrears of Rs.47.10 Crore on account of revision of Tax, FERV and revision in the Annual Fixed Cost for the period from 2008-09 to FY 2013-14 and a Late Payment Surcharge of Rs.3.72 Crore, total amounting to Rs.50.82 Crore on GRIDCO. This amount of Rs.50.82 Crore was claimed by GRIDCO in the Review Petition, bearing Case No. 57/2014 against ARR & BSP Order for FY 2014-15, but the Commission vide Order dated 05.11.2014 decided to allow the same in the Truing-up Exercise. Accordingly, the above amount of Rs.50.82 Crore is now being claimed by GRIDCO for pass through in the ARR & BSP for FY 2015-16. After scrutiny, the Commission passes an amount of Rs. 47.10 crore in the ARR of GRIDCO for the FY 2015-16 excluding the Late Payment Surcharge of Rs.3.72 Crore as it appears that this amount is not related to the subject arrear of Rs.50.82 Crore.

Arrear Payment in respect of PGCIL Charges

303. GRIDCO had claimed an amount of Rs.164.97 Crore towards payment of PoC arrear charges of PGCIL upto 30.08.2013 for pass through in the ARR & BSP Application for FY 2014-15, out of which the Commission had allowed only Rs.149.81 Crore. Hence, GRIDCO has submitted that the balance amount of Rs.15.16 Crore towards PoC Arrear Charges upto 30.08.2013 payable to PGCIL by GRIDCO may be passed through in the ARR & BSP for FY 2015-16.

304. The Commission observed that though the stay has been vacated by the Hon'ble High Court of Delhi on CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010, the case is still sub-judice before the Hon'ble Court and the Commission had allowed the amount of Rs.149.81 Crore as pass through in the ARR of GRIDCO for the FY 2014-15 as this amount had been reconciled between GRIDCO and PGCIL. Further while passing it through the ARR of GRIDCO, the Commission had indicated that the balance amount claimed by GRIDCO may be considered in the next year after reconciliation between PGCIL and GRIDCO. But in the present ARR & BSP Application of GRIDCO there is no evidential document that the said amount has been reconciled and paid by GRIDCO to PGCIL. Therefore, the Commission does not allow the same as pass through in the ARR of GRIDCO for the FY 2015-16. However, the balance amount claimed by GRIDCO on this account may be considered in the Truing Up exercise of GRIDCO after reconciliation of the same between PGCIL and GRIDCO.

Reactive Energy Charges to ER Reactive pool Account

305. GRIDCO in its additional submission has stated that it has already paid Rs.1.72 Crore to ER Reactive pool Account towards Reactive Energy Charges during the period from April'14 to December'14 and prayed the Commission to consider the same as pass through in the ARR & BSP for FY 2015-16. After scrutiny the Commission allows the same as pass through in the ARR of GRIDCO for FY 2015-16.

Claim of Differential Coal cost by M/s SSL for FY 2013-14

306. GRIDCO in its additional submission has further stated that M/s. Sesa Sterlite Ltd. (SSL) vide its Invoice dated 09.12.2014 has claimed for an amount of Rs. 36.34 Crore towards differential value of coal for the FY 2013-14 and GRIDCO is obligated to make payment of this claim of M/s. SSL as per Para 55 & 56 of the Commission's Order dated 12.06.2013 passed in Case Nos.117/2009, 31/2010 & 56/2012 for the period FY2010-11 to FY 2013-14. This claim of M/s SSL is under scrutiny by GRIDCO after which the same shall be considered for payment

shortly during the current FY 2014-15. Therefore GRIDCO has prayed the Commission to consider the same and allow in the ARR & BSP for FY 2015-16.

307. The Commission observed that the claim of Rs. 36.34 Crore by M/s SSL for the differential coal cost is under scrutiny by GRIDCO. The Commission advises GRIDCO to reconcile the amount after due scrutiny with respect to the coal cost of the relevant period and after reconciliation it may be considered by the Commission, if due in the next year or adjust the same in truing up exercise. Therefore, The Commission does not allow the same in the ARR of GRIDCO for FY 2015-16.

Summary of pass through expenses in the year ARR & BSP for FY 2015-16

308. The proposed and approved Pass Through expenses in the ARR of GRIDCO for FY 2015-16 relating to Power Purchase Cost are given below:

Table - 52

Particulars	(Rs. In Crore)	
	Proposal of GRIDCO	Commission's approval
(i) Arrear in respect of TTPS (Differential AFC Arrears from FY 2009-10 to FY 2013-14 of Rs.740.00 Cr., Arrear amount towards Differential Annual Fixed Charges for the FY:2014-15 of Rs.158.95 Cr., Differential Annual Fixed Charges for FY:2014-15 & 2015-16 as per petition filed by NTPC before CERC for the period 2014-19 amounting to Rs.28.56 Cr. and Interest Charges Paid by GRIDCO till Sept-14 amounting to Rs.28.85 Crore)	956.35	740.72
(ii) Arrear paid to NTPC Stations (TSTPS-I&II, KhSTPS-I&II, FSTPS-I,II & III) for the period from October'13 to Sept'14	29.60	29.60
(iii) Arrear POC Charges in respect of PGCIL	15.16	0.00
(iv) Arrear of Teesta-V in respect of revision of AFC, FERV & Tax	50.82	47.10
(v) Reactive Energy Charges to ER Reactive pool Account from April'14 to Dec'14	1.72	1.72
(vi) Differential Claim of Coal Cost to SSL for FY 2013-14	36.34	0.00
Total amount for pass Through in the ARR & BSP for FY 2015-16	1089.99	819.14

Reimbursement to OHPC during FY 2014-15

309. The Commission while passing the order in ARR and Tariff application of OHPC for the FY 2015-16 in Case No.65 by 2014 has allowed an amount of Rs.19.01 Crore for the reimbursement by OHPC from GRIDCO during the FY 2015-16 as given in the table below. The Commission approves the same in the ARR of GRIDCO for the FY 2015-16.

Table – 53

(Rs. in 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	5.68
(b) ED on Auxiliary Consumption	0.05	0.08	0.12	0.07	0.05	0.20	0.57
(c) SLDC charges							1.80
(d) Application fees and publication expenses							0.26
(e) Institutional cost paid for implementation of CATP programme for FY 13-14 & 14-15							4.01
(f) Foreign Exchange Fluctuation loss of PFC loan of Balimela HEP			4.20				4.20
(g) Contribution to ERPC							0.16
(h) Income tax paid during FY 2013-14							2.33
Total							19.01

Special Appropriation of Repayment of Principal

310. For the FY 2015-16 GRIDCO has proposed Special Appropriation of Rs.2368.38 crore under the following heads:-

Table -54

Special Appropriation claimed by GRIDCO

(Rs. in Crore)

Particulars	Loan Repayment Dues	Interest Dues	Total
State Govt. Loan	160.38	315.84	476.22
NTPC-GoO Special Bonds (Rs.1102.87 Cr.)	771.80	238.30	1010.10
Sub-total	932.18	554.14	1486.32
Bank Loans	882.06	-	882.06
Total	1814.24	554.14	2368.38

State Govt. Loan & NTPC Bond

311. Under this head GRIDCO has shown an amount of Rs.1486.32 crore towards principal and interest dues. However, GRIDCO proposed the following in order to reduce the financial burden as well as to avoid tariff shock to the consumer of the State.

- Repayment of NTPC-GOI Bond dues will continue to be paid by the Govt. of Odisha;
- Repayment of dues to Govt. of Odisha by GRIDCO will be kept in abeyance

312. As such GRIDCO deferred the repayment of Govt. dues of Rs.1486.32 crore and not claimed as a part of ARR for FY 2015-16. The Commission approves the same.

Bank Loan

313. Under this head GRIDCO propose an amount of Rs.882.06 crore towards repayment of Bank loan borrowed from the year 2008-09 to 2014-15 (upto September, 2014).

314. As per the submission of GRIDCO, the total cash deficit from 2008-09 to 2014-15 (upto September, 2014) becomes Rs.8229.00 crore. To meet the cash deficit GRIDCO has availed loan Rs.5945.00 crore and balance shortfall (about Rs.2284.00 crore) was met by way of defaulting in payment of interest on State Govt. loan, NTPC bond and also by postponing the payment of power purchase dues to the generators. A table showing approved revenue gap, actual revenue gap, total cash deficit and loan avail is depicted below:

Table-55

FY	Actual Power Pur. Cost (P/U)	Appd. Power Pur. Cost (P/U)	Approved BSP (P/U)	Approved Gap	Profit/(loss) in P&L Accounts	Loan Repayment	BSP Dues defaulted by DISCOMs	Total Cash Deficit	Loan availed to meet deficit
2008-09	151	127	122	410.05	98.14	374.26	163.94	440.06	300.00
2009-10	197	148	122	882.85	(1560.84)	205.06	164.22	1,930.12	1213.00
2010-11	198	175	170	806.15	(587.86)	328.15	297.01	1,213.02	1640.71
2011-12	228	210	232	746.05	(936.81)	382.40	269.74	1,588.95	864.16
2012-13	237	236	271	700.58	31.79	777.69	590.01	745.90	943.83
2013-14	214	229	265	707.60	59.24	1006.57	167.30	1,704.64	483.50

FY	Actual Power Pur. Cost (P/U)	Appd. Power Pur. Cost (P/U)	Approved BSP (P/U)	Approved Gap	Profit/(loss) in P&L Accounts	Loan Repayment	BSP Dues defaulted by DISCOMs	Total Cash Deficit	Loan availed to meet deficit
2014-15 (upto Sept-14)	214	227	263	884.18	-	519.36	86.91	606.27	500.00
Total				5137.46	(2896.34)	3593.49	1739.13	8228.96	5945.21

315. GRIDCO further stated that as per Tariff Policy, depreciation on fixed assets shall be utilized for payment of principal component of loan. In case of GRIDCO, there is virtually no fixed asset and hence, no depreciation is available to GRIDCO to meet the cash deficit arising due to the above reasons. Although as per direction of Commission GRIDCO has to recoup such deficit by way of trading of surplus power and UI, no such improvement has taken place and GRIDCO at the end of the year is ending up with huge deficit. Under such circumstances GRIDCO submits that the loans from bank as well as interest thereon may be considered as a pass through in the ARR of GRIDCO. GRIDCO therefore proposed an amount of Rs.882.05 crore under the head Special Appropriation of expenses for meeting the principal repayment of bank loan.

316. The Commission took note of the submission made by the licensee. In para 295 and 296 of the BSP order for the FY 2014-15, the Commission made the following observation. The same is extracted below:

295 *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 2500 MU of power and generate a substantial amount of revenue, which can be utilised for repayment of principal loan liabilities.

296 *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 recognized 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 2014-15.”

317. The Commission for the FY 2015-16 takes the same stand and not considered the amount of Rs.882.06 cr. as a pass through under the head special appropriation.
318. Based on normative parameters for most generating stations and GRIDCO's projection for CGP, Co-generation and IPP power, the total availability is estimated at 30768 MU. After deducting the estimated state requirement of 25776 MU, there is a surplus of 4992 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.
319. 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.

320. In form F-18 of the filing GRIDCO submitted a statement of revenue from sale of power (Trading and UI) as per which the revenue from trading and UI amounts to Rs.910.70 crore which is more than the recognize amount of special appropriation of Rs. 709.67 crore not considered as a pass through in the ARR for the FY 2013-14. During the FY 2014-15(as per cash flow statement submitted by GRIDCO upto December, 2014) the revenue from Trading and UI is shown at Rs.423.81 crore. The GRIDCO in its ARR filing (Form F-18) submitted that the revenue from trading and UI may be Rs.668.38 crore which may be utilized for a payment of the principal amount of loan of Rs.887.77 crore. During FY 2015-16 GRIDCO in its filing projects to trade Rs.2119.14 MU of power for an amount of Rs.847.66 crore. Commission assumes that GRIDCO may earn more revenue since the surplus power available for trading as stated in the above para shall be 4992 MU. This will help GRIDCO in discharging the payment liability of bank loan of Rs.882.06 crore as mentioned in above para.

Return on Equity

321. GRIDCO proposes Rs.92.27 crore towards Return on Equity (RoE) @ 16% on its Equity Capital of Rs.576.71 crore in line with National Tariff Policy and OERC Tariff Regulations. As submitted by GRIDCO the Govt. of Odisha has provided additional equity amounting Rs.143.73 crore during the FY 2012-13 and reflected in the audited accounts. On scrutiny it is revealed that the above amount is mere book adjustment by writing off the receivable and claims of the State Govt. Hence, there is no infusion of equity as verified from the audited accounts. The Commission therefore disallows the claim of RoE on the above amount of equity. Regarding the balance of Rs.432.98 crore (576.71-143.73) the Commission in principle was not allowing RoE in the previous tariff orders stating the reasons. In line with the earlier orders of the Commission the RoE on the above amount of Rs.432.98 crore is disallowed for the FY 2015-16.

Other Income/ Miscellaneous Receipts

322. During the FY 2015-16 GRIDCO expects to earn an amount of Rs.6.70 crore (at existing approved tariff) from proposed emergency sale of 10 MU to long term customers like NALCO & IMFA as per the MoU signed with these entities. The Commission approves an amount of Rs.6.85 crore for FY 2015-16.

Receivables from DISCOMs and Others

Securitized Dues

323. GRIDCO in its filing submitted that the DISCOMs have defaulted payment of Rs.1771.96 crore by 31.03.2014 towards securitized dues as per the direction of the Commission vide order dated 01.12.2008. The DISCOMs wise default is given below:-

Table –56

Particulars	Securitized dues payable by 31-03-2014	Amount paid & Adjusted by 31-03-2014	Unpaid as on 31-03-2014
WESCO	337.92	127.38	210.54
NESCO	367.68	156.01	211.67
SOUTHCO	239.04	38.52	200.52
CESU	1345.92	196.69	1149.23
Total	2290.56	518.60	1771.96

324. GRIDCO requested the Commission to direct DISCOMs for making regular payment of the securitized dues along with the defaulted dues for improving the cash flow. The securitization order of the Commission dtd.01.12.2008 finalised the amounts outstanding as on 31.03.2005 to be discharged by the respective DISCOMs to GRIDCO in 120 monthly (maximum) equal installments starting from financial year 2006-07 and ending in 2015-16. Therefore GRIDCO submitted the Commission to give suitable direction to the DISCOMs so that the dues will be realised within the terminal year 2015-16 in line with the Commission's order dtd.01.12.2008.
325. The Commission dealt the issue in the BSP as well as RST tariff orders of previous years. A statement showing the amount approved by the Commission in the ARR amount due as per the securitization order the amount paid by the

utilities over and above the 100% current BST bills, adjustment against the securitized amount and balance default amount is given in Table below:

Table -57
Dues as per OERC Order Dt. 01-12-2008 and Actual Payment

(Rs. crore)

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						
	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
	2012-13	42.24	45.96	29.88	118.08	168.24	286.32
	2013-14	42.24	45.96	29.88	118.08	168.24	286.32
	Total	337.92	367.68	239.04	944.64	1345.92	2290.56
7	Due from 2006-07 to 2013-14 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	-	-	-	-	-	-
	2012-13	-	-	-	-	-	-

Sl No	Particulars	WESCO	NESCO	SOUTHCO	REL Total	CESU	Grand Total
	2013-14	-	-	-	-	-	-
	Total	110.49	147.72	82.82	341.03	312.23	653.26
8	Excess BSP paid by DISTCOs to be adjusted against securitised dues						
A	Downward Revision of BST in 2007-08	88.31	3.32	11.07	102.70	93.37	196.07
B	Payment by DISCOMS over and above the current						
	2006-07	36.83	41.36	-	78.19	-	78.19
	2007-08	4.40	41.36	9.53	55.29	-	55.29
	2008-09	-	65.00	5.86	70.86	32.47	103.33
	2009-10	2.00	-	9.69	11.69	80.50	92.19
	2010-11	-	-	-	-	-	-
	Total B	43.23	147.72	25.08	216.03	112.97	329.00
C	Total (A+B)	131.54	151.04	36.15	318.73	206.34	525.07
9	Short fall upto 31.3.2014 (6-8 C) as per securitisation order	206.38	216.64	202.89	625.91	1139.58	1765.49
10	Short fall (7-8 B) as per tariff order	67.26	-	57.74	125.00	199.26	324.26
11	Outstanding Balance (4-8 C)	290.54	308.34	262.35	861.23	1,475.90	2,337.13

326. The Commission in its Business Plan order dated 21.3.2014 stated the following:-

53. The three Reliance managed DISCOMs have not submitted in detailed action plan for liquidation of the arrears of GRIDCO as per Commission's direction dated 01.12.2008. CESU in its submission stated that it will start paying its outstanding dues of GRIDCO from the FY2015-16 and it may liquidate all its outstanding by FY 2020-21.

The Commission vide para 26 of the order 01.12.2008 had mentioned the following:-

"We order that DISTCOs shall repay the outstanding loans including interest along with securitized BST dues as at 31st March, 2005 in 120 monthly

(maximum) equal installments starting from the FY 06-07 ending in 2015-16. They shall also continue to pay the monthly BST dues regularly through LC as per the bulk supply arrangement.”

54. *Every year the Commission in its tariff order gives direction to the DISCOMs to pay the outstanding arrears of GRIDCO as per the schedule given by the Commission. But the DISCOMs made continuous default and have not carried out the direction of the Commission. Commission therefore, directs the licensee to clear the dues of GRIDCO by the end of 2015-16 as per the order of the Commission. The Commission shall take a review after FY 2014-15 and may pass necessary directions in this regard to the DISCOMs.*
327. The Commission therefore, directs the DISCOMs to submit the detailed action plan for liquidation of arrears of GRIDCO by 30.4.2015 after which the Commission shall review the matter and pass necessary orders.

400 crore NTPC Bond dues

328. GRIDCO submitted that the DISCOMs have failed to honour the OERC order dated 29-03-2012 read with corrigendum Order dated 30.03.2012 against the Bond dues of Rs.308.45 Crore. In the said order OERC had directed the erstwhile REL managed DISCOMs to pay Rs.50 Crore by the end of April 2012 and at least @Rs.10 Crore per month w.e.f. May 2012 so that the entire amount shall be cleared by the end of FY 2012-13 or else the order will stand non-est. The erstwhile R-Infra managed DISCOMs have paid Rs.62 Crore by 31-10-2013, besides payment of Rs.50 Crore in March 2012 leaving a balance of Rs.196.45 Crore. On this issue the Commission have given direction to both GRIDCO and DISCOMs several times for compliance of the order. The Commission again reiterated the same and directs both GRIDCO and DISCOMs to comply the order dtd.29.03.2012 in case No.107 of 2011.

Non-payment of BSP dues and Year End Adjustment Bills of DISCOMs

329. Apart from the outstanding securitized dues as mentioned in the above para, GRIDCO submitted that the FY 2011-12 onwards the DISCOMs have started

defaulting in payment of current BSP bill in addition to the yearend adjustment bills payable to GRIDCO because of such failure of DISCOMs the revenue deficit faced by GRIDCO has widened leading to cash crunch. Therefore GRIDCO prays the Commission to prevail upon the DISCOMs for making regular payment of BSP and other dues of GRIDCO. A table showing outstanding dues of BSP and year end adjustment payable by DISCOMs is given as under.

Table -58
Outstanding Dues relating to Current BSP and Year end Adjustment bills
of DISCOMs payable to GRIDCO

Particulars	(Rs. in Crore)				
	WESCO	NESCO	SOUTHCO	CESU	TOTAL
BSP Bills- 2011-12	210.48	53.74	5.52	-	269.74
BSP Bills- 2012-13	265.06	324.95	-	-	590.01
BSP Bills- 2013-14	17.39	57.87	92.04	-	167.30
BSP Bills- 2014-15 (upto Sept-14)	11.82	7.01	62.41	5.67	86.91
Sub Total	504.75	443.57	159.97	5.67	1113.96
Year end Adj. Bills- 2008-09	69.08	-	36.72	58.14	163.94
Year end Adj. Bills-2009-10	-	87.47	32.81	43.94	164.22
Year end Adj. Bills-2010-11	46.80	22.65	60.24	167.32	297.01
Sub Total	115.88	110.12	129.77	269.40	625.17
Grand Total	620.63	553.69	289.74	275.07	1739.13

330. The Commission directs the DISCOMs to settle the issue with GRIDCO and submit a signed joint reconciliation statement by 31.05.2015 after paying the outstanding dues of GRIDCO in full.
331. The Commission further directs the DISCOMs to pay the current BSP bill in full by renewing the Letter of Credit (LC) in favour of GRIDCO.
332. The summary of the ARR of GRIDCO approved for the FY 2015-16 is given below:

Table -59
Revenue Requirement of GRIDCO for FY 2015-16

	Particulars	(Rs. in Cr.)		
		2014-15	2015-16	
		Approved	Proposed	Approved
A	Expenditure			
	Cost of Power Purchase	5788.75	7604.52	5927.67
	Employee costs	5.73	5.97	5.87

	Particulars	2014-15	2015-16	
		Approved	Proposed	Approved
A	Expenditure			
	Repair & Maintenance	0.30	0.30	0.30
	Administrative and General Expenses	3.88	5.50	4.13
	Depreciation	0.26	0.42	0.42
	Other expenses (ERLDC Charges)			
	Interest Chargeable to Revenue (including guarantee commission)	416.64	493.13	280.25
	Sub-Total	6215.56	8109.84	6218.64
	Less: Expenses capitalized			
	Total expenses (Total of A)	6215.56	8109.84	6218.64
B	Special appropriation			
	Carry forward of Previous Losses through amortization of regulatory assets			
	Repayment of principal for the loan	-	882.06	-
	Arrear payment of OPGC		-	-
	Arrear payment of OHPC		-	-
	Power Purchase related cost of TTPS (NTPC)	33.22	956.35	740.72
	Outstanding Govt. Guarantee Commission			
	Excess payment made towards FPA for NTPC Station		29.60	29.60
	Arrear payment on Teesta Power	26.52	50.82	47.10
	NTPC ER arrear charges	20.10		
	Arrear PoC charges to PGCIL	149.81	15.16	-
	Arrear FPA to SEL		36.34	-
	Reactive Energy Charges		1.72	1.72
	Reimbursement to OHPC	14.32		19.01
	Total of B	243.97	1972.05	838.15
C	Return on Equity	-	92.27	-
	TOTAL (A+B+C)	6459.53	10174.16	7056.79
D	Less Miscellaneous Receipt	6.70	6.70	6.85
E	Less receivable from DISCOMs			
F	Less receivable from outside States			
G	Revenue proposed from trading of surplus power		847.66	-
H	Total Revenue Requirement	6452.83	9319.80	7049.94
I	Expected Revenue (Full year) from DISCOMs	6456.42	6882.82	7050.30
J	GAP (+/-)	(+)3.59	(-)2436.98	(+)0.36

Design for Bulk Supply Pricing Philosophy

333. Hon'ble APTEL in their judgment dated 02.09.2014 passed in Appeal No. 29/2009 has concluded as given under:

“31. (i) In the prevailing system of single buyer mode, adjustment for consumers mix has to be made in average BSP of GRIDCO to determine the BSP to be charged from the various Distribution Licensees.

(ii) The benefit of relative efficiency of a distribution company in terms of distribution loss and other controllable expenditure has to be passed on to the consumers and to that extent there has to be a difference in the retail supply tariffs amongst the various distribution companies.

(iii) Thus, the difference in BSP of different distribution companies can be only to the extent of accounting for the difference in revenue recovery of the different distribution companies from its consumers due to difference in consumer mix. However, the difference in revenue due to relative efficiencies of the distribution companies should not be accounted for while determining the differential BSPs for the distribution companies. The alternative proposed in paragraph 29 for allocation of share in various power sources in the portfolio of GRIDCO on the basis of consumer mix of the Distribution Licensees for the purpose of computation of respective BSPs of the Distribution Companies may also be considered.

(iv) In the impugned order, the State Commission has determined the differential BSP with a view to equalize the RST and has not accounted for relative efficiency of the distribution companies in terms of distribution loss and other expenditure. The effect of higher efficiency of a distribution company should be passed on its consumers, in terms of the Tariff Policy.

(v) We feel that the State Commission should prepare a paper for methodology to achieve the objective of giving effect to determination of differential BSP on account of difference in consumer mix and at the same time passing on the impact of relative efficiencies of the distribution licensees and invite objections /suggestions of the public and thereafter finalise the methodology after considering the objections/suggestions of the public and pass consequential order. Accordingly, directed.

32. This Appeal is disposed of with above directions. The State Commission is directed to pass consequential order in terms of the directions given in this judgment within 180 days of communication of this order. No order as to costs.”

334. According to the above direction of the Hon’ble Tribunal the Commission had floated a paper on redetermination methodology for fixation of BSP of GRIDCO inviting suggestion from the public. In their direction the Hon’ble Tribunal has basically directed the Commission for redesigning of BSP determination methodology on major grounds of relative efficiency of the DISCOMs in managing the controllable expenditure.
335. The Commission have been following a particular methodology considering the uniqueness of Odisha power sector for a long time. The State Designated Agency GRIDCO holds all the Power Purchase Agreement (PPA) with the Generators on behalf of State Government. Therefore, power purchased from Generators is pooled at GRIDCO end and thereafter supplied to DISCOMs. It is not possible to allocate particular power stations to a DISCOM since the Power Purchase Agreement of that Generator has been made with the GRIDCO and not with a particular DISCOM. Moreover, DISCOMs have also Bulk Supply Agreement (BSA) with GRIDCO. This has been a legacy of the past and when the PPAs will be allocated to DISCOMs in a future year as per the decision of the Government the allocation of power from that generator to a particular DISCOM shall be a possibility. Accordingly, the Commission has no alternative but to consider the pooled power purchase cost of GRIDCO while designing the BSP of DISCOMs.
336. The relative efficiency of DISCOMs in managing their controllable cost has been elaborately provided in Regulation 5 (H) of the OERC (Terms and Conditions for Determination of Tariff) Regulation, 2004. Therefore, though the Commission follows uniform Retail Supply Tariff in the State any gain due to improvement of efficiency in managing controllable cost shall be passed on to the consumers in terms of rebate to the consumers of particular DISCOM. This way the consumers would get the benefit of efficiency improvement of DISCOMs. Therefore, the suggestion of Hon’ble APTEL to give benefit to the consumers through BSP for

improvement of efficiency of the concerned DISCOMs is actually allowed through reduction of tariff. It is needless to mention here that the suggestion of Hon'ble APTEL has been implemented through our Regulatory provisions.

337. 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 Utility 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 Utility 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 Utilities 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 Utility would reap substantial higher revenue than another distribution Utility 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.
338. 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.

339. Tariff is essentially intended to balance the conflicting interest of various stakeholders like the distribution Utilities 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.
340. 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

341. Like the ARR approval of GRIDCO for FY 2014-15, there shall not be any levy of separate maximum demand charges upto the permitted SMD for the distribution companies for the FY 2015-16. 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

342. GRIDCO has proposed energy charge @ 354.86 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.
343. 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 – 60
Bulk Supply Price and Quantum of Energy for FY 2015-16

Name of the DISCOMs	Quantum of Energy for sale during FY 2015-16 (MU)	Total Revenue for FY 2015-16 (Rs. Crore)	Bulk Supply Price approved for FY 2015-16 (P/U)	Existing Bulk Supply Price i.e. approved for FY 2014-15 (P/U)
CESU	8780.00	2502.30	285.00	265.00
NESCO	5250.00	1585.50	302.00	280.00
WESCO	7350.00	2278.50	310.00	286.00
SOUTHCO	3420.00	684.00	200.00	185.00
Total	24800.00	7050.30	284.29	263.21

344. As against GRIDCO's total net revenue requirement of Rs.7049.94 crore after adjustment of miscellaneous receipts of Rs.6.85 crore, it will recover Rs.7050.30 crore from DISCOMs through energy charges for the year 2015-16.
345. 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.
346. 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 29.01.2003 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. 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. Further, 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. The Govt. of Odisha vide letter No.R&R-25/2013/94 dtd.25.03.2013 stated that the suggestion of the Commission to keep the support of the Govt. in the matter of keeping the effect of up-valuation asset of GRIDCO/OPTCL and OHPC, allowing the moratorium on debt services to the State Govt. till the sector turns around has not been agreed to the Govt. in Finance Deptt. However, steps have been taken by the Govt. in this regard to other recommendation of the Commission in their letter No.4440 dtd.19.04.2010 and the proposal will be placed before the Cabinet for approval after which notification will be issued.

347. The Commission is 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 its letter vide No.Dir(T)-175/02/77 dt.16.01.2014 stated that the Govt. notification on this issue has not yet received. The concession was given only upto the financial year 2012-13. The same concession may be continue for FY 2014-15 and onwards so that the effect of up-valuation is not considered while determining the tariff for the ensuing year. The Govt. of Odisha vide letter No. 4323 dated 31.05.2014 submitted its reply and sought information

from the Commission on the impact of up-valuation of assets on the tariff which has been kept in abeyance. The Commission gave the supporting details i.e summary sheet of up-valuation impact vide letter No. 862 dated 12.06.2014. The Commission also wanted the decision of the Govt., in this matter vide letter No. 51 dated 13.01.2015. Although, the Govt. of Odisha vide letter No. 1808 dated 28.02.2015 gave an item wise reply to the letter of the Commission, but the issue regarding up-valuation of assets has not been addressed. In other words the reply from State Govt. on this issue is still awaited. Pending such notification from the Govt., the Commission recommended to extend the concession for FY 2015-16 and onwards so that the effect of up-valuation is not considered while determining the tariff for the ensuing year.

Charges for Overdrawal of Energy

348. GRIDCO in its application proposes that any excess drawl of energy by a Distribution and Retail Supply Utility 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 2015-16 (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 / Deviation Settlement of the month plus transmission charges and transmission loss.
349. The Commission has already framed suitable guidelines/regulations for intra-state ABT, which will be binding on all the users of the system. As the Commission have 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 schedule energy shall be billed by GRIDCO and paid by DISCOMs as per the present Tariff Order of the Commission. Any deviation from the scheduled energy shall be billed by SLDC and paid by DISCOMs as per the prevalent UI rate.

Rebate

350. For payment of bills through a letter of credit or by cash within two working days (excluding 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 Utility, a rebate of 1% shall be allowed.
351. DISCOMs, time and again during various hearings have raised the issue of rebate from GRIDCO. Due to existence of past arrears, any excess payment is adjusted towards such arrears and therefore they are never able to a rebate. Commission also feels that rebate is an incentive towards prompt collection and prompt payment of dues to GRIDCO and is a motivating factor. With the above Commission decides as under. Any payment within the specified period by DISCOMs shall be first adjusted towards current months dues raised in the bill. If the current dues are fully met within the specified time period GRIDCO shall allow rebate. Payments over and above the current dues shall be adjusted towards the arrears after rebate.

Late Payment Surcharge

352. In case payment of bills by the Utilities 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

353. 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.
354. The Bulk Supply Price in respect of GRIDCO as indicated below will become effective from 1st April, 2015 and shall continue until further orders.

Table -61

Name of the DISCOMs	Paise/ Kwh
CESU	285
NESCO	302
WESCO	310
SOUTHCO	200

355. The application of GRIDCO in Case No.68 of 2014 is disposed of accordingly.

Sd/-
(A. K. DAS)
MEMBER

Sd/-
(S. P. SWAIN)
MEMBER

Sd/-
(S.P. NANDA)
CHAIRPERSON