

**ODISHA ELECTRICITY REGULATORY COMMISSION  
BIDYUT NIYAMAK BHAWAN  
PLOT NO. 4, CHUNOKOLI, SHAILASHREE VIHAR,  
BHUBANESWAR-751021**

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**Present: Shri Gajendra Mohapatra, Member  
Shri Sushanta Kumar Ray Mohapatra, Member**

**CASE NOS.78 & 79 OF 2022**

**Date of Hearing : 15.02.2023  
Date of Order : 23.03.2023**

**In the matter of: Application for approval of Aggregate Revenue Requirement (ARR) and determination of Bulk Supply Price (BSP) of GRIDCO Ltd. for FY 2023-24, under Section 86 (1) (a) & (b) and other connected provisions of the Electricity Act, 2003 read with the OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004 and the OERC (Conduct of Business) Regulations, 2004 and other relevant Rules and Regulations.**

AND

**In the matter of: Application under Section 86(1)(a) &(b) read with other applicable provisions of the Electricity Act, 2003 read with relevant provisions of the OERC (Conduct of Business) Regulations, 2004 for truing up of expenses for FY 2021-22.**

**ORDER**

GRIDCO Limited (hereinafter called as “GRIDCO”) is a Deemed Trading Licensee under the 5<sup>th</sup> Proviso to Section 14 of the Electricity Act, 2003 (hereinafter referred to as “the Act”). GRIDCO carries out the business of Bulk Supply of electricity to the four Electricity Distribution & Supply Utilities, namely TPCODL, TPNODL, TPWODL & TPSODL (for short, “DISCOMs”) by utilizing the transmission network of OPTCL, the State Transmission Utility (STU) and Inter State Transmission System (ISTS). By Section 86 (1) (b) of the Act, the Commission is vested with the authority to determine the power procurement price structure for distribution companies operating in the State of Odisha. Under the existing Bulk Supply Agreements with GRIDCO, the Distribution Companies of Odisha are under obligation to purchase power solely from GRIDCO. In determining the procurement price, the Commission has to hear not only the buyers (Distribution Companies) but also the seller (GRIDCO Ltd.). The demand of GRIDCO for fixation of price of BSP cannot be reasonably effected without hearing GRIDCO on

the point of its Aggregate Revenue Requirement. Thus, the GRIDCO is obligated to file Application for approval of its ARR. Hence, the Commission has taken into consideration the ARR filed by GRIDCO for the FY 2023-24.

### **PROCEDURAL HISTORY (Para 2 to 7)**

2. The Commission had directed GRIDCO Ltd. to publish its Aggregate Revenue Requirement (ARR) and determination of Bulk Supply Price (BSP) application for the FY 2023-24 in the approved format in two leading and widely circulated daily newspapers one in odia and one in English and the matter was also posted on the Commission's website ([www.oriarc.org](http://www.oriarc.org)) and GRIDCO's website in order to invite objections/suggestions from the intending objectors. GRIDCO has filed rejoinder, counter to the objections submitted by the objectors.
3. In response to the aforesaid public notice in respect to the ARR and BSP Application of the GRIDCO Ltd. for FY 2023-24, the Commission received 09 nos. of objections/ suggestions from the following persons/ associations/ institutions/ licensees. However, notices were issued to the following persons to participate in the hearing of both the Cases bearing Nos.78 of 2022 and 79 of 2022: -

(1) M/s. OPGC Ltd., Zone-A, 7<sup>th</sup> Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023, (2) M/s. Vedanta Limited, 1st Floor, C-2 Fortune Tower, Chandrasekharpur, Nandanakanan Road, Bhubaneswar-751023 (3) Shri R.P.Mahapatra, Retd.Chief Engineer & Member(Gen.)erstwhile OSEB, Plot No.775(P), Lane-3, Jayadev Vihar, Bhubaneswar-751013, (4) M/s. Grinity Power Tech Pvt. Ltd., At-K-8-82, Kalinga Nagar, Ghatikia, Bhubaneswar-751029, (5) Shri Soumya Ranjan Patnaik, S/o-Late Brajabandhu Patnaik, MLA, Khandapada, Plot No. 185, VIP Colony, Nayapalli, Bhubaneswar-15, (6) M/s. Utkal Chamber of Commerce & Industry Ltd. (UCCI), N-6, IRC Village, Nayapalli, Bhubaneswar-751015, (7) M/s.Ferro Alloys Corporation Ltd.,(FACOR), D.P.Nagar,Randia, Dist.-Bhadrak-756135, (8) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour & President, UpobhoktaMahasangha, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012, (9) Shri AlekhaChnadra Malik, S/O-Late Harekrushna Malik, Plot No.335, City Garden, Raghunathpur, Bhubaneswar-751024, (10) Shri Ananda Kumar Mohapatra, Plot No.799/4, Kotitirtha Lane, P.S: Old Town, P.S: Lingaraj Police Station, Bhubaneswar-751002. (11) M/s. VISA Steel Ltd. Kalinganagar, Industrial Complex, At/Po:Jakhapura-

755026, (12) M/s. Indian Energy Exchange, Plot No. C-001/A/1, 9<sup>th</sup> Floor, Max Towers, Sector-16B, Noida, Gautam Buddha Nagar, Uttar Pradesh-201301, (13) The Chief Executive Officer, TP Central Odisha Distribution Ltd.(TPCODL), 2<sup>nd</sup> Floor, IDCO Towers, Janpath, Bhubaneswar-22, (14) The Chief Executive Officer, TP Western Odisha Distribution Ltd. (TPWODL), Burla, Sambalpur-768017, (15) The Chief Executive Officer, TPNODL, Corporate Office-Januganj, Balasore-756019, (16) The Chief Executive Officer, TPSODL, Courtpeta, Berhampur-760004, (17) the representative of the Principal Secretary to Government of Odisha, Department of Energy, Bhubaneswar.

4. In exercise of the powers conferred under Section 94 (3) of the Electricity Act, 2003, the Commission appointed World Institute of Sustainable Energy (WISE), Pune, as Consumer Counsel for objective analysis of the licensee's ARR and Bulk Supply Price proposal for FY 2023-24 in order to protect the interest of the consumers of Odisha. The Consumer Counsel-WISE, Pune presented its views on the matter in the hearing.
5. The date for hearing was fixed to 15.02.2023 at 11.00 AM through hybrid mode (both physical and virtual) and it was duly notified in the leading newspapers mentioning the list of the objectors, date and time of hearing. The Commission had also issued notices to applicant, objectors and the Department of Energy, Government of Odisha informing them about the date and time of hearing of the above matter through hybrid mode requesting them to furnish their individual e-mail ID and Whatsapp number, if they desire, to participate in the hearing through virtual mode. Accordingly, some of the objectors provided their e-mail ID for taking part in the hearing through virtual mode.
6. In its consultative process, the Commission conducted the public hearing through hybrid mode on 15.02.2023 and heard the Applicant, Objectors, Consumer Counsel and the Representative of Dept. of Energy, Govt. of Odisha and other participants at length. The following persons participated in the hearing process.

(1) Shri Trilochan Panda, Managing Director, GRIDCO Ltd., (2) Shri Haresh Satpathy, the Representative of M/s. OPGC Ltd., (3) Shri Lakshya Bagdwal, Advocate on behalf of M/s. Vedanta Limited, (4) Shri R.P. Mahapatra, Retd. Chief Engineer & Member (Gen.) erstwhile OSEB, (5) Shri Soumya Ranjan Patnaik, S/o-Late Brajabandhu Patnaik, MLA, Khandapada, (6) Shri Bibhu Charan Swain, the Representative of M/s. Utkal Chamber of Commerce & Industry Ltd. (UCCI), (7) M/s. Ferro Alloys

Corporation Ltd.,(FACOR), (8) M/s. Visa Steel Ltd., (9) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour & President,UpobhoktaMahasangha, (10) Shri AlekhaChnadra Malik, S/O-Late Harekrushna Malik, (11) Shri Ananda Kumar Mohapatra, (12)Shri Puneet Munjal, Head Regulatory Affairs & G.A. TP Central Odisha Distribution Ltd.(TPCODL) for and on behalf of (13) the Chief Executive Officer,TP Western Odisha Distribution Ltd. (TPWODL), (14)the Chief Executive Officer, TPNODL, (15)the Chief ExecutiveOfficer,TPSODL, (16) Ms. Nibedita Mishra Addl. Secretary to Government, Department of Energy, Government of Odisha and the Representative of Consumer Counsel-WISE, Pune, appointed by the Commission.The written note of submissions filed in the above cases were taken in to consideration by the Commission.

7. The State Advisory Committee (SAC) meeting was convened on 15.03.2022 at 11.00 A.M. through physical mode for discussion on Tariff proposal of licensees and generators including Bulk Supply Price proposal of GRIDCO for FY 2023-24. The Members of the SAC, Special Invitees, the Representative of Department of Energy, Govt. of Odisha actively participated in the discussion and offered their valuable suggestions and views on the matter for consideration of the Commission.

**PROPOSAL OF GRIDCO ON ARR AND BULK SUPPLY PRICE (BSP) FOR THE FY 2023-24 (Para 8 to 53).**

8. GRIDCO, being the successor organization to the erstwhile Odisha State Electricity Board (OSEB), continues the functions of bulk purchase and sale of power in the interest of the State under the “Single Buyer Model”, as a matter of historical legacy. Accordingly, GRIDCO continues to procure power from various generators located inside Odisha and the State share from central sector generators for supplying the same to DISCOMs. Under the existing Bulk Supply Agreements between the DISCOMs and the GRIDCO, the DISCOMs are required to purchase power from GRIDCO at a regulated price to be determined and approved by the Commission. The Commission is empowered under the Electricity Act, 2003 to determine the power procurement price of the DISCOMs. This procurement price incidentally happens to be the Bulk Supply Price at which GRIDCO supplies power to the DISCOMs. Moreover, GRIDCO also supplies emergency power to the Captive Generating Plants (CGPs) and trades the surplus power, if any, from time to time. Thus, as a statutory requirement, as provided in the OERC (Conduct of Business) Regulations, 2004 & other related Regulations and as per

Section 86 (1) (a) & (b) & other applicable provisions of the Electricity Act, 2003, GRIDCO is required to submit its Annual Revenue Requirement before OERC for determination of the power procurement cost of the DISCOMs. Accordingly, GRIDCO has filed an application for approval of its proposed Aggregate Revenue Requirement and revision of Bulk Supply Price for the FY 2023-24.

#### **Projection of Demand and Energy**

9. The Simultaneous Maximum Demand (SMD) of DISCOMs for the FY 2023-24 has been projected by GRIDCO as 6017 MVA based on the maximum SMD observed during April 22 to October 22 period and the additional load growth as estimated for the FY 2023-24 over FY 2022-23 for each DISCOM. GRIDCO has projected energy requirement as 36428 MU for FY 2023-24, which includes energy consumption of DISCOMs (36358 MU) and emergency power supply to captive generating plants (CGPs) like NALCO and IMFA (70MU).

#### **Quantum of Power Procurement**

10. GRIDCO has estimated an energy availability of 38453.07 MU for the FY 2023-24 from different generating sources and proposed to procure the entire available energy. However, GRIDCO has projected State requirement of 37554.41 MU for FY 2023-24 considering the energy requirement of 36428 MU for DISCOMs and CGPs and 1126.41 MU towards Transmission Loss @ 3.0% in state transmission utility (STU) system. GRIDCO plans to sell the surplus power in the short-term market and details in this regard are given below.

**Table - 1  
Demand and energy projection of GRIDCO for FY 2023-24**

<b>Particulars</b>	<b>Projection for FY 2023-24</b>
SMD for DISCOMs Utilities (MVA per month)	6017
Energy Demand of DISCOMs and emergency sales (MU)	36428.00
Transmission Loss @ 3% as approved for FY 2022-23 (MU)	1126.41
Energy Required to be purchased by GRIDCO to meet the power demand of Discoms & CGPs (MU)	37554.41
Available Energy (MU)	38453.07
Surplus Energy (MU)	898.66

### Power Purchase Cost Projected for FY 2023-24

11. The detailed cost of power purchase as furnished by GRIDCO for FY 2023-24 is reproduced hereunder in Table below.

**Table - 2**  
**Proposed Power Procurement Cost for FY 2023-24**

Station Name	Energy Availability (M U)	Per unit Rate (P/U)	Total Cost (Rs Crore)
HHEP	664.52	119.27	79.26
CHEP	344.52	120.78	41.61
Rengali	749.43	107.25	80.38
Upper Kolab	700.92	90.32	63.31
Balimela	1,176.12	68.60	80.68
<b>Sub-Total</b>	<b>3635.51</b>	<b>94.96</b>	<b>345.24</b>
Upper Indravati	1930.50	88.33	170.52
<b>Total</b>	<b>5566.01</b>	<b>92.66</b>	<b>515.77</b>
Machkund	259.88	116.98	30.40
<b>Total</b>	<b>5825.89</b>	<b>93.75</b>	<b>546.16</b>
OPGC (1& 2)	2509.73	287.33	721.12
OPGC (3& 4)	9294.69	334.27	3106.90
Small Hydro	483.35	437.12	211.28
Biomass	80.00	760.00	60.80
Wind Energy	1060.43	279.94	296.86
State Solar	606.00	777.36	471.08
Central Solar	1554.00	177.23	275.41
CGPs and Co-Gen.	0.00	-	-
IPPs	5261.94	318.41	1675.43
<b>Total State Availability</b>			
Darlipalli STPS-I	5503.70	358.95	1975.53
Talcher STPS-II	1548.52	328.94	509.37
Talcher STPS-I	1974.31	355.80	702.45
Barh	940.20	542.66	510.21
Kahalgaon STPS-II	205.05	536.94	110.10
Kahalgaon STPS-I (Bundled power)	24.97	719.26	17.96
Farakka STPS-III	321.72	787.08	253.22
Farakka STPS-I & II (Bundled power)	49.70	760.76	37.81
<b>Total Central Thermal</b>	<b>898.67</b>	<b>577.48</b>	<b>518.96</b>
Chukha	267.68	248.43	66.50
TALA	122.20	234.78	28.69
Mangdechhu	313.04	433.43	135.68
Teesta	505.76	202.55	102.44
<b>Total Central Hydro</b>	<b>1208.68</b>	<b>275.77</b>	<b>333.32</b>
<b>Total Power Purchase</b>	<b>38453.07</b>	<b>307.26</b>	<b>11,815.02</b>
ISTS Tr. Charges	-		774.71

Station Name	Energy Availability (MU)	Per unit Rate (P/U)	Total Cost (Rs Crore)
ERLDC Charges	-		2.81
SLDC Charges	-		1.28
<b>Total</b>	<b>38453.07</b>	<b>327.51</b>	<b>12,593.82</b>

12. GRIDCO has submitted that apart from availability of energy from various sources, it also sources power through need-based power banking arrangement with different Generators/Utilities under exigency/force majeure conditions. The arrangement is a cashless transaction which helps it as a cash-deficit Utility. GRIDCO submitted that there may be requirement to procure power to meet peak demand during the months like April, May, June etc. under Power Banking Arrangement during FY 2023-24. However, the above assumption does not preclude procurement or supply of Power through Power Banking under exigency / force majeure conditions during outage of the approved stations or to meet peak demand.
13. Further, GRIDCO has prayed before the Commission to pass suitable orders related to sale of surplus power to industrial/large consumers considering recovery of cost to GRIDCO, margins for DISCOMs and applicable transmission charges etc.

#### **Additional Power Purchase cost during FY 2023-24**

14. GRIDCO requests to consider the claim of Rs.1072.42 Crore as additional power purchase cost for payment to be made to OPGC (I to IV) due to year End charges and Secondary fuel oil cost; differential amount payment to NTPC, one time settlement payment to KBUNL, ash transportation charges to NTPC; additional payment towards various renewable projects; and payment towards wage revision with respect to TEESTA-V power project etc.

#### **Special Appropriation for Loan Repayment Liabilities**

15. GRIDCO has outstanding loan balance of Rs 6563.86 Cr. as on 31st March 2022 with repayment liability of Rs 1592.54 Cr. due in FY 2023-24. Due to non-cost reflective BSP, disallowance of carrying cost on Regulatory assets and huge receivables, the loan liability has increased over the year. GRIDCO has proposed to first meet such loan liability from margin from sale of surplus power as directed by the Commission in its previous orders. As the trading margin will be very low due to present market condition, GRIDCO has requested create a separate mechanism to meet net repayment liability post adjustment of margin.

16. Further, GRIDCO submitted that there is no mechanism available for recovery of past dues given in the order of the Commission in Case No. 27 of 2021 related to consolidated true up for FY 2015-16 to 2019-20. Any default in repayment will severely impact credit rating of GRIDCO. Considering the insufficient trading margin to meet huge repayment liability in FY 2023-24, GRIDCO has proposed to deduct margin earned from sale of surplus power (sale price minus variable charges) from the repayment liability for the year and requested to allow the balance repayment amount in the following manner:
- a. Allow as a part of the annual revenue requirement,
  - b. Allow a regulatory surcharge recovery as a percentage of bulk supply tariff, or
  - c. Allow as a regulatory asset with an amortisation in a defined period of 3 to 5 years, as the Commission deems fit.
17. Further, GRIDCO has suggested that the vesting orders for TPCODL, TPNODL, TPWODL and TPSODL stated that the depreciation on assets of erstwhile utilities transferred to the successor entities shall be utilised to meet the additional serviceable liabilities. As per the orders of the Commission regarding finalization of opening balance sheet of TPCODL and TPWODL, these entities do not have to service any additional serviceable liabilities. Therefore, the depreciation on assets transferred to all the four new DISCOMs may be utilised for payment of past dues of GRIDCO.

#### **Interest, Financing and Other expenses**

18. GRIDCO has proposed to incur about Rs.936.49 Crore during the FY 2023-24 towards expenses on account of interest and financial charges, depreciation, Employees Cost, A&G Expenses etc.
19. GRIDCO has submitted that total interest and finance charges for FY 2023-24 is estimated to be Rs. 543.46 Crore based on existing loan liabilities along with the proposed working capital loan to be availed during FY 2022-23 & FY 2023-24 including securitized dues to be paid to OHPC. GRIDCO submitted that the reasons to borrow loans are predominantly due to non-cost reflective BSP, non-allowance of carrying cost on regulatory assets, huge outstanding receivables from DISCOMs. Further, due to the above reasons GRIDCO was compelled to resort to debt for the years which resulted in financing costs as well as repayment obligations. In case of payment of OHPC securitized dues, GRIDCO submitted that recently a meeting was

held between GRIDCO and OHPC on 28.10.2022, wherein it was deliberated that unless and until the interest cost is not passed on by the Commission in the ARR of GRIDCO it may not be possible to pay interest on Securitized Dues. In view of above, GRIDCO has requested to allow the interest dues of Rs. 46.42 Crore against OHPC Securitized Dues for the FY 2023-24 in the ARR for FY 2023-24 under Interest & Finance Charges.

20. GRIDCO has proposed Rs.23.52 Cr. towards employee cost for FY 2023-24. Further, Rs.0.81 Cr. and 13.07 Cr. has been proposed as repair and maintenance cost and administrative and general expenses, respectively. The Details of above expenses are given in the table below.

**Table-3**  
**Interest, Financing & Other expenses for FY 2023-24 (Rs. Crore)**

Particulars	GRIDCO proposal for FY 2023-24
1. Interest & Financial Charges	543.46
2. Other Costs:	
a. Employee Cost	23.52
b. A&G Cost	13.07
c. Repair & Maintenance Cost	0.81
3. Depreciation	1.31
4. Return on equity (@ 16%)	354.32
<b>Total (1+2+3+4)</b>	<b>936.49</b>

**Other Income / Miscellaneous Receipts**

21. GRIDCO has expected to earn an amount of Rs. 51.94 Crore during FY 2023-24 (at approved rate of Rs 7.42 /Unit towards Emergency Sale) from proposed emergency sale of 70 MU to long term customers like NALCO and IMFA.

**Receivable from DISCOM Utilities and other parties**

22. GRIDCO has submitted that with the sale of licenses, there is uncertainty in realisation of past dues from DISCOMs. Prior to sale of licenses, GRIDCO had escrow mechanism for recovery of dues. Post sale of licenses, the past dues of GRIDCO have been retained in the erstwhile utilities which are non-functional and do not have any revenue stream to repay GRIDCO's past dues. Thus, at present, GRIDCO does not have any mechanism at its disposal to recover the dues from DISCOMs. This will negatively impact the capabilities of GRIDCO to meet the debt service obligation for the short term/ working capital loans. GRIDCO has outstanding securitized dues of Rs.1863.81 Crore (as on 30.11.2022) payable by DISCOMs including DPS of Rs.700.85 Crore, due of Rs.958.80

Crore towards BSP bills (31.10 2022), due of Rs. 174 Crore for deferred credit, due of Rs.167.60 Crore for transfer scheme receivable, and due of Rs.195.36 Crore towards Bonds from DISCOMs.

23. In view of this, GRIDCO has submitted that a mechanism be put in place for principal and interest repayment of short-term loans availed to bridge the working capital gap arising due to concerns on non-realization of BSP dues from DISCOMs during the past years.

#### **Aggregate Revenue Requirement (ARR)**

24. The proposal for Aggregate Revenue Requirement of GRIDCO for FY 2023-24 is summarized in the Table below:

**Table - 4**  
**Proposed Aggregate Revenue Requirement of GRIDCO for FY 2023-24 (Rs. Crore)**

<b>Particulars</b>	<b>Amount</b>
Power purchase cost	12593.82
Additional Power Purchase Cost (as pass through)	1072.41
Interest cost	543.46
Employee cost	23.52
Repair & Maintenance	0.81
Administrative and General Expenses	13.07
Depreciation	1.31
Return on Equity	354.32
<b>Gross Revenue Requirement</b>	<b>14602.72</b>
Less: Return on Equity	354.32
Less: Revenue from Trading of Surplus Power	357.08
Less: Revenue from Emergency sales	51.94
<b>Net ARR</b>	<b>13839.39</b>

#### **Proposed Revenue Earning at Existing BSP**

25. GRIDCO has estimated to earn revenue of Rs.11513.63 Crore during FY 2023-24 from the anticipated sale of 36358 MU to DISCOMs at the existing BSP Rate for FY 2022-23.

#### **Excess / Deficit in the ARR and Proposal for Revision of Bulk Supply Price for FY 2023-24**

26. GRIDCO has estimated that it would suffer revenue deficit of Rs. 2325.70 Crore considering the proposed net ARR of Rs. 13839.39 Crore and the revenue of Rs.11513.69 Crore to be earned from sale of the proposed energy of 36358 MU to

DISCOMs during FY 2023-24 at the existing BSP Rate for FY 2022-23. The details are shown in the table below:

**Table -5**  
**Excess/Deficit on Revenue Requirement for FY 2023-24**

SL. No.	COMPONENTS	Amount (in Rs Crore)
1	Net ARR to be recovered through BSP	13839.39
2	Revenue from DISCOMs at existing BSP	11513.69
3	Deficit Revenue at existing BSP	2325.70

27. In order to meet the above estimated revenue deficit during FY 2023-24, GRIDCO has submitted before the Commission for upward revision of Bulk Supply Price for the FY 2023-24. GRIDCO has proposed the revised average BSP of 380.64 P/U to recover the Net Revenue Requirement of Rs.13839.39 Crore through energy charge only as given in the Table below.

**Table-6**  
**Proposed Bulk Supply Price for FY 2023-24**

SL. No.	COMPONENTS	Proposed ARR and BSP for FY 2022-23
A	Net ARR to be recovered through BSP(Rs Crore)	13839.39
B	Units to be sold to DISCOMs Utilities (MU)	36358.00
C	Proposed Average BSP (to recover the Net Revenue through energy charge only) (P/U) [A*1000/B]	380.64

**Demand Charges for excess SMD**

28. GRIDCO has proposed that the Demand Charges may be levied @ Rs.250/kVA/Month from DISCOM Utilities on the excess SMD based on the following conditions: (a) when the actual SMDs of DISCOMs in a month exceeds the permitted Monthly SMDs (105% of the approved SMD); (b) Such Charges shall not be adjusted at the end of the year even if the actual Annual SMD remains within the Permitted Annual SMD i.e. 105% of the approved Annual SMD.

**Over Drawl Charges**

29. GRIDCO submits that presently it bills the DISCOMs at the corresponding OERC approved BSP Rate(s) in terms of the Judgement dated 07.05.2018 of Hon'ble APTEL in Appeal No.55 of 2015 till Deviation Settlement Mechanism (DSM) Regulations is pronounced by the Commission and implemented in the State.

30. GRIDCO has proposed for recovery of charges on account of any excess drawl of energy by a DISCOM during a month over and above the monthly approved energy quantum at the actual power purchase cost incurred for such excess drawl (including transmission, deviation charges, transmission loss and etc.) or at the approved BSP rate for each DISCOM whichever is higher on a monthly basis applicable to the respective DISCOMs.

#### **Fuel Price Adjustment (FPA)**

31. GRIDCO submits that Fuel Price Adjustment (FPA) mechanism needs to ensure timely recovery of variations in fuel cost which is an uncontrollable expense. Ex-post facto approval is provided on quarterly basis by the MERC, Maharashtra allowing monthly adjustment of tariff to account for FPA. Some other States determine the fuel price adjustment on quarterly basis. In Gujarat, FPA upto 10 paise/unit is allowed to be levied without any prior approval of GERC. GRIDCO has requested the Commission to provide a mechanism for monthly or quarterly determination of FPA component which can be recovered through tariff as per the practices followed in the other States.

#### **Rebate**

32. GRIDCO has submitted that the due date of BSP bills of GRIDCO may be kept at 25 days from the date of presentation, in order to settle the bills by the end of the month of billing itself. Further, CERC currently allows maximum rebate of 1.50% for making payment to the generators and transmission licensee within a period of 5 days. The rebate policy must be consistent with the rebate mechanism between GRIDCO and generators (including NTPC and NHPC stations). GRIDCO has proposed following graded rebate:
- a) For crediting the BSP bill of the DISCOMs to GRIDCO's designated current bank account through Letter of Credit on presentation or through NEFT/RTGS within a period of five (5) working days, a rebate of 1.50 % shall be allowed.
  - b) Where the amount is credited on any day after five (5) working days and within a period of twenty-five (25) days of presentation of bill, a rebate of 1.00% shall be allowed.
  - c) The DISCOMs may pay their BSP dues in staggered manner under different rebate options, but for eligibility of rebate, total current BSP dues needs to be settled by the DISCOMs within 25th day of presentation of BSP bills.

**Special concessional tariff under Regulation 139 of OERC Distribution (Conditions of Supply) Code, 2019**

33. The Commission vide its Order dated 23.05.2022 has accorded approval to the interim arrangement agreed between GRIDCO and DISCOMs for sale of surplus power to the interested industries having CGP with CD of more than 20 MW at a fixed price of Rs.4.75/kVAh (beyond 80% LF) through a Tripartite Agreement among GRIDCO, DISCOMs and the Consumer. GRIDCO has proposed to continue the same arrangement for FY 2023-24 with a revised tariff of Rs. 5.25 per kVAh (beyond 70% LF).

**Commitment Charges for new and additional Load**

34. GRIDCO has submitted that, during the course of a year, the DISCOMs approach GRIDCO with applications of new and additional load for the industries / institutions. GRIDCO accordingly plans for additional power procurement depending on the expected date of load addition. However, it has been observed that the requested load is either not availed or there is a delay in availing the load by the industries. But GRIDCO has to bear the fixed charges corresponding to the additional capacity contracted by it to honour the requested load and this additional burden of fixed charges on GRIDCO ultimately puts burden on consumers of the State. However, the industries / institutions do not face any penalty for not availing or delaying in availing the load. Therefore, GRIDCO has requested to impose commitment charges @ Rs.250/KVA/Month on industries in such cases, which may be in form of a lump-sum deposit with the respective DISCOMs and the same shall be passed on to GRIDCO from the DISCOMs, if the consumer does not avail the load as per the commitment.

**Disparity in recovery of Fixed Charge and Variable Charge between DISCOMs and GRIDCO**

35. GRIDCO has submitted that as a Bulk Supplier, GRIDCO needs to recover its expenses in the ratio of variability of its cost to ensure financial sustainability. As per present practice, GRIDCO has to recover its ARR through a BSP which is 100% variable charge whereas GRIDCO makes payment to the generators and transmission utilities in terms of fixed as well as variable component. On the other hand, the DISCOMs have revenue with both fixed and variable component. In view of this, GRIDCO has requested the Commission to allow part of its ARR to be recovered as fixed charge from the fixed charges recovered by the DISCOMs from the consumers.

### **Duty and Taxes**

36. GRIDCO submits that 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.

### **Impact of sale of utilities of revoked licenses on GRIDCO**

37. GRIDCO has stated that the outstanding dues amounting to Rs.7128.60 Crore, lying on all the four erstwhile utilities as on 31.10.2022, is resulting in a negative impact on the financial health of GRIDCO. GRIDCO has no mechanism to collect such huge outstanding dues from them. Therefore, GRIDCO has requested the Commission to allow a mechanism for amortization of these past dues over the next 3-5 years. Further, the depreciation on assets of erstwhile distribution utilities transferred to the new distribution utilities can be utilised to settle GRIDCO's dues. This will help for settling the past dues through BSP without impacting the retail supply tariff.

### **Prayer**

38. In its application, GRIDCO has prayed the Commission to approve the following for FY 2023-24:
- a) Consider allowing all the reasonable costs as proposed in the petition and accordingly, approve the ARR and Bulk Supply Price (BSP) for FY 2023-24 and make the same effective from 1st April 2023;
  - b) Approve the capacity charges as payable by GRIDCO to the generating stations for all existing and new stations to be recovered through BSP, wherever PPA is tied up on overall long-term energy planning of the State;
  - c) Allow the carrying cost on Regulatory Assets and amortization of the Regulatory assets through BSP;
  - d) Allow recovery of the additional cost/s due to over-drawal of energy, fuel price adjustment / fuel surcharge adjustment etc. or on account of any other statutory increase/s, significant rise in the fuel cost, Electricity Duty/ Water Cess levied by the Government of Odisha and any other Statutory levy/ Duty/ Tax etc. if any, be passed on to GRIDCO;
  - e) Approve monthly SMD and monthly quantum of energy for sale to each of the DISCOMs and allow GRIDCO for recovery of charges on account of any excess drawl of energy by a DISCOM during a month over and above the monthly approved energy quantum at actual power purchase cost incurred for excess drawl (including transmission, deviation charges, transmission loss and etc.) or at approved BSP rate for each DISCOM, whichever is higher on a monthly basis.

- f) Allow GRIDCO for recovery of Fuel and Power Purchase Price Adjustment in the tariff order and to create a mechanism for monthly basis.
- g) Pass suitable orders related to sale of surplus power to industrial/large consumers considering recovery of cost to GRIDCO, margins for DISCOMs and applicable transmission charges etc. as specified in the application.
- h) Approve the proposed rebate mechanism as specified in the petition.
- i) To allow a suitable mechanism to recover the shortfall towards DISCOMs' receivable of Rs. 7128.60 Crore, as on 31.10.2022, arising out of sale of utilities of CESU, WESCO, NESCO and SOUTHCO through regulatory process preferably in the next five years.

### **Truing Up Application for FY 2021-22**

- 39. The submissions of GRIDCO, in its Truing Up application in Case No.79 of 2022 for truing up of its expenses for FY 2021-22, are summarized in the following paragraphs:
- 40. GRIDCO has submitted that there is steep increase in approved power purchase cost from 278.06 P/U (procurement cost of Rs. 8005.77 Crore for 28791.96 MU) as approved by the Commission in the Tariff Order for FY 2021-22, to actual cost of 297.88 P/U (procurement cost of Rs. 10021.31 Crore for 33641.65 MU). In absence of any mechanism for speedy recovery of such major and uncontrollable cost, it has severely and adversely affected the liquidity position and operational ability of GRIDCO. Hence, by way of the present application, GRIDCO seek to set out its entitlements based on the actual audited accounts for necessary consideration by the Commission.

### **Power purchase cost**

- 41. GRIDCO has submitted that the State's power purchase requirement is primarily fulfilled through multiple sources, with whom GRIDCO has long-term tied up allocated capacities through various PPAs. The main sources of power procurement are State Hydro Generating Stations (OHPC), State Thermal Generating Stations (OPGC), Central Hydro Generating Stations (Chukha, Tala, Teesta, Mangdechhu), Central Thermal Generating Stations of NTPC, IPPs (Vedanta Ltd., JITPL, GMR Kamalanga Ltd.), Renewable Energy Sources (Solar, Small Hydro, Biomass, Wind). In addition to the above sources, GRIDCO also procures power on short-term basis through power exchanges, trading and also through banking, in case of shortfall from regular sources or to meet the deviation from estimated demand depending on the availability of power on real time basis.

42. GRIDCO has submitted the approved power purchase quantum (MU) and power purchase cost (Rs Crore) vis-à-vis actual power purchase quantum and cost for FY 2021-22, as given in the table below.

**Table-7**  
**Approved and Actual Power Purchase Quantum and Cost for FY 2021-22**

Generating stations	Quantum (in MU)		Cost (in Rs. Crore)	
	Approved	Actual	Approved	Actual
<b>State Hydro Stations of OHPC</b>	<b>5881.74</b>	<b>4667.25</b>	<b>537.73</b>	<b>548.76</b>
Unit- I & II of OPGC	2,726.34	2,614.58	677.37	712.67
Unit- III & IV of OPGC	4,208.22	6,565.02	1300.34	2,051.58
<b>State thermal</b>	<b>6,934.56</b>	<b>9,179.60</b>	<b>1,977.71</b>	<b>2,764.25</b>
GMR (IPP)	1,844.00	1,960.31	621.05	655.42
Vedanta (IPP)	3,003.48	2,101.19	756.85	498.08
NBVN (IPP)	-	3.83	-	0.96
<b>Total IPPs</b>	<b>4,847.48</b>	<b>4,065.33</b>	<b>1,377.89</b>	<b>1,154.46</b>
<b>Renewable Sources</b>	<b>2702.35</b>	<b>2899.39</b>	<b>1022.46</b>	<b>1050.05</b>
<b>Central Hydro Power Stations</b>	<b>1226.95</b>	<b>1260.18</b>	<b>327.17</b>	<b>361.69</b>
TSTPS St-I	2,158.20	2,071.62	675.85	587.99
TSTPS St-II	1,346.00	1,401.35	380.56	354.33
FSTPS I & II	-	380.65	-	200.52
FSTPS III	-	447.91	-	229.63
KhTPS St-I	-	297.65	-	110.95
KhTPS St-II	-	188.22	-	70.87
DSTPS-I	2,608.02	4,919.33	752.10	1,396.00
DSTPS-II	1,086.67		313.38	
Barh-II		221.00		158.19
RRAS (NTPC)				(1.74)
Kanti Bijlee Utpadan Nigam		18.50		73.90
NVVNL Bundled Power (thermal)		115.85		45.34
<b>Total Central Thermal</b>	<b>7,198.89</b>	<b>10,062.08</b>	<b>2,121.88</b>	<b>3,225.98</b>
<b>Total</b>	<b>28,791.97</b>	<b>32,133.83</b>	<b>7,364.84</b>	<b>9,105.19</b>
Central Tr. & ERPC Charges			640.93	609.49
Power Purchase through Trading				183.65
Other Charges i.e. Deviation, OA etc.				122.97
Less: Rebate availed from generator				146.94
<b>Grand Total</b>			<b>8005.77</b>	<b>9874.37</b>

43. GRIDCO submitted that it always undertakes cost-efficient power purchase planning by drawing power on merit order due to which GRIDCO has been able to procure power at a low cost compared to other States. GRIDCO purchases power from high-cost sources to mitigate the exigency situation arises in the State due to the outage of generating stations or increase in demand and also, sometimes the power is being force scheduled to GRIDCO at Technical Minimum. GRIDCO submitted that the Commission has not approved any power from FSTPS-I, II & III, KhSTPS-I&II and Barh-I for FY 2021-22

due to higher variable charges of these stations as compared to other sources (including IPPs). However, in spite of non-scheduling of power by GRIDCO in normal course from the costly power stations, there was forced scheduling from these stations by RLDC for running these high-cost plants at technical minimum which were beyond the control of GRIDCO. As these events are uncontrollable, the total costs incurred towards power procurement from all NTPC stations need to be approved. Further, fixed cost is a sunk cost for it, which is paid even if it does not source power from FSTPS, KhSTPS and Barh-II stations as per the terms of PPA. The Commission in its earlier tariff orders has approved fixed cost from these stations despite nil or some quantum of energy approved from these stations.

44. GRIDCO has submitted that in the judgment of Hon'ble APTEL in Appeal No. 255 of 2014 in the matter of Damodar Valley Corporation Vrs. Jharkhand State Electricity Regulatory Commission, regarding disallowance of power purchase cost, Hon'ble APTEL held that fixed charges need to be paid and approved even if power is not scheduled. Hence, GRIDCO has requested the Commission to approve the total cost of FSTPS, KhSTPS and Barh-II stations in light of the above decision of Hon'ble APTEL.
45. GRIDCO has submitted that the Commission may consider that there has been distortion in the actual drawal of power by GRIDCO vis-a vis non-supply of the requisite quantum of power by the IPPs due to non-adherence of the BSP orders as well as specific orders pertaining to them passed by the Commission. The approval of the Commission for procurement power from the IPPs were quite optimistic. The IPPs have not supplied power as per the approval of the Commission for FY 2021-22, due to which GRIDCO was forced to procure power from other sources at relatively higher cost in order to compensate the shortfall of power from the IPPs. GRIDCO has taken necessary steps and filed petition under Section 142 and 146 of the Electricity Act, 2003 before the Commission for necessary directions against defaulting IPPs.
46. GRIDCO has requested the Commission to approve the power procurement cost of Rs. 9874.37 Crore as per the audited accounts for the FY 2021-22, considering the detailed break up of cost components of energy drawal from each of the approved stations.

#### **Finance and Other Cost**

47. GRIDCO has submitted the approved and actual cost with respect to employees, R&M, A&G and interest on loan as given in the table below.

**Table -8**  
**Approved and Actual Finance and Other Cost of GRIDCO for FY 2021-22**

Sl. No.	Particulars	Commission's Approval	Actual (As per Audited Accounts)
1	Net Employee Cost	11.43	14.01
2	R & M Cost	0.70	0.64
3	A & G Expenses	7.33	31.41*
4	Finance cost (Interest on loan)	75.20	741.11**

\*including delayed payment surcharge of Rs 23.26 Crore.

\*\*including provision for interest on OHPC securitized dues to the tune of Rs.166.15 Crore for the period from FY 2017-18 to FY 2021-22.

#### **Principal Repayment of Loan**

48. GRIDCO has submitted that it had made repayment of Rs.2179.62Crore towards principal repayment of loan (Bank Loan: Rs.1033.64Crore, OMC Loan: Rs.132.31 Crore, Public Bonds: Rs.31.88 Crore, conversion of Govt. loan to Equity: Rs.981.35Crore) during the FY 2021-22. The Commission vide Para-345 of the BSP Order for FY 2021-22 mentioned that proposed Repayment of loan Principal during FY 2021-22 may be met from “Separate Fund” to be created out of the revenue earned from trading of surplus Power, funds earned through sale of low-cost hydro power over and above design energy of OHPC Hydro Stations, earnings from UI/ DSM Charges and budgetary support from Government of Odisha.
49. GRIDCO submitted that earning of any surplus revenue from power trading has not been up to the mark because of the very low prices. Even after taking the trading revenue into account, GRIDCO could manage to earn very nominal revenue. Government of Odisha has so far not provided any Budgetary Support/ Subsidy/ Grant to GRIDCO except providing Government Guarantee to facilitate GRIDCO to avail loan from Banks/Financial Institutions at the competitive MCLR rate.Under the compelling and financial distressed situations, GRIDCO continued to absorb the major deficits of the sector as a whole without maintaining any reserves and surplus to meet its financial obligations. Therefore, GRIDCO has requested to allow its actual repayment of loan to the tune of Rs.1197.83 Crore.

#### **Summary of the Expenses of GRIDCO**

50. GRIDCO has submitted the details of expenses approved by the Commission vis-a-vis the actual expenses duly audited for the FY 2021-22 as given in the table below.

**Table-9**  
**Approved and actual expenses of GRIDCO for FY 2021-22**

<b>Expenditure</b>	<b>OERC Approval (Rs. Cr.)</b>	<b>True-Up Petition (Rs. Cr.)</b>	<b>Difference (Approval - True Up) (Rs. Cr.)</b>
Cost of Power Purchase	8005.77	9874.37	-1868.60
Employee Costs	11.42	14.01	-2.59
Repair & Maintenance	0.70	0.64	0.06
Administrative & General Expenses	5.42	31.41	-25.99
Interest chargeable to Revenue	75.20	741.11	-665.91
Depreciation	1.33	0.26	1.07
Adj. in Statement of Profit & Loss towards Changes in Fair Value of Loans, Bonds & Debentures during FY 2021-22	0.00	0.00	0.00
Bad Debts (FY 2021-22)	0.00	0.00	0.00
<b>Total Expenditure</b>	<b>8099.84</b>	<b>10661.80</b>	<b>-2561.96</b>
Prior Period Adjustments	-	-	
Pass Through of Power Purchase Dues	190.15	0.00	190.15
Previous Loss	-		
Return On Equity	-	-	-
Repayment of Principal (Bank & Commercial Loans)	-	-	
<b>Total Cost</b>	<b>8289.99</b>	<b>10661.80</b>	<b>-2371.81</b>
Revenue : Sale of Power to DISCOM	8257.57	7922.97	-334.60
Trading		2058.84	2058.84
UI/DSM	0.00	45.18	45.18
CGP & Other Sales	44.52	134.47	89.95
Other Income		3.71	3.71
Adj. in Statement of Profit & Loss towards Changes in Fair Value of Bonds during FY 2021-22	0.00	0.24	0.24
<b>Total Revenue</b>	<b>8302.09</b>	<b>10165.41</b>	<b>1863.32</b>
<b>GAP allowed by OERC /Difference in Cost and Revenue (Loss as per Audited Annual Accounts)</b>	<b>-12.10</b>	<b>-496.39</b>	<b>-484.29</b>

51. In line with various decisions/orders of the Hon'ble APTEL and other SERCs and policy directives regarding true-up and treatment of regulatory assets, GRIDCO has requested the Commission to allow for amortization of Regulatory Gap/Assets through increased BSP along with the carrying costs on the regulatory gap being created due to the revenue deficit for the FY 2021-22.

52. In view of the above submissions, GRIDCO has prayed the Commission to:

- a) Approve the differential Costs of Rs.496.39 Crore in truing up of its expenses based on the Audited Accounts for the FY 2021-22;
  - b) allow recovery of the revenue gap along with carrying cost through BSP of subsequent year;
  - c) allow for amortization in tariff as per the directives of Hon'ble APTEL in OP No. 01/2011 and the directives of Ministry of Power, Govt. of India vide their letter dated 11.11.2022.
53. During the hearing, the licensee-GRIDCO was allowed at the outset to give a power point presentation regarding its ARR and BSP application for the FY 2023-24. The World Institute of Sustainable Energy (WISE), Pune who was appointed by the Commission as consumer counsel, put up certain queries and objections regarding ARR and BSP filing of GRIDCO. A presentation on the proposed ARR was made by GRIDCO followed by the objective analysis by the consumer counsel (WISE). The objectors also made their observations and valuable suggestions on the submission of the licensee. Based on the nature and type of issues, objections/ observations of consumer counsel and objectors have been broadly classified and details are as follows:

**VIEWS OF THE CONSUMER COUNSEL AND OBJECTORS ON ARR & BSP PROPOSAL FOR FY 2023-24 AND RESPONSE OF GRIDCO THEREON (Para 54 to 251)**

**Views of Consumer Counsel (WISE)**

54. Design of BSP for DISCOM Utilities has direct impact on consumer tariff; therefore, WISE, the Consumer Counsel has made the following observations on the ARR of GRIDCO and requested for consideration of the Commission.
- a. to review the energy availability from all sources, specifically the low availability from IPPs (i.e. lower than state quota availability) along with the power purchase costs claimed by GRIDCO in respect of various power stations;
  - b. not to consider the high-cost power purchase from central thermal stations and finalise the procurement strictly based on merit order despatch principle;
  - c. to consider purchase cost of OHPC as per its tariff order to be issued;
  - d. to review the cost projected for OPGC unit # 3 & 4 in terms of final tariff order issued by the Commission for the project;

- e. to review the energy procurement from renewable energy projects for meeting the RPO target set by the Commission;
- f. to review the transmission loss and transmission charges in case of central sector projects;
- g. to suitably determine the power procurement rates for IPPs;
- h. not to consider the proposed special appropriation for repayment of loans;
- i. to allow principal repayment through trading income or govt support as per the Commission's earlier directive;
- j. to review the proposed passthrough expenses especially the cost of power purchase from non-approved NTPC stations during FY 22-23 and one time settlement payment made to KBUNL;
- k. not to allow interest on proposed new loans and loans availed from FY 2016-17 onwards as per Commission's earlier orders; and
- l. to verify the actual employee cost, R&M cost, A&G cost and trading income of GRIDCO.

### **Legal Issues**

#### **Views of Objectors**

- 55. One of the Objectors raised objection on the determination of ARR and determination of Bulk Supply Price(BSP). He said that the bulk price is different from bulk supply price. He relies on the bulk price specified in section 86 but not on bulk supply price as determined by the Commission, because the Act does not spell out bulk supply price. The BSP has been determined by the Commission as per the ARR filed by a power trader in contravention to the provisions of the Act; whereas, bulk price has been determined by other SERCs as per power procurement cost only. It may not be correct to contend that the bulk price could not be determined in the absence of the ARR filing due to the reason that other SERCs are determining bulk price without seeking any ARR filing from their power traders.
- 56. The Objector further submitted that GRIDCO is a deemed power trader under the 5th provision to Section 14 of the Act and doing power trading both inside and outside of the State. The functions of the Commission are stipulated under Section 86 of the Act and the Commission cannot function beyond the purview of the Act. Therefore, it is

necessary to revisit Section 86 of the Act along with other provisions and the relevant policy and regulations notified thereunder, inasmuch as GRIDCO relies only on the clauses (a) and (b) of Sub-section 1 of Section 86 of the Act in support his prayers to approve the ARR for the purpose of determination of BSP.

57. The Commission should determine the bulk price and regulate the power purchase cost as per Section 86 (a) & (b) without approving the ARR of GRIDCO for the purpose of determination of BSP. While relying Section 86(1) (a) & (b) of the Act by GRIDCO, this cannot be considered in isolation with other provisions like clause (j) of same Sub-section. Clause (j) of Sub-section (1) of Section 86 states that the State Commission shall fix the trading margin in the intra-state trading of electricity, if considered necessary. The Commission has the power to fix the trading margin for the power trader like GRIDCO and to determine the bulk price of power proposed for trading with DISCOMs. So, under the purview of the Act, the powers, duties and responsibilities of the Commission is very much stipulated to fix the trading margin for intra-state trading of power by GRIDCO and further to monitor the PPAs and other short-term power procurement by GRIDCO within and outside the State in an economic manner.
58. Further, Section 62 of the Act specifies that the Commission has the power to determine the tariff for generation, transmission, wheeling and distribution/sale of electricity as per the notified regulations framed under Section 61 of the Act., whereas it does not spell out anything for determination of BSP for a power trader. Section 61 of the Act empowers the Commission to specify terms and conditions for determination of tariff for the Power Utilities like Generating Companies, Transmission & Distribution Licensees but it does not say that the Commission shall specify terms and conditions for approval of ARR & determination of BSP thereunder for a power trader like GRIDCO. So, in view of section 61 & 62 of the Act, the Commission has no power to consider the ARR of GRIDCO.
59. The objector further submitted that GRIDCO cites the Sub-section 5(k) of Section 15 of Orissa Electricity Reform Act, 1995 and the provisions of amended Conduct of Business Regulations-2011 in support of the filing. The above provisions of OER Act, 1995 and amended Conduct of Business Regulations-2011 are contradictory to the provisions of the Electricity Act, 2003. Therefore, by virtue of Section 185(2)(e) and 185(3) of the Act, the inconsistencies of the OER Act, 1995 with the Electricity Act, 2003 shall not be passed out in the instant proceeding and for which the Commission

should set aside the ARR filed by GRIDCO and determine the BSP of the power trading to DISCOMs in the ensuing FY 2023-24. Further, the OER Act, 1995 does not provide any time period for filing of ARR by GRIDCO.

60. The Objector also submitted that the Hon'ble Supreme Court of India has expressed deep concern over the violation of Section 61 of the Act by the SERCs in the proceeding to determine tariff and directs all the SERCs of India including the Commission to frame regulations for determination of Tariff as per the prescribed guiding principles enumerated in Section 61 of the Act. There is no space in the provisions of the Act to frame required regulations specifying the terms and conditions for determination of tariff like BSP for the power trader, but in the other hand, trading margin can be allowed to the power trader for trading of electricity inside the State.
61. Some of the objectors submitted that GRIDCO should be allowed a trading margin between 4 p/u to 7 p/u as a trader. Considering the 4 p/u and 7 p/u as trading margin, the ARR of GRIDCO excluding power purchase cost should be between Rs 145.5 Cr. to Rs.254.7 Cr. The additional ARR proposed by GRIDCO in its application should not be passed on to consumers.

**GRIDCO's Response:-**

62. GRIDCO is a Deemed Trading Licensee under 5th Proviso to Section 14 of the Electricity Act, 2003. GRIDCO, a wholly State-owned Undertaking & the State Designated Entity and also an Aggregator, is engaged in the business of purchase of electricity in bulk from various generators located within & outside the State of Odisha and also the requisite State share of power from the Central Generators for supply of the same in bulk to the four DISCOMs in the State of Odisha. GRIDCO has been filing its ARR & BSP Application each year before the Commission for approval under Section 86 (1) (a) & (b) and all other applicable provisions of the Electricity Act, 2003 read with relevant provisions of the OERC (Conduct of Business) Regulations, 2004, and other related Rules and Regulations.
63. GRIDCO has submitted that GRIDCO undertakes power purchase planning with an objective of reducing tariff for the consumers of the State. Under the existing Bulk Supply Agreements with GRIDCO, the Distribution Companies of Odisha are under obligation to purchase power solely from GRIDCO. This enables a centralized, bulk procurement planning which helps in maintaining a uniform retail supply tariff in the

State. Owing to cost-efficient power purchase planning, GRIDCO has been able to procure power at a low cost compared to other States. GRIDCO's management of power purchase has ensured that there is no energy deficit in the State even at peak period. GRIDCO owns the responsibility of meeting the RPO and HPO targets for the State. GRIDCO also undertakes trading of surplus power and earns revenue which was utilized to reduce the end-tariff for the consumers. GRIDCO supplies power at-cost without any profit margin to ensure low-cost power for consumers of Odisha.

64. GRIDCO has further submitted that Section 86 (1) (a) (b) of the Electricity Act, 2003 requires the State Commission to determine the power procurement price structure for distribution companies operating in the State of Odisha. For determining the Bulk Supply Price, the Commission conducts public hearing of various stakeholders including the Distribution Companies, the Petitioner GRIDCO Ltd., industries and moreover the public at large. No meaningful hearing on bulk procurement price of DISCOMs is possible unless GRIDCO files its ARR and expected revenue from the energy supplying functions. Accordingly, GRIDCO has filed the present petition for the ensuing financial year 2023-24. Also, the Commission has determined the Bulk Supply Price for all the DISCOMs in its orders for the previous years. The Commission in its order dated 24.03.2022 has broadly explained the applicability of Section 86 and the requirement of GRIDCO to file the ARR petition for determination of the power procurement price of the DISCOMs. The Stakeholders may refer to the previous Orders of the Commission for different years and avoid raising issues already dealt with by the Commission. Further, the Petitioner-GRIDCO has contended that it has no objection regarding determination of Bulk Price for sale of power to DISCOMs. In this regard, GRIDCO submitted that the Section 86 (1) (a) of the Electricity Act, 2003 mentions the functions of State Commission as follows:

*“Section 86. (Functions of State Commission): --- (1) The State Commission shall discharge the following functions, namely: -*

*(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:”*

The stakeholder needs to interpret the above provisions of Section 86 of the Act in the correct perspective, wherein it has been mentioned that the Commission is empowered to determine tariff at which the Distribution Companies shall procure power and supply to end consumers.

65. GRIDCO's Trading margin @4P/U, has been long settled by the Hon'ble Supreme Court of India in Appeal No. 5722 of 2006 (Gajendra Haldea vs. GRIDCO & Others). It is to reiterate that GRIDCO is an "Intra-State Trader" and not an "Inter-State Trader" to whom Trading Margin @ 4 P/U is applicable. Besides, GRIDCO's legal existence and the nature of its business and filing of its ARR & BSP Application each year before OERC have also been upheld by the Commission in multiple occasions. The Commission has been following a particular methodology by way of approval of differential BSP for each of the DISCOMs considering the uniqueness of Odisha power sector for a long time. As the State Designated Entity, GRIDCO holds all the PPAs with the Generators on behalf of State Government since the time of unbundling. Therefore, power purchased from Generators is pooled at GRIDCO end and thereafter supplied to DISCOMs. It is not possible to allocate particular power station to a DISCOM since the PPA of that Generator has been executed with the GRIDCO and not with a particular DISCOM. Moreover, DISCOMs have also Bulk Supply Agreements with GRIDCO and are obligated to purchase power to meet the State demand. The benefit of differential BSP has been accepted over the years which has facilitated in implementing the uniform RST in the State. In absence of such a system, one distribution utility would earn substantially higher revenue compared to other distribution utilities by virtue of concentration of industries (subsidizing consumers) in its area of operation. DISCOMs having higher percentage of subsidized consumers would comparatively earn less revenue. Hence, it is just & fair/proper that BSP should be higher for the DISCOM(s) with higher concentration of HT/EHT industries than for those with lesser HT/EHT load. Therefore, the differential BSP mechanism across the distribution licensees, enables application of uniform retail supply tariff across the State.
66. Further, GRIDCO submitted that 99.78% of the ARR of GRIDCO approved by the Commission for FY 2022-23 constitutes the Power Purchase Cost and the balance 0.22% of the costs are associated cost including Employee Cost, Administrative & General expense etc. Both the power purchase cost and other associated costs are uncontrollable in nature and shall be incurred by any utility which shall discharge the functions of GRIDCO. Further, the Commission has not approved any profit or return on equity till date for GRIDCO unlike other Distribution, Transmission and Generation utilities of the State. On the other hand, due to continuous endeavor of GRIDCO, it was

possible to use the revenue earned from trading of surplus power resulted with moderate control in the retail supply tariff paid by the end consumers of the state over the years.

67. GRIDCO has submitted that it appreciates the concerns of the stakeholder in allowing GRIDCO a margin on its trading activities. GRIDCO being a State Designated Entity has always acted for the interest of the consumers of the State. Given that the power sector in the State was not stable and economically viable, until now, GRIDCO has operated on no profit basis, even incurred huge operating loss due to non-cost reflective tariff over the years.
68. In response to the Stakeholders claim that the Commission is determining generation tariff of OPGC without seeking for the ARR filing, is not appropriate. The Commission has determined the tariff for OPGC Stage-I & Stage-II comprising of Annual Fixed Cost, Variable Charges and other charges based on the applications filed by OPGC for determination of generation tariff.
69. GRIDCO has submitted that in the current context of determination of Bulk Supply Price and the ARR of GRIDCO, with reference to the power purchase cost and all other associated costs, all costs claimed in the Petition are quite legitimate and uncontrollable in nature and moreover are contractual in nature.
70. GRIDCO has submitted that GRIDCO makes bulk purchase of power to meet the State's requirement and makes payment to Generators, which are being passed on in the Tariff. It never gets any grant from State Govt., rather due to inappropriate cost reflective tariff, the revenue deficit has been financed through borrowing with State Govt. Guarantee during past couple of years. However, the Govt. of Odisha is providing budgetary allocation for strengthening of Transmission & Distribution network in the State through Capex program and has not considered funding for any working capital requirement of GRIDCO. Thus, the non-allowability of expenses beyond the trading margin seems to be illogical, inappropriate and untenable.

### **Multiyear Tariff (MYT)**

#### **Views of Objectors**

71. One of the objectors has submitted that Section 61 of the Electricity Act, 2003 and the National Tariff Policy (NTP)-2016 notified by Central Govt under Section 3 of the Act, mandates the State Electricity Regulatory Commissions (SERCs) and Central Electricity

Regulatory Commission (CERC) to follow the principle of Multi-Year Tariff (MYT) in framing regulations & determination of Tariff and Charges of the Generating Companies and Licensees. After issue of the Business plan order for the control period by SERC/CERC, the Licensee/Company files the ARR & Truing up Petition for the ensuing & previous year respectively in due consideration to Business plan order for the concerned year.

72. The Objector submitted that in the absence of truing up exercise of the previous year, the Commission loses its capacity of prudent checking of the ARR documents filed by the Licensee for determination of tariff for ensuing year. If the tariff is determined by the Commission without truing up exercises, then it becomes imprudent and unrealistic.
73. The Regulations notified for Tariff determination and the Tariff Orders issued by SERCs/CERC reveal that they are following MYT principle, under which the ERCs are passing the power purchase cost of the Distribution Licensees for the control period of five years. But in OERC, this was discontinued since 2010, but the new OERC (Terms & Conditions for determination of RST & WT) Regulations, 2022 notified on 22.12.2022 (after the filing of Bulk Price Petition by GRIDCO) specifies several provisions for determination of Bulk Price (BP), ARR, CAPEX & Revenue Gap of the Distribution Licensees under the nomenclature BUSINESS PLAN for a period of five years ending with FY 2027-28. In the aforesaid new Regulations-2022, the Distribution Licensees are directed to file their Business Plan under MYT regime for the period 2023-24 to 2027-28 within 31 January 2023. Therefore, without the support of GRIDCO, the DISCOMs will not be able to file business plan. Therefore, the Objector urged before the Commission to direct GRIDCO to file the Power Purchase Cost & BP for the above control period without which the current tariff proceeding commenced by the Commission will not be completed.

**GRIDCO'S Response: -**

74. GRIDCO has submitted that it has already provided its power purchase requirement for FY 2023-24 before the Commission based on the demand projections submitted by the respective DISCOMs with assumptions and parameters as described in the present Petition. Regarding power purchase cost for the rest of the years of the control period, GRIDCO submitted that as per Regulation 5.4 of the OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2022, the

Distribution Licensee(s) shall prepare short-term and long-term power procurement plan for procurement of power to serve the demand of electricity in its area of operation / supply and submit such Plan to the Commission and GRIDCO for preparation of Bulk Power Procurement Plan. GRIDCO has not yet received any such plan from the respective DISCOMs.

75. GRIDCO is an “Aggregator” with its role as “State Designated Entity” to facilitate power procurement on behalf of the State to meet the entire power requirement of the four DISCOMs in Odisha. The Commission has been approving the Business Plan of the DISCOMs from time to time where GRIDCO remains as an active participant offering its views, especially with regard to its role as the Sole “Bulk Supplier” of Power to the four DISCOMs. Even though the estimated power requirement is approved by the Commission for four DISCOMs in their Business Plan, the principal responsibility of fulfilling such power requirement always falls on GRIDCO to arrange for the Bulk Procurement and Supply of the required power at the Regulated Price in time so that the interest of the State Consumers is always served and protected. Thus, GRIDCO to have a separate Business Plan of its own will be self-defeating in nature and therefore, has been shelved in the greater interest of the Public of the State.

### **Truing up Petition**

#### **Views of Objectors**

76. One of the objectors has submitted that GRIDCO has not filed the Truing up Petition for FY 2021-22 in the present Petition for Bulk Price for FY2023-24. The bulk price cannot be determined without the true up order issued by the Commission for FY 2021-22. Therefore, the Objector requested the Commission to carry out the truing up exercises of the Bulk Price Order issued for FY 2021-22 with reference to the audited accounts of the GRIDCO.
77. The objector further submitted that the Commission in its truing up order dated 22.10.2021 passed for the FY 2016 to FY 2020, has not trued up the estimated Variable Cost (ECR) and Fixed Cost per unit of the individual power stations, from which GRIDCO procured power. The Objector has suggested to refer the MYT Order issued by TNERC dated 09.10.2022, in which TNERC has trued up its Tariff Order with the audited accounts for the period FY17 to FY21 in detail including the Variable Cost & Fixed Cost per unit of individual power stations, actual CTU Loss, CTU Charges etc.

against the corresponding approval in MYT Order. Comparing the true-up order of TNERC with OERC, one can find huge differences.

78. Further, the Objector submitted that the Commission is escorting GRIDCO to continue its corruptive practices in proposing its power purchase cost. The exclusion of the power purchase from the truing up proceeding makes space for GRIDCO to continue its imprudent, unrealistic and corruptive practices in proposing the power purchase cost for the four DISCOMs. Therefore, the Objector urged the Commission to initiate necessary action to true up the station-wise power purchase cost for previous FY2021-22 which has been excluded from truing up exercises for the period FY16 to FY20.
79. Another Objector submitted that under the multi-year tariff, GRIDCO requires the approved ARR under the nomenclature business plan for the control period from FY 2023-24 and the audited financial statements along with true-up exercise for previous FY 2021-22 and the aforesaid documents play crucial role in determination of bulk price. So, tariff proceeding commenced by the Commission for determining the bulk price must consider the above two documents so as to make the bulk price and retail supply tariff (RST) cost effective, prudent and realistic specially because the bulk price constitutes 75% of the RST.
80. GRIDCO had not submitted the audited financial statement along with the truing up exercises for the previous year. But GRIDCO submits some audited figures relating to financial statement for FY 2021-22. From the Cash Flow Statement (F-7), it is found that GRIDCO has generated huge surplus revenue during the FY2021-22. GRIDCO has Rs. 2332.30 Cr. revenue by selling 176.34 MU to CGPs and 5425.22 MU to other consumers excluding DISCOMs. So, that total trading revenue of GRIDCO is arrived at Rs. 2332.30 Cr. by trading 5601.56 MU @ 416.37 P/U. In the other hand, GRIDCO collected revenue of Rs. 8306.14 Cr. for selling 27048.89 MU to four DISCOMS @ 307.08 P/U during FY2021-22. Therefore, it derived huge surplus during FY2021-22 and the same may be considered appropriately for the ensuing FY2023-24.

**GRIDCO'S Response: -**

81. GRIDCO has submitted that it has already filed the True-Up Petition for FY 2021-22 on 29.11.2022 and while filing of True-Up Petition, it has adhered the timelines of OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2022 wherein it has been mentioned that the True-Up Petition shall be filed

by 30th November. GRIDCO has further submitted that the Truing up has been carried out by the Commission till FY 2020-21. The Commission has issued True-Up Order for FY 2020-21 in Case No. 12 of 2022 on 13.09.2022 and the True-Up Petition for FY 2021-22 filed before the Commission on 29.11.2022, is under active consideration.

### **Availability of power**

#### **Views of Objectors**

82. OPGC has submitted that they had furnished the ex-bus generation of 2731.66 MU for Units 1&2 as per generation plan furnished to GRIDCO for FY 2023-24; whereas GRIDCO, in its petition has considered the generation of 2509.73 MU. One of the Objectors has also pointed out that OPGC has considered 2732 MU power at a budgeted PLF of 81.50%; but, GRIDCO mentioned the PLF as 78.61%, and availability as 2510 MU. As OPGC power is cost effective, the Commission may approve availability as 2732 MU as submitted by OPGC.
83. Regarding availability of power from its IPP, M/s. Vedanta Ltd. has submitted that they have filed an appeal (Appeal No. 437/2022) before APTEL, challenging the Commission's order dated 28.10.2022 in Case No. 129 of 2021 and APTEL, vide their judgment dated 13.01.2023, have allowed the said appeal and set aside the OERC order dated 28.10.2022 on re-hearing the Case No 34/2018. In view of this, M/s Vedanta Ltd. has submitted that, GRIDCO is required to submit requisition to avail power from its generating Unit-2 of in term of the Commission's order dated 05.10.2021 in Case No. 34/2018.
84. M/s. Vedanta Ltd. has further submitted that GRIDCO has considered the drawal from Vedanta-IPP as 58% of power available from IPP Unit-2 based on the actual supply. Earlier, on various occasions, they have raised the issue of GCV grade of linkage coal supplied by MCL. The norms for coal consumption in thermal power plant is issued by CEA from time to time. As per the FSA dated 27.08 2013, Vedanta is entitled to receive linkage coal of GCV between G8 to G-13 and the quantity of linkage coal allocated under the said FSA is only 25.70 Lakh tonne per annum. But the GCV of coal supplied by MCL is G-14 grade, having GCV in the range of 3100-3400 kCal/kg based on CEA norms and therefore, Vedanta's coal allocation is required to be increased to 33.09 lakh tonne/annum under the FSA to supply 564 MW to GRIDCO from Unit-2 at 85% PLF. So, Vedanta has shortage of linkage coal of around 7.5 lakh tonne per annum. Thus,

maximum power that can be generated from Unit-2, under the existing FSA with supply of G-14 grade of coal by MCL, is 350 MW. M/s. Vedanta, vide its letters dated 22.07.2020, 02.09.2021, 09.06.2022 and 13.01 2023, has requested MCL to provide additional linkage coal. But, MCL is yet to respond on the same. However, Vedanta has also been paying short supply compensation to GRIDCO for the reason beyond its control.

85. An Objector has submitted that the State quota of power available to GRIDCO from the four IPPs for FY 2023-24 is 7894 MU, out of which GRIDCO has proposed to procure 5262 MU, thereby leaving 2632 MU power. The IPPs are cost effective power and GRIDCO has executed PPAs with them for supply of state quota power. If the IPPs failed to supply state quota power, then they are to discharge the obligation of PPAs and they shall compensate GRIDCO accordingly. However, GRIDCO cannot leave such huge power of 2632 MU in the bucket of IPP. Therefore, the Objector requested the Commission to approve full state quota power from IPPs, so that additional power would be added to the surplus power.
86. GRIDCO has not proposed any procurement of power from the CGPs operating in the State despite knowing that they are generating huge surplus power after meeting their captive demand. The surplus power of CGPs is 23740 MU for FY 20 and 21966 MU for the FY19 as reveals from CEA Report. GRIDCO has proposed to buy costlier power from NTPC; however not buying power from state CGPs even (0-1) MW at Inadvertent power cost, (1 up to 5) MW at Rs.2.75/unit and (5 up to 10) MW at Rs.3.75/unit. GRIDCO is also not taking any action to buy power from IEX. The main purpose of power trader is to expand its volume of power trading. As a power trader, instead of trying to expand its power trading, GRIDCO does not trade the surplus CGP power and procures full state quota high-cost power from generators as per PPAs.
87. The Objector submitted that Govt. of Odisha need not allow further installation of new CGPs in Odisha and allocate the surplus power of existing CGPs to the upcoming new industries, so that the Govt of Odisha will earn huge revenue on account of Electricity Duty. The Commission may issue necessary advices to Govt of Odisha under Section 86 of the Act for economical use the surplus power of the CGPs within the State.
88. The Objector further pointed out that as per GRIDCO the surplus CGP power is infirm power, but the regular generation of surplus power by the CGPs cannot be treated as

infirm power and GRIDCO has grossly failed to economize the surplus power of the CGPs in the interest of the State. The high quantity of cheaper CGP power of Odisha is being exported to other States without paying transmission tariff to OPTCL, for which the Transmission Licensee as well as the Consumers of Odisha are losing huge economics because of the inefficiency of GRIDCO.

89. The Objector further submitted that the CGPs are injecting on an average of 1500 MU inadvertent power into the State grid, which is no cost to GRIDCO. But GRIDCO has neither carries out energy audit nor ascertaining the exact amount of inadvertent power injected into the state grid. However, GRIDCO admits that the CGPs are injecting 500 MU per annum into the State grid as no cost inadvertent power. The Objector urged the Commission to include at least 500 MU inadvertent power without any cost to the power availability of GRIDCO, so that the cumulative surplus power of GRIDCO may be increased to 5453 MU.
90. The surplus power availability to GRIDCO from the Central Generating Stations (CGSs) can be increased by 1209 MU. After deducting the proposed Central Transmission Loss of 3.33%, the gross availability of power is computed by the objector as 11737 MU against GRIDCO's proposal of 10932 MU.
91. Some of the Objectors have submitted that GRIDCO should surrender its quota and should not buy costlier power from NTPC. The Commission has already disallowed to procure power from Farakka and Barh, but still GRIDCO is scheduling power from NTPC and paying bills and burdening the consumers unnecessarily. GRIDCO is to submit the status and action taken by it so far for surrendering the allocated quota.
92. One of the objectors submitted that as per GRIDCO, they have signed several PPAs with NTPC Generating Stations for State requirement based on 17<sup>th</sup> EPS. As per 17<sup>th</sup> EPS, Odisha demand was more than 10,000 MW for the year 2022-23. But the actual demand is found to be less than 10,000 MW. Hence, GRIDCO has to revise the PPA & encourage CGPs of the State to supply power to it, so that bulk supply price will reduce.
93. Another objector submitted that the surplus power calculated by the GRIDCO for the ensuing FY 2023-24 does not include the full state quota power available from Stage-1 & Stage-II OPGC, IPPs, CGS and the surplus power of CGPs. He urged the Commission to consider the full state quota power available from aforesaid sources in

arriving at the State pool power for the FY 2023-24 and accordingly determine the surplus power of GRIDCO for FY 2023-24.

**GRIDCO'S Response: -**

94. GRIDCO has submitted that the power shall be procured and supplied by GRIDCO to the DISCOMs and CGPs for emergency sale following the Merit Order Despatch principle. In the present Petition, GRIDCO has projected that the quantum of surplus power is to be reduced significantly in FY 2023-24 considering the trend of actual drawal of power from various stations during the peak seasons of current FY 2022-23. While on annual basis, there may be surplus power, but the monthly computation shows that there will be deficit for 6 months. During such period of deficit, GRIDCO is obligated to procure power through banking or from the market in order to meet the State requirement. Further, since GRIDCO has an outstanding loan of Rs.6563.86 Cr. as on 31.03.2022 with repayment liability of Rs.1592.54 Cr. in FY 2023-24, in the present Petition, GRIDCO has proposed to first meet such loan liability from margin from sale of surplus power as directed by Commission in Order dated 24.03.2022.
95. As the trading revenue will be insufficient, GRIDCO has also requested the Commission to create a separate mechanism to meet the net repayment liability post adjustment of trading margin enabling GRIDCO to make timely discharge of financial obligations. Hence, there shall be no impact on the proposed BSP in case of under casting or overcasting of surplus power as the revenue to be earned from the same has not been factored in the calculation of ARR for FY 2023-24. In view of the above, GRIDCO submitted that the contention of the stakeholder regarding under-casting of availability of surplus power is not tenable and hence may not be accepted.
96. Further, with regard to under casting of power from OPGC I&II, GRIDCO submitted that as per the Generation Plan shared by OPGC for FY 2023-24, net drawal from OPGC Stage-I was estimated to be 2731.66 MU at a budgeted PLF of 81.80%. However, the actual PLF for OPGC Stage-I for FY 2021-22 was 78.61%. Accordingly, GRIDCO has considered the same PLF for projecting energy availability from OPGC Stage-I for FY 2023-24, which works out to be 2509.73 MU. GRIDCO stated that it is responsible for ensuring 24x7 power availability to the State and cannot accept the submissions made by the generators overlooking the ground realities. Therefore, the

contention of the stakeholder is denied and the Commission is requested to consider the submissions of GRIDCO while evaluating the availability of power generating stations.

97. GRIDCO has submitted that it has adopted the following methodology for estimating the quantum of power to be made available from the Central Generating Stations:

- a) Projections of drawl have been made by GRIDCO by prorating the actual drawal of power during the first six months of FY 2022-23.
- b) CTU loss of 3.33% has been considered for computing net energy available to GRIDCO for the ensuing FY 2023-24.
- c) Unit-1 of Barh-I (660 MW) was put into commercial operation on 12.11.2021 and subsequently the State share was deallocated for a period of five years. Units-2 & 3 of Barh-I have not yet been considered for deallocation. The 2<sup>nd</sup>Unit of Barh-I is expected to be commissioned in April, 2023; thus, GRIDCO has projected the State share of 21.11% from the upcoming unit of Barh-I for the ensuing FY 2023-24.
- d) Further, the detailed calculation of the energy to be procured from the various Central Generating Stations are provided below:

**Table-10**  
**Energy Procured from various Central Generating Stations (CGSs)**

Power Stations	Actual for FY 2022-23							Gross energy projected for FY 23-24	CTU Loss @ 3.33%	Net Energy available to GRIDCO FY 23-24
	April	May	June	July	Aug	Sep	Avg			
<b>FSTPS-I&amp;II</b>	3.89	4.04	4.78	4.87	4.35	3.78	4.28	51.41	1.71	49.70
<b>FSTPS-III</b>	57.06	52.37	28.70	-	9.09	19.18	27.73	332.80	11.08	321.72
<b>KhSTPS-I</b>	2.80	2.35	2.06	2.27	2.01	1.42	2.15	25.83	0.86	24.97
<b>KhSTPS-II</b>	4.94	23.54	21.58	19.76	19.84	16.40	17.68	212.11	7.06	205.05
<b>TSTPS-I</b>	207.39	184.14	187.59	216.24	128.36	97.44	170.19	2,042.32	68.01	1,974.31
<b>TSTPS-II</b>	130.91	135.52	134.32	135.41	134.27	130.50	133.49	1,601.86	53.34	1,548.52
<b>DSTPS-I</b>	532.98	299.64	454.80	540.74	504.43	514.05	474.44	5,693.29	189.59	5,503.70
<b>BARH-I</b>								972.58	32.39	940.20
<b>Total</b>								<b>10,932.21</b>	<b>364.04</b>	<b>10568.17</b>

98. GRIDCO submitted that the stakeholder has relied on the arithmetic calculation for deriving the quantum of energy from CGSs instead of acknowledging the actual supply of power from these stations during the first six months of FY 2022-23. The assumptions of the stakeholder shall not only give a wrong picture of the availability from such stations but also restrict GRIDCO from making optimum power procurement

plan in advance. This may result in increase in power purchase cost in lieu of purchase from the market at higher rate during peak hours. Therefore, GRIDCO has requested the Commission to consider its submissions in the instant petition regarding basis of projection of availability from CGSs.

99. In response to contention of another stakeholder that the full State share available from the low cost IPP power is under casted, GRIDCO submitted that it is entitled to avail power from four IPPs in the State namely M/s. Vedanta Ltd, M/s. GKEL, M/s. NBVL and M/s JITPL and the actual supply of power from these IPPs is varying from the State's entitlement. The actual and approved power purchase from IPPs is reproduced below for ready reference.

**Table-11**  
**Actual vs Approved Power Purchase from IPPs (MU)**

IPPs	FY 2018-19		FY 2019-20		FY 2020-21		FY 2021-22		Actual (Avg.)
	Approv.	Actual	Approv.	Actual	Approv.	Actual	Approv.	Actual	
M/s. Vedanta Ltd.	5039.45	902.09	5039.45	747.84	3053	2806.01	3003.48	2,101.19	1658.29
M/s GKEL	1842.19	1702.44	2167.28	1814.75	2167.28	1769.88	1844.00	1960.32	1811.85
M/s JITPL	1007.89	261.14	1010.57	11.95	1010.57	0	0	0	68.27
M/s. NBVL	-	-	-	-	-	-	-	3.83	-
<b>Total</b>	<b>7889.53</b>	<b>2865.67</b>	<b>8217.3</b>	<b>2574.54</b>	<b>6230.85</b>	<b>4575.89</b>	<b>4847.48</b>	<b>4,102.52</b>	<b>3528.70</b>

100. GRIDCO submitted that the Commission is approving/projecting availability of power from the IPPs based on normative parameters which is on higher side in comparison to the actual quantum of power scheduled in favour of it, thus adversely affecting the power supply position of GRIDCO. The gap in availability vis-à-vis actual quantum of power supplied by the IPPs impacts the BSP and during real time operation, GRIDCO is dependent on high-cost power sources to meet/cater State demand. GRIDCO has submitted that the objections of the Stakeholder regarding under casting of low cost IPP power is not justified.
101. GRIDCO has submitted that there is no LoA with the CGPs and accordingly, the power procurement from such sources is nil during the FY 2022-23, thus raising of bill by the CGPs does not arise. However, the respective Bills (April'22 to Sept'22) towards power procurement from renewable sources relating to Solar, SHEP, Wind and Biomass

sources have been submitted by GRIDCO in its ARR and BSP Application for FY 2023-24.

102. With respect to power availability from M/s Vedanta, GRIDCO submitted that they have placed requisition dated 23.09.2022 for the period January'23 to March'23. Further, as per recent APTEL order dtd. 13.01.2023, the Commission has been directed to pass a reasoned order in Case No. 129/2021. Vide notice dated 12.01.2023/ 21.01.2023, OERC has listed Case No. 129/2021 on 21.02.2023. In view of the above, till disposal of the Case no. 129/2021, GRIDCO is not required to place requisition for availing power from Unit-2(600 MW). Therefore, M/s Vedanta Ltd may be directed to supply the entitled ex-bus quantum of power to GRIDCO from its IPP unit, without failure.
103. With regard to no procurement of power from the CGPs operating in the State, GRIDCO submitted that with commissioning and full entitlement of OPGC Unit # 3 & 4, NTPC-Darlipalli (1600 MW), Renewable capacity addition and Barh-I, there would not be any requirement of sourcing power from CGP sources during the FY 2023-24 on regular basis. However, procurement of power from CGPs and Co-Generation Plants may be resorted to as per the Order dated 09.04.2019 of the Commission in Case No.62 of 2017. Further, CGPs are not firm sources of power as they are essentially meant for the captive consumption and hence, GRIDCO cannot propose procurement of a definite quantum of power from the CGPs. Further, drawal of firm power from the Generators with whom PPAs have been signed, has to be sourced in order to economize the procurement cost; otherwise, the liability of payment of Fixed Cost remains with GRIDCO irrespective of quantum of drawal of power.
104. GRIDCO has submitted that drawal of firm power is quite necessitated for ensuring energy stability in the State from a long-term perspective, which would only be materialised through PPAs with Generators, in order to economize the procurement cost in the interest of the State consumers. GRIDCO has made projections of power procurement of about 37,554 MU of energy during the ensuing FY 2023-24 to meet the State demand, which is within the limit of allocated state share of energy for the FY 2023-24. Thus, there would be no opportunity left for GRIDCO to source any power from CGP Sources which are quite infirm in nature. However, GRIDCO is not denying the proposal of power procurement from CGPs. The option of sourcing power from CGPs has been kept open for procurement under "force majeure" or "exigency

conditions” and in cost effective situations. GRIDCO may consider procuring power from CGPs, provided the economics of power procurement works out in GRIDCO’s favour and also depending on the Power Supply & Demand Configurations of the State and the exigency conditions justifying such procurement from CGPs.

105. GRIDCO has further submitted that as per the Judgement of the Hon’ble APTEL dated 08.05.2017 in Appeal No. 120 of 2016 & IA No. 272 of 2016, the generator can’t pump electricity into the grid without having consent/ contractual agreement with the distribution licensee and without approval / scheduling power by the SLDC. Further, the injection of inadvertent power from CGPs or any other sources demands levy of additional cost due to imposition of penalty on GRIDCO as per the DSM Regulations. Injection of inadvertent power is detrimental for stability of the State Grid and the consumers of the State which requires grid balancing on real time basis to accommodate this unscheduled power. SLDC / GRIDCO has to re-schedule the input from other generators which otherwise may have an impact on the grid stability. In view of the same, GRIDCO should ideally charge penalty on the CGPs for injecting inadvertent power as the same is negatively impacting the stability of grid. Since the inadvertent power is a threat to safety and security of grid operation, the same cannot be used for trading as the power cannot be scheduled without real time basis. Therefore, GRIDCO has requested the Commission not to consider the proposition for inadvertent power for calculation of total availability of surplus power for FY 2023-24.
106. GRIDCO has submitted that it is contractually obligated by various Legal Covenants (like Long Term PPAs) to purchase power from the approved entitled sources. GRIDCO is also equally concerned for any high cost of power entering into the State Power Basket as it will prove costly for the State consumers. In fact, GRIDCO along with the Government of Odisha, has been continuously following up with the Central Govt. since 2012, for de-allocation of high-cost power. Further, regarding up-to-date deallocation of State’s share of power from NTPC stations, GRIDCO has submitted in its reply to the query of Commission on the ARR & BSP application for FY 2023-24 which has been circulated among the objectors.
107. GRIDCO has already submitted allocation of share from different generating stations in favour of Odisha in its rejoinder. However, the current share allocation from Central Generating Stations have been revised by the Govt. of India.

108. Regarding procurement of power from IEX, GRIDCO has submitted that in forced majeure conditions, it makes procurement from the Power Exchanges to meet the State demand after availing the no cost power exercising the power banking options. The stakeholders may appreciate that the availability and rates in the Energy Exchanges are always subject to change as per the market dynamics and thus, the market purchase may not be a definite source of power to meet the State demand in lieu of the Generators, which can meet the State requirement more appropriately within the limit as approved by the Commission.
109. GRIDCO has submitted that it always makes continuous endeavor to follow the Merit Order on day-to-day basis for sourcing of power and earns revenue through trading of surplus power in order to optimize the power procurement cost to the maximum extent possible. It is committed for ensuring steady power supply to the consumers through long term PPAs to meet the long-term foreseeable demand keeping pace with the requirements of the State consumers at large.
110. Further, GRIDCO always makes its best efforts to avail power from IPPs and deallocation of costly power has been under active consideration of GRIDCO with close monitoring by the State Govt. with the Central Govt. from parting costly Odisha share of power to other states. It is because of the diligent efforts of the State Government and the necessary coordination by GRIDCO, Odisha share of costly thermal power from NTPC-Barh-II, Nabi Nagar, FSTPS-I & II, KhSTPS-I and KBUNL Power stations could be de-allocated in favour of other states.
111. On the matter of executing PPAs for trading surplus power, GRIDCO has submitted that as the State Designated Entity, GRIDCO is entrusted with the task of ensuring availability of long-term power contract for the State. Any surplus revenue earned from trading has been considered by the Commission for reducing the ARR i.e. benefit has been passed on to the consumers. However, this cannot be considered as a good reason for execution of PPA. The State demand was considerably low due to slow down in the economy as a result of outbreak of COVID Pandemic during FY 2019-20 and FY 2020-21. However, the conditions have now been improved from FY 2021-22 onwards and GRIDCO has projected 898.67 MUs of surplus power for FY 2023-24.

## **Inter-State Transmission System (ISTS) Loss**

### **Views of Objectors**

112. An Objector pointed out that actual ISTS loss incurred by GRIDCO during FY2021-22 is not disclosed in the present petition. Therefore, the projection of ISTS Loss for ensuing year is neither realistic nor prudent, and needs review by the Commission. The ISTS Loss approved by TNERC is less than 2% for the period from FY 2016-17 to FY 2020-21. However, GRIDCO considered ISTS Loss @3.33% on an average basis, which needs prudent verification.

### **GRIDCO'S Response: -**

113. GRIDCO has submitted that it has considered the actual ISTS loss for the first six months of the current FY 2022-23, applicable for the central generating stations from which power drawl has been scheduled and the same has been deliberated in detail in Para 151 of the present Petition. The average Transmission Loss, which has been derived from the month-wise transmission losses is again reproduced below:

**Table-12**  
**Month Wise Transmission Loss**

<b>Month</b>	<b>Transmission Loss (%)</b>
Apr-22	3.22
May-22	3.35
Jun-22	3.33
Jul-22	3.45
Aug-22	3.44
Sep-22	3.20
<b>Average Loss (%)</b>	<b>3.33</b>

114. GRIDCO has submitted that the contentions made by the stakeholder are not true and hence, the Commission is requested not to consider the submissions of the stakeholder in absence of any merit.

## **RPO and Odisha Renewable Energy Policy, 2022**

### **Views of Objectors**

115. Vedanta submitted that for FY 2023-24, GRIDCO had considered to RPO at the rate of 16% (consisting of 8.75% Solar, 0.66% Hydro Purchase Obligation (HPO) & 6.59% Non-Solar) of the total projected State energy requirement of 36,358 MU. GRIDCO estimated to procure 2160 MU of solar energy from different solar power sources. M/s. Vedanta submitted that GRIDCO would have surplus solar energy during Day-time

(except morning peak hrs.) and hence, the Commission should devise a separate mechanism/modality for consumption of such surplus solar energy available with GRIDCO during daytime by industrial consumers under Tri Partite Agreement (TPA). The solar energy to be consumed by industrial consumers shall also qualify for RPO obligation of Industrial consumers. Under the existing TPA arrangement GRIDCO is supplying pooled power; hence, the benefit of RPO compliance is not available to industrial consumer in spite of availing the green power under TPA arrangement.

116. An Objector submitted that as per the submission of GRIDCO, it does not comply the targeted RPO of 16% with respect to the total quantum of power procurement for FY2023-24 as per the OERC (Procurement of Renewable Energy & its Compliance) Regulations, 2021. At 16% RPO target, the GRIDCO should purchase 5828 MU but it projects to purchase 3784 MU i.e. 10.40%. Therefore, GRIDCO should submit the reason behind less projection of Renewable Energy in its power procurement plan for FY2023-24. Further, the CGPs are obligated Entities as per the above Regulations and need to comply the RPO. The RPO is uniform for all obligated entities including CGPs. Therefore, the CGP of the State must procure power from RE sources not less than 6000 MU for the FY2023-24.
117. GRIDCO being the State Designated Entity for procurement power & Nodal Agency, it does not spell out the RPO compliance by CGPs. The compliance of RPO by the obligated Entities is the need of the hour because it promotes the sustainable development. The Objector urged the Commission to review the matter of non-compliance of RPO by the obligated entities and initiate necessary actions.
118. M/s Grinity Power submitted that in its ARR, GRIDCO has not considered the short fall in RPO for the period from FY 2011-12 to FY 2022-23. Further, GRIDCO should submit the year-wise RPO obligation and compliance status for each control period starting from 2011-12 to 2022-23. The objector has submitted that GRIDCO needs to clarify whether it has submitted any quarterly report and annual report regarding its RPO compliance to the State Designated Agency, OREDA. If not, GRIDCO should be directed by the Commission to submit its RPO compliance return to OREDA from 2011-12 to 2022-23 at the earliest in order to avoid complications in future. Further, GRIDCO is to clarify whether its RPO compliance status has been audited by Compliance Auditor or not.

119. The Objector has submitted that GRIDCO is to submit its plan of purchasing required renewable energy to meet its RPO and intimate the tariff at which it would like to buy renewable power installed inside the state so that the Commission can approve the Tariff of Renewable Sources for FY 2023-24 and more numbers of Renewable Power Plant can be established in the State. Further, GRIDCO has never approached the Commission in its ARR for finalization of generic tariff for various types of renewable power plant, due to which a number of Renewable power projects could not be established in the State, and there is a very slow progress in Renewable power development in the State. The Objector requested that for each BSP order, the tariff for procurement of energy by GRIDCO from various Renewable Energy sources may also be finalized. GRIDCO may submit a detailed proposal to the Commission considering various options and scope within the State so that the RPO & Energy Storage Obligation (ESO) trajectory can be finalized by the Commission in such a way that GRIDCO will not be subjected to depend on Renewable Energy sources outside the State to meet its RPO & ESO. The Objector has requested that GRIDCO may be directed to discuss with various coal based central sector & private sector generating plants to submit month wise status report of utilization (blending) of Biomass in coal so that GRIDCO can claim necessary RPO while procuring power from the IPPs (both within and outside the State) in respect of the order dated 22.07.2022 of Ministry of Power, GoI.
120. The objector has submitted that as per the recent Renewable Energy Policy, 2022, there is a provision for GRIDCO to charge a trading margin for supplying power to the industries. The Objector requested to the Commission to approve the trading margin for GRIDCO for procuring such Renewable Power so that aggregation of demand shall help in achieving better tariff through economies of scale. In view of the same, GRIDCO is required to submit detailed proposals in its ARR so that the Commission can pass necessary orders while passing the ARR & BSP order for FY 2023-24. GRIDCO may also explore the possibility of procuring power from Grid balancing assets like pumped storage, hydro, battery storage to meet the issues of intermittency of the grid, as the share of Renewable energy in the energy mix of the State is slated to rise about 43% by 2030 as per the RPO trajectory notified by the MoP, whereas the energy storage obligation is said to rise 4% in 2030 due to which there would be issues of intermittency in the grid.

121. Further, GRIDCO needs to intimate its action plan for implementation Renewable Energy Policy, 2022 as the Govt of Odisha has nominated GRIDCO as nodal agency for implementation of this Policy. The Objector submitted that the administrative cost towards implementation of Renewable Energy Policy is not a licence activity and hence, all associated costs related to implementation of the said policy may be clubbed separately and excluded from the purview of ARR of GRIDCO while determining the bulk supply price.
122. The objector has submitted that being nodal agency of Odisha Renewable Energy Policy-2022,GRIDCO may takenecessary action & prepare draft guidelines so as to facilitate in framing of Regulations and Orders from the Commission in a consultative manner as mentioned below:
- a. Order for implementation of revised RPO Trajectory as per para 23.1 of Renewable Energy Policy 2022 and Regulation for Banking of Power as per para 20.3 of Renewable Energy Policy 2022.
  - b. Generic tariff for Small Hydro Plants till 2030 as referred to in para 13.3 of Renewable Energy Policy 2022.
  - c. Generic tariff for all wind projects awarded under para 16.2 and as referred to in para 16.3 of Renewable Energy Policy 2022.
  - d. Generic tariff for Biomass Plants till 2030 as referred to in para 17.3 of Renewable Energy Policy 2022.
  - e. Suitable Regulations to avail services of grid balancing assets as per para 22.8 of RE Policy 2022, when policy, technology and market matures.
  - f. Order for exemption on cross subsidy charges for Renewable Energy power procured by industries in State (GRIDCO acting as a demand aggregator) as per para 22.5 of Renewable Energy policy 2022.
  - g. Determination of tariff that encourages the consumers to opt for 100% consumption of green energy.
123. An Objector has submitted that as GRIDCO is nodal agency as per the Odisha Renewable Energy Policy 2022, GRIDCO may submit the RPO Compliance status of all obligated entities in the State and may intimate the same to Commission as per the para 25.3 (22) of Odisha Renewable Energy Policy 2022.

124. Another Objector has submitted that the Commission should direct the Secretary, Department of Energy, Govt. of Odisha to take action against the OREDA. The OREDA has to produce their planning schedule for procurement of solar power for the interest of the State.
125. One of the objectors has submitted that as per the Notification dtd. 15.12.2022 of Department of Energy, Govt of Odisha, GRIDCO has been designated as "Nodal Agency" for implementation of Renewable Energy Policy of Odisha. But GRIDCO has failed to consider the provisions of the said policy while projecting for procurement of energy from Renewable Sources. The RPO targets and the sources of Renewable Energy procurement as specified in the Odisha Renewable Energy Policy are completely mismatched with the targets specified in OERC (Procurement of Renewable Energy and its Compliance) Regulations, 2021.
126. The RPO Target as per the OERC RPO Regulations, 2021 is 16% whereas the Odisha RE Policy specifies for 25% RPO. However, in the present petition, GRIDCO has proposed only 10% RPO. Therefore, it is necessary to revisit the aforesaid Policy of Govt of Odisha at this stage while Commission approves the RPO and determines the Power Purchase Cost for the DISCOMs.
127. GRIDCO/DISCOMs are required to invite bids for procurement of power from projects to be set up in the State through tariff based competitive bidding. It is incumbent upon GRIDCO to take proactive measures for development of RE potential in the State.
128. The Policy mandates OERC to determine tariff that encourages consumers to opt for 100% consumption of green energy. The Policy says that the State Government may consider extending the benefit of lower Electricity Duty to such consumers as per the provisions of the Odisha Electricity (Duty) Act, 1961. Thus, the Objector urged the Commission to consider the above policy measures in the instant proceedings.
129. The Policy states that OERC will mandate a trajectory for Renewable Purchase Obligation (RPO) and Energy Storage Obligations (ESO) till 2029-30, based on Ministry of Power Order dated 22.07.2022 titled "Renewable Purchase Obligation and Energy Storage Obligation Trajectory till 2029-30". The RPO and ESO trajectories shall be uniform for all the obligated entities including DISCOMs, captive or open access consumers. Thus, the Commission is required to revisit the OERC (Procurement of Renewable Energy and its Compliance) Regulations, 2021.

130. The Policy further specifies that through consultative process and based on technical studies, OERC will suitably mandate blending of 5-7% biomass briquettes and pellets in coal based thermal generating stations. The quantum of biomass blending shall account for meeting the RPO of the captive generators to the extent of blending. GRIDCO or DISCOMs shall be deemed to have meet their RPO to the extent of blending. GRIDCO needs to devise suitable mechanism for compliance of above guidelines, being SDE of Govt of Odisha. Further, several enabling Regulations and Orders, which are in the purview of the Commission, are required for implementation of this Policy and for achievement of the objectives of energy transition envisaged in this Policy. As per the Objector, to meet the new RPO trajectory, the required cumulative capacity addition is estimated about 21700 MW till FY 2029-30i.e.5700 MW for DISCOMs and 16000 MW for industries.

**GRIDCO'S Response: -**

131. GRIDCO has submitted that GRIDCO is procuring power from different RE Sources through competitive bidding route for RPO compliance. This has helped GRIDCO in promoting cheap green power. GRIDCO is well committed to meet the RPO target and moreover has taken all sorts of proactive measures thorough requisite planning by executing agreements with Central & State Developers to meet the RE target by 2030. GRIDCO is hopeful to achieve the target with commissioning of various RE projects in pipeline.
132. The RPO Regulation specifies the consumption and compliance of RPO by the Captive user(s) and open access consumer(s) shall be certified by SLDC and shall be submitted to the State Agency which shall also be submitted to Chief Electrical Inspector/ Electrical Inspector for cross verification.
133. GRIDCO has submitted that it is not fully correct to say that the shortfall in RPO for the period from FY 2011-12 to FY 2021-22 has not been considered by GRIDCO. GRIDCO has endeavoured continuously to procure the RE Power (Solar & Non-Solar) as available inside and Outside the State at a reasonable tariff, making effort for meeting the RPO target to the maximum possible extent. In FY 2021-22, GRIDCO has been able to comply 98% RPO target up to Jan'2022 as per the then prevailing OERC RPO Regulations,2015 and for the balance period of the year it has fully complied the RPO

target as per the new Regulations,2021. Further, for the current FY 2022-23, GRIDCO is in the process of compliance of the RPO to the maximum extent.

134. GRIDCO is regularly submitting the quarterly and Financial Year wise RPO compliance status report to OREDA and OERC, in line with OERC RPO Regulations. The verification of RPO compliance Status of GRIDCO is a part of the Statutory Audit compliance process of GRIDCO. In order to comply the RPO target of DISCOMs, power from different RE sources is being procured by GRIDCO following the prevalent OERC Regulations with due approval of the Commission.
135. The Plan of purchasing Renewable Energy and the tariff thereof for the FY 2023-24 has been submitted to the Commission in the ARR application for approval.
136. GRIDCO procures RE Power in compliance to the prevalent OERC Regulations. As per its order dated 15.10.2022 and 27.01.2023 in Case No.43 of 2022 & Case No.92/2022 respectively, the Commission has already inclined to amend the RPO Regulations in line with the RPO Order dated 22.07.2022 of the Ministry of Power. GRIDCO is going to submit its views/ suggestions on the Draft Regulations published by OERC.
137. GRIDCO shall take necessary steps as per the directives of the Commission to fulfil its RPO requirements after amendment of the RPO Regulations of the State with best efforts to procure power from cheapest available sources to fill its basket.
138. GRIDCO is preparing the action plans with detailed operational guidelines for the all-round implementation of the RE Policy-2022for tapping the RE potential in the State and also to submit its views/suggestions on the Draft RPO Regulations published by the Commission and shall comply the directives of the Commission.
139. Technologies for Battery Energy Storage System and Pumped Storage Hydro are in the process of adoption and implementation; thus, it may take some time to penetrate and stabilize with the cost of supply of power from these sources for growth of the respective sector through adequate investment. GRIDCO shall take necessary steps for procurement of power from such sources after framing of Regulations by OERCfor the State.
140. GRIDCO submitted that it is procuring power from different RE Sources through competitive bidding route for RPO compliance. This has helped GRIDCO in promoting cheap green power. Further, GRIDCO has long term tied up capacities through PPAs

with various RE Developers inside and outside the states to meet the RPO targets against the State Consumptions only, which is being accounted for meeting the RPO of DISCOMs, thereby leaving no gap to meet the industries' requirements under the special scheme as because there is increase in RPO trajectory which necessitates a year-to-year increase in the RE power procurement.

141. GRIDCO has submitted that the Odisha Renewable Energy Policy, 2022 was notified on 30.11.2022 and the present petition was also filed on the same date. Section 61 of the Electricity Act 2003 provides that the Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff through Regulations. GRIDCO has filed the petition before the Commission for determination of its ARR & BSP as per the Regulations and not as per the policy framed by the State Government. However, now GRIDCO is in the process of preparation of action plan for implementation of the Odisha RE Policy-2022, which shall be submitted before the Commission shortly.
142. GRIDCO has further submitted that to support the Nodal Agency, Odisha Renewable Energy Policy-2022 has provided that Department of Energy shall allocate required funds for a period of at least 3 (three) years towards Capacity Building of the Nodal Agency and for set-up of the Project Monitoring Unit (PMU) for implementation of this Policy. The Commission may take prudent decision on the apprehension of the Objector.

### **Demand Forecast for FY2023-24 and Power-Cut by DISCOMs**

#### **Views of Objectors**

143. An objector submitted that during last summer season, the consumers of Odisha sustained huge pains due to both scheduled and unscheduled power-cuts. The reasons behind power-cut were the lower forecast of power demand by OERC in the Tariff order, huge gap between peak and off-peak demand, weak R&M works of DISCOMs, unviable investment of Govt. grant and failure of GRIDCO to procure state quota power from IPPs & other sources. The objector submitted that the low demand approved by the Commission for the current year (4734 MW against the peak of 5500 MW) was a prime reason for DISCOMs to go for power-cut during peak summer. Therefore, the Objector urged the Commission to approve the power demand for FY24 in such a level that the bonafide consumers of Odisha shall be prevented from power cuts. He pointed

out that GRIDCO has not made any reference of the power-cut in its projected Simultaneous Maximum Demand for the ensuing FY2023-24.

**GRIDCO'S Response: -**

144. GRIDCO has submitted that it is arranging the entire power requirement as well as the backup power to the industries and moreover to meet the State's peak demand. The maximum demand and the availability of power needs to be matched on a continuous basis and any instantaneous additional demand cannot be met on real time basis. Clause 3.10 of the Odisha Grid Code, 2015 stipulates that the primary responsibility of load forecasting within its area rests with the Distribution Companies. They shall determine peak load and energy forecasts of their respective areas of operation for each category of loads. GRIDCO prepares least cost generation plan for the State to meet the future load demand as per the forecast, after examining the economic, technical and environmental aspects of all available alternative sources taking into account the existing contracted generation capacities. Power purchase planning is done on a long-term basis and power is tied up considering the peak load. Gap between the load forecast and actual demand during the year is not unique to Odisha and GRIDCO is in continuous endeavor to minimize such gap for each subsequent year. However, there always remains a degree of uncertainty (like force majeure conditions, technical breakdowns of the generating plants and market forces etc.) which adversely affects the fine balance between demand and supply.
145. GRIDCO's projection of SMD for FY 2023-24 is based on the additional load growth as estimated for the FY 2023-24 over FY 2022-23 for each of the DISCOMs. The projected SMD has been derived by adding the additional SMD in terms of MVA to the maximum SMD that occurred during the period from April 22 to October 22. This projection is based on the Commission's approach adopted for SMD approval for FY 2022-23 for each DISCOM. GRIDCO has adopted a more realistic approach while projecting the SMD for each of the DISCOMs, which is also in line with the methodology followed by the Commission in the BSP Orders of previous years.

**Power Purchase Cost**

**Views of Objectors**

146. OPGC has submitted that GRIDCO has considered the AFC of Rs. 291.07 Crore and ECR of 161.09 Paise/kWh for its Units 1&2 for FY 2023-24. OPGC pointed out that

they had provided a detailed justification for each component of ARR in its Petition. and requested the Commission to approve the AFC of Rs. 292.58 Crore and Energy Charge Rate of 178.86 Paise/kWh considering the norms of operation as per the approved amended PPA, and the fuel prices and GCV as per the half yearly Fuel Price Adjustment for FY 2022-23 submitted to GRIDCO.

147. Further, for Units 3&4, OPGC submitted that GRIDCO considered the Annual Fixed Charge of Rs. 1487.15 Crore based on the Commission's Tariff Order dated 24.03.2022. However, the Commission, vide its Order dated 07.01.2023 in Case No. 96/2021, approved the Annual Fixed Charge of Rs. 1904.70 Crore for Units 3&4 for FY 2023-24. OPGC requested the Commission to consider the Annual Fixed Charge of Rs. 1904.70 Crore while approving the power purchase cost of GRIDCO from OPGC Units 3&4.
148. With respect to statutory charges, OPGC has submitted that GRIDCO has considered the statutory charges for Units 1&2 as Rs. 25.76 Crore against their proposal of Rs. 70.97 Crore. Similarly, GRIDCO has considered Rs 39.65 Crore towards reimbursement of statutory charges for Units 3&4. OPGC has requested the Commission to direct GRIDCO to reimburse the statutory and other charges on actual basis in accordance with the provisions of the approved amended PPA for Units 1&2 and in accordance with the Order dated 07.01.2023 in Case No. 96/2021 for Units 3&4 for FY 2023-24.
149. Another objector has submitted that GRIDCO is purchasing low cost Hydro Power from OHPC & OHPC is incurring profit by selling power to GRIDCO. GRIDCO should negotiate with OHPC to reduce their procurement price which was claimed by OHPC in their ARR application.
150. M/s. Vedanta has submitted that they have filed petition before the Commission for determination of multi-year tariff for the block year 2019-2024 in Case No. 20/2020 which is pending before Commission for adjudication. M/s. Vedanta has requested the Commission to allow the provisional rate of 282.26 P/U for the power supplied to GRIDCO for FY 2023-24. Vedanta has also requested to allow year end charges on actual basis and they reserve its right to claim any differential charge.
151. Another Objector submitted that GRIDCO has not indicated the reference Para of CERC Tariff (MYT) Order in relation to the ECR (Variable Cost) & Fixed Cost of the Central Generating Stations. In absence of such reference, it is presumed that the ECR

& Fixed Cost of the power proposed to be procured from CGSs has been calculated in arbitrary manner. Therefore, the Objector requested GRIDCO to submit the actual ECR & Fixed Cost paid to CGSs, station-wise during the previous FY2021-22 with reference of the CERC MYT Generation Tariff Order.

152. The Objector submitted that he has cross-verified the ECR and Fixed Cost of Talcher STPS (Stage-1 & Stage-II) approved by OERC in truing up exercises & BSP Order for the period 2020-21 to 2022-23 and the proposal of GRIDCO for FY 2023-24 with the Truing up, APR and MYT Order issued Tamil Nadu Electricity Regulatory Commission (TNERC). The Objector submitted that GRIDCO has proposed higher cost per Unit of TSTPS power in comparison to approved cost by TNERC. The above difference looks very much significant for the FY 2021-22, in which there is 30 P/U difference in the between Tamil Nadu & Odisha ERC approval. Similar exercise has been done for Farakka STPS. The Generation Tariff of Farakka STPS approved by OERC is significantly higher than the Tariff approved by TNERC. The Objector urged the Commission, to issue an order to cross-verify the Generation Tariff proposed by GRIDCO for the Power Stations, the tariff of which is determined by CERC. Similar difference has been noticed in case of Barh-I also.
153. Some of the objectors submitted that GRIDCO has furnished the reasons for not procuring power from CGPs, such as adequate availability of power due to State share in the various existing & Up-coming Power Plants in the State and GRIDCO purchase power on long term basis from Central Generating Stations on cost plus basis. Now, GRIDCO submitted that there will be a shortfall, GRIDCO shall arrange to purchase of power from CGPs and such procurement from CGPs shall be resorted to depending upon exigencies/force majeure conditions.
154. The reasons submitted by GRIDCO are not proper and adequate. The Objectors proposed that GRIDCO should procure a specified minimum quantum of power from CGPs of the state depending on the availability considering the fact that the tariff of CGP power is cheaper in comparison to the tariff at which GRIDCO buys power from the Central Generating Stations. Moreover, the CGP power is not associated with any transmission loss, PoC / STU transmission charges, PoC Losses and other associated cost. Hence, the Objectors requested the Commission to pass appropriate order so as to ensure a specified quantum of power to be purchased from Captive Power Plants in Odisha and the tariff of the same may be approved looking into the present cost of the

generation. Also, GRIDCO may procure power through CGPs through tendering process.

155. 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 paise 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. The Objectors requested that 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 projection of power demand and the report of the same may be furnished.
156. An objector submitted that the cost of power figures submitted in F-3 form for FY 2021-22 indicates that the EHT Loss arrived by GRIDCO for FY 2021-22 is 991.20 MU. During FY 2021-22, GRIDCO has purchased 33641.65 MU and traded 32650.45 MU. So, the EHT Loss of GRIDCO for FY 2021-22 is below 3% (@ 2.95%); whereas, the same has not been duly considered by GRIDCO in the present proceeding. Therefore, the objector urged the Commission to approve a performance based EHT loss of 2.75% for the FY 2023-24.

**GRIDCO'S Response: -**

157. With respect to observed variance in the ECR and Capacity Charges for Talcher STPS (Stage-I & Stage-II) and Farakka STPS as approved by the TNERC in its True-Up Order, APR and MYT Order in comparison to that approved by the Commission and claimed in the present Petition, GRIDCO submitted that the stakeholder may be aware of the fact that the AFC and the ECR of the Central Generating Stations are determined by the Central Electricity Regulatory Commission. So, in this case also, the AFC and the ECR for Talcher STPS and Farakka STPS are supposed to be determined by CERC. The AFC is billed by the generating station to the beneficiaries in proportion of their share as per the applicable CERC Regulations. However, the ECR varies across the year

due to change in fuel price which the generating stations claim considering the actual fuel price prevailing during that period for which bill is raised. The AFC and ECR approved for the Central Generating Stations by the CERC is adopted by the State Electricity Regulatory Commissions after prudent check. Further, the MYT Orders comprise of projections approved by the respective State Commissions for an entire Control Period (which usually extends over a period of 3 to 5 years) whereas in Odisha the ARR petition is filed every year and the projections are made considering most recently available actual data. The following are the major possible reasons for variation between the MYT Order approved by the TNERC and that proposed by the GRIDCO.

- a) In Para 4.18.1 (iv) Page 178 of the TNERC Order No. 07 of 2022 dated 09.09.2022 the following assumptions are mentioned to have been considered for projecting Energy Charge and Capacity Charge of Talcher STPS-II and Farakka STPS for the entire control period i.e. from FY 2022-23 to 2026-27.
  - i For projecting variable charge and fixed charge per unit from CGS stations, the actual energy charge for FY 2020-21 has been considered as base. Further, the weighted variable charge so considered for FY 2021-22 is then escalated year-on-year by a nominal escalation rate of 2% for lignite based plants and 5% for coal based plants in order to arrive at the variable charge for subsequent years, i.e., for FY 2022-23 to FY 2026-27.
  - ii For annual fixed cost, a marginal increase has been considered for CGS over the years
- b) The Petitioner has considered the actual Energy Charge Rate (ECR) claimed by NTPC for September 2022 i.e. Rs. 2.24/kWh for Talcher STPS-II and Rs. 4.39 /kWh for Farakka STPS I&II for estimating the Energy Charge for FY 2023-24. The Annual Fixed Charge for Talcher STPS-II has been claimed considering GRIDCO's share of 10% on the total AFC of Rs. 1303.57 Cr. for FY 2023-24 as submitted by NTPC in its MYT Petition filed before Hon'ble CERC and was pending for disposal at the time of filing of instant Petition. Similarly, for Farakka STPS I&II, the Annual Fixed Charge has been claimed considering GRIDCO's share of 0.55% on the total AFC of Rs. 1048.79 Cr. for FY 2023-24 as submitted by NTPC in its MYT Petition filed before Hon'ble CERC and was pending for disposal at the time of filing of instant Petition for Farakka STPS I&II.

- c) The Energy Charge Rate is subject to change depending on the market price of the primary and secondary fuel used in the Thermal Generating Stations and does not remain constant over a full year of operation. Regulation 43 of the CERC Regulations 2019 provides that

*“43. Computation and Payment of Energy Charge for Thermal Generating Stations*

*(1) The energy charge shall cover the primary and secondary fuel cost and limestone consumption cost (where applicable) and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel and limestone price adjustment).”*

158. Therefore, it may be inferred that for Central Generating Stations, the Annual Fixed Charge and ECR approved by the State Commissions are subject to change after True-Up for the control period is completed. In view of the above submissions, it appears that the contentions made by the stakeholder do not have valid grounds and are liable to be rejected. The Commission is requested to consider the MYT Orders issued by CERC and latest bills paid by GRIDCO while approving the power purchase cost for the Central Generating Stations.
159. With respect to observed variance in the ECR and Capacity Charges for Barh-I as approved by the TNERC in its MYT Order in comparison with that claimed by GRIDCO for FY 2023-24, GRIDCO submitted that the Petitioner has prayed before the Commission to draw power as and when required from Barh-I as per Merit Order. There is also every possibility, considering the existing practice, the system operator may schedule power from Barh-I under technical minimum to GRIDCO. Hence, considering the share of GRIDCO as 21.11%, Auxiliary Consumption @ 6.25%, as per the CERC Tariff Regulations, 2019 in force, normative PLF of 85.00% and Central Transmission Loss of 3.33%, the Projected Energy Availability to GRIDCO from existing unit of Barh-I is estimated as 940.20 MU for FY 2023-24. The tariff for Barh-I has been considered on the basis of Petition filed by NTPC with Hon'ble CERC. The apportionment of Capacity Charge has been made as per the share of GRIDCO. The Projected Fixed Cost applicable to GRIDCO for its share of energy drawal from Barh-I works out to Rs. 261.62 Crore (which includes one existing unit of Barh-I). The detailed calculation has already been provided in the present Petition.

160. GRIDCO has been able to procure power at low cost as compared to other States. GRIDCO's management of power purchase has ensured of any energy deficit in the State even at peak period and under power crisis situation. Further, GRIDCO owns the responsibility of meeting the RPO and HPO targets for the State. GRIDCO supplies power at-cost without any profit margin to ensure low-cost power for consumers of Odisha. GRIDCO, as a bulk supplier to State DISCOMs, enables centralized, bulk procurement of power which helps in maintaining a uniform retail supply tariff in the State across different categories of consumers. The role of GRIDCO is very important in ensuring that the consumers of Odisha can avail 24x7 supply of reliable power at competitive price as compared to individual DISCOM making PPAs with the multiple generators.
161. Further, GRIDCO submitted that the Power Purchase Cost is an uncontrollable cost listed under 2.12.1 (c) of the OERC Regulations, 2022. The relevant portion of the Regulations has been extracted below for ready reference:
- “2.12. Controllable and Uncontrollable costs*
- 2.12.1. For the purpose of these Regulations, the term “uncontrollable factors” shall comprise of the following factors, which were beyond the control of the Applicant, and could not be foreseen and mitigated by the Applicant:*
- a. Force Majeure events;*
- b. Change in law, judicial pronouncements and Orders of the Central Government, State Government or Commission (as applicable);*
- c. Variation in the price of fuel and/ or price of power purchase including Intra-State transmission and SLDC Charges approved by the Commission from time to time;*
162. The power purchase cost has increased considerably and the ARR and BSP application of GRIDCO for FY 2023-24 submitted before the Commission mostly comprises of the uncontrollable power purchase cost to be incurred in the ensuing year i.e. FY 2023-24. The Commission has not been allowing in the ARR of GRIDCO for any working capital and also any loan funds to meet the deficit for the deviation in the approved and actual power purchase cost. GRIDCO does not have any additional fund to meet the gap between the approved and actual power purchase cost and accordingly is forced to hold the same till True-Up. Therefore, any delay in approving the power purchase cost for FY 2023-24 shall not only erode the already depleted financial position of GRIDCO but also, shall impose additional cost on the end consumers in terms of carrying cost.

163. GRIDCO submitted that it has considered AFC of Rs. 291.07 Cr. and ECR of 161.09 P/U for OPGC Stage-I for FY 2023-24 as per generation plan shared by OPGC vide email dated 07.10.2022. OPGC has revised its claim of AFC and ECR for OPGC Stage-I in its Petition in Case No. 75 of 2022, filed before the Commission, on which GRIDCO has filed its detailed reply/observations on dated 30.01.2023 before the Commission. However, the Commission is requested to consider the approved figures for OPGC Stations as to be approved in Case No.75 of 2022 while determining the ARR and BSP of GRIDCO for FY 2023-24.
164. OPGC has requested the Commission to consider AFC of Rs. 1904.70 Cr. for OPGC Stage-II (Unit-III & IV) as per Order dated 07.01.2023 in Case No. 96 of 2021. In this regard GRIDCO submitted that GRIDCO has considered AFC of Rs. 1487.15 Cr. and ECR of 170 P/U as per Order dated 24.03.2022 for estimation of power procurement cost from OPGC Stage-II for FY 2023-24. Since the Order dated 07.01.2023 in Case No. 96 of 2021 was issued after filing of the present petition on 30.11.2022, GRIDCO had no other option than adopting the Order dated 24.03.2022 which was then in force. The Commission is requested to adopt the approved AFC and ECR for OPGC Stage-II while approving ARR and BSP for GRIDCO.
165. Further, GRIDCO requested the Commission to direct OPGC to
- a. Compute the monthly Energy Charges in accordance with the OERC Generation Tariff Regulations based on the Actual price and GCV of fuel.
  - b. Provide the details of coal/oil used for generation as per the said OERC Regulations for scrutiny and payment by GRIDCO as per the Order dated 07.01.2023
166. GRIDCO has considered statutory charges of Rs. 25.76 Cr. and Rs. 39.65 Cr. towards statutory charges for Stage-I and Stage-II respectively for the present Petition. The statutory charges were projected considering Electricity Duty @ 55 P/U on auxiliary consumption @ 9.50% for Stage-I and 6.25% for Stage-II. Rest of the statutory charges were projected by prorating the actual year end charges as admitted by GRIDCO during the 1st half of the FY 2022-23 i.e. from April to September, 2022. However, GRIDCO requested the Commission to allow the approved figures of statutory dues in Case No. 75 of 2022, in the ARR of GRIDCO for FY 2023-24.

## **Central Transmission Charges**

### **Views of Objectors**

167. An Objector submitted that GRIDCO should provide the station-wise details of its 1863 MW General Network Access for determination of ISTS Charges for ensuing FY2023-24.
168. GRIDCO has proposed to procure 12181 MU from CGSs, but ISTS Charges of 775 Crore has been calculated for drawl of 17464 MU. The DISCOMs are no way concerned for drawl of 17464 MU but they will draw only 12181 gross MU from CGSs in the FY24. Therefore, the Objector submitted that the proportionate ISTS Charges for drawl of only 12181MU may be calculated for the purpose of determination of power purchase cost of DISCOMs which is Rs. 541 Crore.

### **GRIDCO'S Response: -**

169. CERC vide Notification dated 07.06.2022 has brought out the Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 (herein called as GNA Regulations). CERC in the said Regulations at 18.1(a) has determined the deemed GNA basing on the average of actual ISTS drawal during the last three years since the drawal represents the usage of ISTS by the State. CERC while arriving at the initial GNA quantum (deemed GNA) allocated to States has not taken into consideration the station wise allocations. The following formula has been adopted by CERC at 18.1 (a) of GNA Regulations for arriving at the deemed GNA.

*“GNA for a (i) State including intra-State entity(ies) and (ii) other drawee entities, shall be the average of ‘A’ for the financial years 2018- 19, 2019-20 and 2020-21: where, ‘A’ = {0.5 X maximum ISTS drawal in a time block during the year} + {0.5 X [average of (maximum ISTS drawal in a time block in a day) during the year]}”*

*Further, Regulation 18.1(b) stipulates the following :*

*“(b) GNA computed as per clause (a) of this Regulation is given to these regulations.”*

170. Accordingly, the deemed GNA of Odisha has been fixed at 2157 MW by CERC and the same has been mentioned in the Annexure-I of the GNA Regulations.
171. Further, Clause 18.1(d) of the GNA Regulations stipulates that GNA of a State will be granted to STU and as per Clause 18.1(e) such GNA shall be segregated for each intra-State entity, including distribution licensee, by the respective SLDC, and intimated to

STU, Nodal Agency (CTUIL) and NLDC within 1 month of publication of details by the Nodal Agency under clause (d) of this Regulation.

172. In the present case, deemed GNA of Odisha was provisionally determined by GRIDCO as 1863 MW based on the ISTS drawal data for the FY 2018-19, 2019-20 and 2020-21 as the same was required by CTUIL. However, as stipulated in the Regulation, SLDC has subsequently segregated the deemed GNA of the State and allocated 1709 MW to GRIDCO. After considering the drawal of all intra-state entities individually, SLDC has communicated the deemed GNA of the intra-State entities to NLDC, CTUIL and OPTCL. Final concurrence in the matter is awaited. It is to further state that the GNA Regulations is yet to be implemented in complete shape and the GNA allocation of the entities may change post such implementation.

### **Employee cost**

#### **Views of Objectors**

173. Few Objectors pointed out that GRIDCO has projected Employee Cost expenditure at Rs. 23.52 Cr. for FY 2023-24 against Rs 13.25 Cr. as approved by the Commission during FY2022-23. GRIDCO needs to justify such abnormal increase in employee cost. Along with the details of its present staff and future employee projection for the next two years.

#### **GRIDCO'S Response:-**

174. GRIDCO has submitted that the details of projections of GRIDCO towards Employees Cost has been furnished in Commission's prescribed format F-9 along with the ARR & BSP application for FY 2023-24. Employee cost of Rs. 23.52 crore has been projected for various components including salary of regular employees, out sourced personnel, terminal benefits towards leave salary and pension contribution of the existing employees.

### **A&G, R&M and Depreciation**

#### **Views of Objectors**

175. Few Objectors submitted that GRIDCO has projected Administrative and General (A&G) expenditure at Rs. 13.05 Cr. for FY 2023-24 against Rs.5.59 Cr. as approved by the Commission for FY 2022-23. GRIDCO needs to justify why they have crossed approved A&G Expenses without obtaining necessary consent from the Commission.

Further, the objectors enquire whether the accounts are being audited as per statutory provision of the Company Act.

176. Some objectors submitted that GRIDCO has projected depreciation expenditure at Rs. 1.31 Cr. for FY 2023-24 against Rs. 1.02 Cr. as approved by the Commission for FY 2022-23. The same may be approved after prudence check.
177. Further, R&M cost of Rs.0.81 Cr. proposed by GRIDCO for FY 2023-24 against the approved cost of Rs 0.85 Cr. for FY 2022-23, which may be approved by the Commission through prudence check.

**GRIDCO'S Response:-**

178. GRIDCO submitted that the details of projection towards A & G Cost have been furnished in OERC Format (F-11). Out of the total projected expenses of Rs.13.07 Crore, the major components of the expenses are projected towards Annual License Fees Rs.1.90 Crore, professional charges of Rs.7.07 Crore towards legal expenses, consultancy charges, audit fees, etc., conveyance charges Rs.1.39 crore and the balance expenses to the tune of Rs.2.71 crore, which are quite minimal with respect to the annual turnover and the normal functioning of GRIDCO.
179. GRIDCO stated that the projections for R&M cost are based on realistic basis considering the assets in use and the required R&M for up-keeping of the assets.

**Loan / Pass through Expenses**

**Views of Objectors**

180. Some of the Objectors submitted that GRIDCO should not be allowed to avail loan for bridging the cash gap due to its default in collecting its dues from earlier DISCOMs. Even if GRIDCO has availed any loan without approval, then provision of principal and interest for the same should not be allowed.
181. An Objector submitted that the Commission should not accept the loans with principal amount Rs. 6563.86 Cr., because GRIDCO have taken loan for repayment of outstanding dues other than the power purchase cost. The Commission should reject the application of GRIDCO of bulk supply tariff of 380.64 P/U.

**GRIDCO'S Response:-**

182. GRIDCO has been suffering from severe financial stress from past few years in absence of a sustainable revenue stream due to default in payment of BSP dues by the R-Infra

managed erstwhile DISCOMs. GRIDCO has outstanding loan balance of Rs.6563.86 Cr. as on 31.03.2022, with repayment obligations of Rs.1592.54 Cr. due in FY 2023-24. GRIDCO has requested the Commission to allow for adjusting the revenue earning from sale of surplus power through trading for meeting its loan repayment liability and past losses.

183. GRIDCO submitted that it is constrained to avail loans for repayment of the past loans availed over the years due to non-payment of BSP dues by the erstwhile DISCOMs during the post vesting period. Moreover, obligations of GRIDCO towards payment of Finance Cost and principal repayment obligation has arisen due to non-cost reflective Tariff prevailing over the years resulting in cumulative revenue deficit and compelling GRIDCO to resort to bank loan through Govt. guarantee. With the recent privatization, anticipating improvement in the overall operational performance of the DISCOMs in the coming future, GRIDCO is hopeful of getting the outstanding BSP dues from the new DISCOMs that would result in better financials and growth of the sector, resulting in settlement of loan liabilities of GRIDCO.

#### **Return on equity**

#### **Views of Objectors**

184. Some Objectors submitted that GRIDCO is not entitled to Return on Equity. The order of APTEL may be continued and Return on Equity should not be considered for ARR determination of GRIDCO. GRIDCO needs to submit what is book value of equity and net worth and whether they have been eroded.

#### **GRIDCO'S Response:-**

185. GRIDCO submitted that RoE to the tune of Rs 354.32 Cr. i.e., @ 16% on equity capital of Rs.2214.51 Cr. including conversion amount of Rs.2039.69 Cr. and equity investment of Rs.174.82 Cr. in TP DISCOMs, has been claimed in the ARR application as per the regulations framed by the Commission, considering the turnaround of the sector. Further, it was proposed to request the State Govt. for waiver of the Return on Equity in order to lower the revenue deficit. GRIDCO submitted that its net worth has been improved due to conversion of outstanding Govt. loan to the tune of Rs.2039.69 Crore into equity which has resulted in better financial positions of GRIDCO.

## **Miscellaneous Receipts, Revenue Gap and BSP**

### **Views of Objectors**

186. An Objector pointed out that two different Power Purchase Cost has been proposed by GRIDCO in para 255 and para 315 of the Petition. Further, the Bulk Price of 380.64 P/U has been proposed by GRIDCO considering other cost of Rs. 1245.59 Cr. (excluding power purchase cost). The provisions of the Act do not provide any space to approve the other cost of Rs. 1245.59 Cr. and the higher power purchase cost. The Objector has re-calculated Power Procurement Cost and projected the same as Rs.11500 Cr. for the FY2023-24 and submitted that there is no need to revise the current Bulk Price of Rs.3.12 P/U.
187. Few Objectors submitted that GRIDCO has projected Annual Revenue Requirement at Rs.14245.65 Cr. for FY 2023-24 against Rs. 9235.11 Cr. as approved by the Commission for FY 2022-23. The ARR of GRIDCO needs to be approved by the Commission through a prudence check so that there will be no financial burden on general consumers.
188. M/s. FACOR submitted that GRIDCO has proposed its ARR excluding Power Purchase Cost at Rs.884 Crore for FY 2023-24, this is huge and such type of ARR has no basis. GRIDCO has all the liberty to make an expenditure of Rs.884 Crore by availing grant from the State Government, but additional ARR should not be passed to the consumers.
189. An Objector submitted that the contention of deficit revenue by the GRIDCO in the instant petition, is false and fabricated which needs to be validated by the Commission in the present proceeding.
190. According to an Objector, the Non-Tariff Income projected by GRIDCO for the FY 2023-24 is very less in view of the Cash Flow Statement submitted by it for previous FY 2021-22, current FY 2022-23 and ensuing FY 2023-24. Therefore, the Objector urged the Commission to consider the figures of the Cash Flow Statement for FY 2021-22, FY 2022-23 and FY 2023-24 in the present proceeding to determine the Non-Tariff Income, Power Purchase Cost and Bulk Price for the FY 2023-24.
191. It is necessary to reconcile the audited Cash Flow Statement with the Cash Flow Statement submitted by GRIDCO in the instant proceeding. The objector revealed from the Sundry Debtors (F-6) Statement submitted by GRIDCO for FY 2021-22 that the collection from DISCOMs& Others is Rs.10898.32 Cr. against the billing of Rs.

10278.27 Cr. So, GRIDCO has collected additional revenue of Rs.620.05 Cr. during FY 2021-22 over and above billing after considering rebate of Rs.47.43 Cr. Accordingly, the closing balance of sundry debtors has been reduced to Rs.1973.50 Cr. with outstanding balance (OB) of Rs.2593.55 Cr. Therefore, the Objector urged the Commission to consider the above improvement of revenue collection during previous FY 2021-22 in the present proceeding to determine the Bulk Price for FY 2023-24.

192. GRIDCO has made repayment of loan of Rs.1202.32 Cr. against floating loan of Rs. 600 Cr. during FY 2021-22. This indicates GRIDCO has improved the financial credibility during FY 2021-22; whereas, GRIDCO has received Rs.732.25 Cr. on account of Misc. Receipts during FY 2021-22, but paid only Rs.32.94 Cr. The high cash inflow on account of Misc. Receipts may be considered in the present proceeding for determination of bulk price for ensuing FY 2023-24.

**GRIDCO'S Response:-**

193. GRIDCO submitted that it expects to earn Rs.51.94 Crore during FY 2023-24 (at approved BSP of 7.42 Rs./kWh for FY 2022-23) towards emergency sale of power of 70 MU to long term customers including NALCO (48 MU) and IMFA (22 MU) for meeting their emergency & back-up power requirements as per the MOU signed with them. The Commission, in ARR & BSP Order for FY 2022-23, has approved emergency sale of 60 MU against which GRIDCO has estimated the revenue from emergency sale of 70MU considering an additional sale of 10 MU for FY 2023-24. In view of the same, the Commission may consider the submissions of GRIDCO and approve the Other Income/ Miscellaneous Receipts as proposed.
194. GRIDCO has submitted that it has registered a loss amounting to Rs.440.18 Cr. as reflected in the audited Statement of Profit and Loss for the FY 2021-22. The Commission may ignore such submissions made by the stakeholder in absence of any ground.
195. GRIDCO has already submitted that revenue of Rs.11513.63 Cr. is estimated to be earned by GRIDCO from sale of proposed energy of 36358 MU to the DISCOMs during FY 2023-24 against the proposed net ARR of Rs.14193.71 Cr. at the existing BSP for FY 2022-23. It shall result in revenue deficit of Rs. 2,680.08 Cr. The details of the cost and revenue estimation has been deliberated in the instant Petition and hence

not repeated here for the sake of brevity. In view of the same, the contention made by the stakeholder does not hold good and the Commission may not consider the same.

### **Open Access Consumers**

#### **Views of Objectors**

196. An Objector submitted that GRIDCO has ignored the Open Access consumption in the present Petition. Thus, the Objector urged the Commission, to initiate necessary action and ask GRIDCO to submit necessary data on open access power consumption in the State.
197. The Objector submitted that open access of power by the industrial consumers is increasing because of the unreasonable retail tariff and GRIDCO, being the intra-State power trader, is losing huge economics. Moreover, open access consumers are obligated entities who are to comply the RPO targets for meeting their power consumption.

#### **GRIDCO'S Response:-**

198. GRIDCO supports the concern of the stakeholder regarding compliance of RPO by the CGPs and Open Access consumers which are obligated entities as per Clause No. 3.1(b) of the OERC (Procurement of Renewable Energy & its Compliance) Regulations, 2021. The said Regulation provides the following related to submission of information pertaining to consumption and compliance of RPO by the captive user(s) and open access consumer(s).

*“8.2 Every Captive user(s) and open access consumer(s) shall have to submit necessary details regarding total consumption of electricity and purchase of energy from Renewable Energy Sources for fulfillment of RPO certified by SLDC on regular basis to the State Agency. The necessary details regarding the total consumption of electricity shall also be submitted to the concerned Chief Electrical Inspector/ Electrical Inspector for cross verification of consumption.”*

### **Financial Sustainability of GRIDCO**

#### **Views of Objectors**

199. One of the Objectors pointed out that GRIDCO has submitted that financial sustainability of GRIDCO needs to be ensured by the Commission, but GRIDCO fails to cite relevant provisions of the Act or Policy. GRIDCO knows that the State Commission cannot function beyond the provisions of the Act. The Commission cannot

take the responsibility of GRIDCO for its sustenance because no provisions for Act specifies about the same. But in the other hand, as it is the State Designated Entity (SDE) of Govt of Odisha, GRIDCO need to approach before State Govt for its sustenance.

**GRIDCO'S Response:-**

200. GRIDCO has submitted that Section 61 of the Electricity Act, 2003 provides that the terms and conditions of the determination of tariff shall be set in such a way that the generation, transmission, distribution and supply of electricity are conducted on commercial principles thereby safeguarding consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner.
201. GRIDCO has been suffering from financial stress from past few years in absence of a sustainable revenue stream due to default in payment of BSP dues by erstwhile DISCOMs. Due to non-cost reflective BSP, disallowance of carrying cost on regulatory assets, the loan liability of GRIDCO has increased considerably over the years. GRIDCO submitted that it was compelled to raise loans in the past for the following reasons:
- (a) Non-cost reflective BSP in the past years resulting in huge revenue gaps on year-on-year basis;
  - (b) Non-amortization of Regulatory Assets by the Commission through feasible mechanism of amortization;
  - (c) Revenue from sale of surplus power is inadequate to amortize its regulatory assets and moreover such revenue was adjusted in the ARR of respective financial year without leaving any gap for further amortization;
  - (d) No carrying cost allowed by the Commission on the unamortized regulatory assets / Revenue Gaps;
  - (e) Outstanding from the erstwhile Distribution Companies against the bulk supply of power and non-cost reflective BSP compelled GRIDCO to avail loans to meet the power purchase obligations for ensuring energy security of the State.
  - (f) Such loans raised helped to avail rebate on timely payment for power purchase cost and / or reduced the late payment surcharge, thus construing the said benefits were being passed on to the consumers.

(g) Non implementation of financial restructuring schemes like the Financial Restructuring Plan (FY 2013) and Ujjwal Discom Assurance Yojana (FY 2015) for the non-distribution companies like GRIDCO or private Discoms in Odisha to restructure financial cost, which was available in other States for restructuring of liabilities failing to make the sector viable as per the policy initiatives of Government of India. In the above schemes, the liabilities were taken over by Govt whereas in Odisha it remained with GRIDCO.

202. GRIDCO has been financially stressed on account of cash deficit scenario due to the reasons mentioned above. However, despite such adverse situations, GRIDCO has ensured uninterrupted power supply in the State even in the situations of non-payment of power purchase dues by erstwhile DISCOMs. For this, it had to raise loans to meet its cash flow deficit and clear the power purchase dues for avoiding the power regulation in the State.

203. The Clause 8.2.2 of the National Tariff Policy, 2016 provides that the recovery of outstanding Regulatory Assets along with carrying cost should be time bound and within a period not exceeding seven years for which the State Commission shall specify the timeline. The relevant extract from the Tariff Policy has been reproduced below for ready reference:

*“8.2.2 The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as a very rare exception in case of natural calamity or force majeure conditions and subject to the following:*

*a. Under business as usual conditions, no creation of Regulatory Assets shall be allowed;*

*b. Recovery of outstanding Regulatory Assets along with carrying cost of Regulatory Assets should be time bound and within a period not exceeding seven years. The State Commission may specify the trajectory for the same.”*

204. Further, there are sufficient provisions listed under the Act as well as in the Tariff Policy under which the State Commission can frame mechanisms for amortization of past dues, loans, Regulatory Assets along with carrying cost to be recovered from the consumers. GRIDCO requests the Commission to frame suitable mechanisms for settlement of its all outstanding dues.

**Special concessional tariff under Regulation 139 of OERC Distribution (Conditions of Supply) Code, 2019**

**Views of Objectors**

205. M/s Vedanta has submitted that they have participated in the said scheme and would like to provide certain suggestions to streamline the mechanism of surplus power sale under TPA mode.

- The Commission may devise a separate modality for sale of surplus solar energy available with GRIDCO under the existing TPA arrangement. GRIDCO while scheduling day ahead power to the industrial sources of power may be required to specify the source of power to be supplied to the industry.
- Due to power crisis scenario in the State, GRIDCO had intermittent surplus power available in off peak period. The Commission has allowed sale of such intermittent power on a fixed price of Rs 4.75/ KVAh. The monthly billing is raised to the consumers by the DISCOM as per RST (up to 80% Load Factor) and the special tariff of Rs 4.75/ KVAh beyond 80% Load factor. The breakup of special fixed tariff is as follows: GRIDCO Rs. 4.26/kWh, OPTCL Rs 0.28/kWh, and Differential margin of the above for DISCOMs. The rate of GRIDCO is based upon the marginal cost of surplus power available after meeting the State demand on merit order dispatch basis. In the present ARR application, GRIDCO has proposed to continue the same arrangement with a revised tariff of Rs.525/kVAh (beyond 70% LF) for FY 2023-24. Vedanta submitted that GRIDCO has not provided the breakup of proposed fixed tariff of Rs 5.25 /kVAh. Further, GRIDCO's share in fixed rate is to be based on marginal cost of surplus power, which needs to be justified.
- Under the non-RTC based surplus power sale scheme, industries are getting power during non-peak hours, whereas in peak hours, industries are required to procure power from market/other sources. The Commission may devise a modality for supply of power during the peak period considering the surplus availability and price of power.
- Key points/issues facing by consumers while operating the TPA agreement are as follows: -

- i. Operational flexibility of 20 MW up to which Energy Charges should remain the same discounted price, which currently is around Rs. 7.20 per unit.
  - ii. Flexibility for ramp-up/down of 50 MW per 15 min time block.
  - iii. During Peak period wherein GRIDCO does not supply power under TPA, in such period at least 50% power should be supplied to the consumers under TPA scheme.
  - iv. Provision of Intraday surplus (if available) may also be included.
  - v. In present TPA scheme power is supplied by DISCOMs, however, the modality of supply is based on day ahead schedule as like Open Access regime. It is proposed that Consumers should also have flexibility to revise the power schedule.
- Vedanta submitted that the Commission may also intervene in the operational modality of surplus power sale under TPA modality which shall make this arrangement more attractive to industrial consumers.
  - Fixed rate of surplus power sale under TPA is Rs 4.75/ kVAh as approved by the Commission shall continue for the ensuing FY 2023-24.
206. M/s FACOR submitted that GRIDCO proposed to revise the tariff from Rs. 4.75/kVAh to Rs. 5.25/kVAh which is charged to the industries having CGP with Contract Demand of more than 20 MW beyond 80% Load Factor as per the Commission order dated 23.05.2022. The proposed revision of price by GRIDCO is unacceptable because this will put the industries having CGP in most difficult situation. Few CGPs have availed the facilities. If the rate will increase further, there will be hardly any taker of the scheme which will cause difficulty for GRIDCO.

**GRIDCO'S Response: -**

207. GRIDCO has submitted that it is not possible to provide source-wise segregation of the pooled power on block-wise basis while supplying intermittent surplus power to the industries having CGP through DISCOMs under Tripartite Agreement (TPA). The proposed increment in the tariff from Rs. 4.75/ kVAh to Rs. 5.25/ kVAh is attributable to the increase in the marginal cost of surplus power duly considering the intermittency in availability of surplus power.

208. Due to rise in the energy demand of the State, substantial surplus power may not be available during the peak hours for the ensuing FY 2023-24. Thus, the Commission may not consider for supply of power during the peak hours to the industries in the present circumstances.
209. In order to maintain grid discipline, every grid connected entity needs to adhere to their respective drawl/ injection schedule. Any deviation from the schedule attracts penalty under different regulations/ tariff order. Similarly, the industries having CGP willing to avail power through TPA arrangement should maintain their drawl within their respective drawl schedule. Thus, the proposal of Vedanta Ltd. in this regard may not be considered.
210. The ramp up/ ramp down flexibility will vary from industry to industry and hence, generalizing the same may not be prudent. Thus, the proposal of Vedanta Ltd. in this regard may not be considered.
211. As per the Commission's order in Case No. 25/2022, the TPA scheme is devised for supply of intermittent surplus power, on as and when available basis, to the industries having CGP with CD of more than 20 MW. Therefore, the prayer of Vedanta Ltd. with regards to supply of committed 50% power during the peak hours may not be considered as the TPA scheme is only on as and when available basis and does not assure committed power.
212. GRIDCO has stated that, provision for intra-day revision of TPA schedule is not possible as it may result in the operational complicacies, thus the same may not be considered. As per the present TPA, the consumer can only revise the power schedule under Force Majeure conditions. The operational modality is mostly influenced by the real time operations, thus the prayer of M/s. Vedanta Ltd. in this regard may not be considered.

### **Commitment Charge**

#### **Views of Objectors**

213. M/s Vedanta submitted that the commitment charge proposed by GRIDCO is neither supported by Electricity Act, 2003, nor any Regulation notified by the Commission. Application of new load /additional load by consumers is governed by the OERC Distribution Supply Code, 2019. Regulation 127 of OERC Distribution Supply Code, 2019 enables consumers to enhance contract demand for additional load/new load.

Therefore, any kind of charges with respect to load addition/reduction shall be levied as per Regulations in force.

214. M/s FACOR submitted that in its ARR for FY 2023-24, GRIDCO has requested to impose commitment charges of Rs. 250/kVA/month on industries which apply for new or additional load. However, there are many unforeseen situations for any industries for which there may be delay in availing the power by the industries. The objector submitted that this can be settled by GRIDCO in real time power allotment. So, the proposal may be rejected.

**GRIDCO'S Response: -**

215. GRIDCO submitted that it ensures energy requirement of the State through DISCOMs. It may be appreciated that GRIDCO makes long term energy planning for the State and accordingly executes PPAs with various Central and State Generators for availing the required energy during the scheduled period. Accordingly, GRIDCO undertakes the responsibility for procuring the State share of power from these stations and is contractually obligated to share the capacity charges from the date of commercial operation of the Generating stations and the drawal made therefrom. As the industries desiring to set up new/additional units or enhancing the loads are making contracts for availing the desired quantum of power from specific locations within specific period. GRIDCO accordingly makes adequate planning for the requisite quantum of power and ensures for supplying the requisite quantum of power by procuring the same from the approved Generators.
216. The commitment charges proposed by GRIDCO would be utilized for recovery of the Fixed Charges of the stations or else the same shall be recovered from the consumers of the State by way of tariff. GRIDCO prayed the Commission for approval of commitment charges in the interest of the state consumers at large.

**Fuel Price Adjustment (FPA)**

**Views of Objectors**

217. M/s FACOR has submitted that the proposal to formulate a mechanism for monthly or quarterly determination of Fuel Price Adjustment component is not good for the industries and hence should be rejected. When the Commission is considering annual tariff hearing and GRIDCO is filing annual Truing Petition, then in between adjustment

of Tariff on account of FPA component is not at all required and hence, such proposal may be rejected.

**GRIDCO'S Response:-**

218. Regarding non-applicability of Fuel Price Adjustment, GRIDCO submitted that the views grossly violates the RST Regulations framed by OERC. The Fuel Price Adjustment secures early recovery of cost in lieu of the higher tariff shock due to the deferment of the additional cost as would be determined during the truing up exercise.

**Excess Drawal by DISCOMs**

**Views of Objectors**

219. M/s FACOR submitted that GRIDCO has proposed for recovery of charges on account of any excel drawl of energy by a DISCOM during a month over and above the monthly approved energy quantum at actual power purchase cost incurred for excess drawl or at approved BSP rate for each DISCOM whichever is higher on a monthly basis applicable to the respective DISCOM. Since the Commission has framed Deviation Settlement Mechanism Regulations, DISCOM and GRIDCO may implement the DSM in true spirit and therefore, there is no need to levy additional demand charges on excess drawl of DISCOMs from GRIDCO. It will finally increase the landed cost of power to industries and the tariff will increase further.

**GRIDCO'S Response:-**

220. GRIDCO has submitted that the demand projections for the past years were made as per the estimations submitted by the DISCOMs based on historical growth and certain assumptions. It is practically very difficult to exactly predict the demand for the ensuing year in advance and the variation is mostly attributable to the external factors such as inflation, natural disaster, pandemic, population growth etc. which are uncontrollable in nature. As per the RST Order dated 24.03.2022, the variation between the approved and actual drawl of energy by the DISCOMs has remained below 4% for the past years except for FY 2019-20 and FY 2020-21. The higher variation in FY 2019-20 & FY 2020-21 is due to low industrial consumption on account of Covid-19 situation in the State which has also been acknowledged by the Commission in the said Order. Till Dec' 2022 there has been total energy input of 25721 MU to the DISCOMs against the total yearly approved energy input of 29500 MU and considering the prevailing trend, GRIDCO expects that the total actual requirement for the current year shall

exceed the approved limit. Further, GRIDCO is required to maintain a contingency of 10% of the estimated power requirements of DISCOMs for ensuring the energy security of the State. GRIDCO is in continuous endeavor to minimize the gap between the approved and actual energy input estimated for the DISCOMs.

221. GRIDCO may defer draws from the hydro-generating stations by procuring power from exchanges when market price is low and use the water saved to generate power when market price is high. In this regard GRIDCO has submitted the following:
- i. The power from the tied up generating stations are scheduled as per Merit Order Despatch (MoD) principle on day-to-day basis.
  - ii. The power from State hydro stations is scheduled by GRIDCO as per the actual availability and the same are mostly utilized to meet the peak demand.
  - iii. The price of power in the market is very volatile and is quite difficult to predict with accuracy. In the past it has been observed that the price was very high due to scarcity in the market. In such situation, GRIDCO meets the State demand from the available sources in priority and the opportunity to trade the low-cost hydro power could not be availed.
  - iv. In case the low-cost hydro power is not scheduled then equivalent quantum of high-cost power as per the MoD has to be availed for that period and capacity charges for the respective hydro generating stations has to be paid on monthly basis even in absence of any scheduling.
  - v. The water level in the reservoirs of the hydro stations in the State are maintained within the permissible limits defined by the Department of Water Resources, Odisha and has to be strictly adhered to. Priority of generation of electricity using water stored in the reservoir, comes after flood control, irrigation etc. Therefore, the quantum of water to be stored or released is not entirely controlled by GRIDCO.
  - vi. Odisha is a coastal State and is more prone to cyclones and floods unlike other landlocked States of India. Such natural disasters are frequent in the State and makes the hydrology of the State more vulnerable making it difficult to predict.
222. The suggestion of the stakeholder is appreciated and GRIDCO shall endeavor to explore such opportunities in future considering the State requirement in summer season, Peak demand and MoD principle.

223. Further, with regard to proposition of power procurement from the Energy Exchange instead of procuring costly power from the central sector, it is submitted that GRIDCO has entered into Power Purchase Agreements (PPAs) with various State & Central generators to meet the long term demand. The proposition of the learned objector seems to be unviable as the exchange rate for power during the period of national scarcity situations during Apr – July’2022 was exorbitantly high even touched the highest ever price of Rs.20/Unit, capped by the CEA to Rs.12/Unit.
224. Of course, the exchange price during the off-peak hours during the surplus situations may be lucrative as proposed by the stakeholder considering the subdued market with lower trading price at times, which may cater the short term demand of the State in particular. However, the above proposition may not hold good to meet the state demand specially in the peak hours in the long run for ensuring the energy security for the state. GRIDCO being functioning as the State Designated Entity is responsible for ensuring 24X7 steady power supply in the State which can be achieved only through Long Term Power Purchase Agreements. Above all, when situation warrants, procurement of CGP power and the power exchange can be considered. Moreover, GRIDCO has not made any Power Purchase Agreements (PPAs) for procurement of power from the CGPs.

#### **Issues related to DISCOMs**

##### **Views of Objectors**

225. An Objector submitted that the Commission should not accept the amount Rs. 7128.60 Cr., the receivable amount from erstwhile DISCOMs i.e., CESU, NESCO, SOUTHCO, WESCO, because GRIDCO, being a Govt. Company & encouraging loss for the non-performance of DISCOMs as the shareholder.

##### **GRIDCO’S Response:-**

226. GRIDCO submitted that due to non-cost reflective tariff, non-settlement of outstanding dues by erstwhile DISCOMs over a long period and for other perennial factors, GRIDCO was compelled to avail loan from banks with Govt. guarantee in order to avoid power regulation in the event of non-payment of generator bills. Further, the revenue gap as well as the deficit created over the years caused great hardship for GRIDCO in financing the revenue deficit so created due to non-cost reflective tariff over the years and also due to the non-approval of truing up gap along with carrying costs over the years. With the above pretext, the State Govt. is not willing for providing

any subsidy/grant to GRIDCO for meeting the repayment and finance cost obligation. With no reserves and surplus, GRIDCO is unable to meet the financial obligation and accordingly prays before the Commission for allowing the same in its ARR. GRIDCO also requested the Commission that a mechanism be put in place for principal and interest repayment of short-term loans availed to bridge the working capital gap arising due to concerns on account of non-realization of BSP dues from erstwhile DISCOMs.

227. GRIDCO submitted that the erstwhile DISCOMs owes huge outstanding dues to GRIDCO towards BSP and other dues over a period which needs to be serviced for meeting its repayment obligations. The Stakeholder may appreciate that the newly TPCL managed DISCOMs are collecting the arrears from consumers towards settling the outstanding dues as per the directives of the Commission.

### **Unlawful prayers**

#### **Views of Objectors**

228. An Objector submitted that most of the reliefs sought in the prayer of the present petition are unlawful because GRIDCO has failed to cite the relevant provisions of the Act. GRIDCO has requested the Commission to create a separate mechanism to repay loan liability under special appropriation. However, GRIDCO does not cite relevant provisions of the Act & Policy in support of the aforesaid prayer.
229. Further he submitted that the Commission will monitor the trading activities of GRIDCO and cannot intervene into the financial adjustments of the licensee. He submitted that the ARR side of the Petition should be dismissed because the Act does not support the ARR of the Power Trader.
230. The Commission cannot consider and allow all the costs but to allow the costs relating to power purchase from the generators to the extent to meet the requirement of DISCOMS. Question does not arise to consider the RoE (Return on Equity) of the Petitioner in the instant Petition because it is not supported by the provisions of the Act.
231. The Capacity Charges/Fixed Cost payable by GRIDCO to the generating stations for procurement of power for sale to DISCOMs may be accepted in full but the same payable to new generating Stations with whom PPA has been executed but no procurement is proposed, needs to be dismissed. The servicing cost of the PPAs will be paid by either GRIDCO or by Govt.

232. In the previous Bulk Supply Price Orders of the Commission, GRIDCO has been allowed lot of benefits through higher BSP by considering the full ARR in the tariff proceeding. So, question does not arise to allow the carrying cost on the Regulatory Assets and amortisation of the same in the instant proceeding.
233. Further, the Objector submitted that GRIDCO was a Party to the suo-motu sale proceedings done by the Commission to sale the four power distribution Utilities to Tata Power. Claiming now the receivables from the Utilities as of the date of vesting order is unlawful. Therefore, the Objector urged the Commission to dismiss the prayer seeking to allow a suitable mechanism to recover the shortfall towards DISCOMs receivable of Rs. 7129 Cr. arising out of sale of the four utilities in the upcoming five years.
234. Further, the Objector urged upon the Commission to utilize the regulatory surplus of Rs. 1224 Cr. for reduction of RST & WT for the ensuing FY2023-24. The Objector submitted that such action of the Commission shall be very much effective for making the RST competitive.

**GRIDCO's Response: -**

235. GRIDCO has clarified that the total power purchase cost for FY 2023-24 including the power to be traded works out to be Rs. 12593.82 Cr. out of which Rs.12236.74 Cr. has been considered for calculation of ARR / BSP to be recovered from the State DISCOMs. The differential amount of Rs.357.08 Cr. (i.e. Rs.12593.82 Cr. – Rs.12236.74 Cr.) towards energy charges of the power to be traded has been excluded from the ARR calculation. Further, GRIDCO in its additional submission dated 13.01.2023, has mentioned that the total additional power purchase cost claimed for FY 2023-24 has inadvertently mentioned to be Rs.1657.10 Cr. in place of Rs.1072.41 Cr. GRIDCO also requested the Commission to consider the same. Considering the estimated power purchase cost of Rs.12236.74 Cr. and additional power purchase cost of Rs.1072.41 Cr., the total power purchase cost works out to be Rs.13309.16 Cr. The detailed break-up of the claimed power purchase cost has been summarized below:

**Table-13**  
**Claimed Power Purchase Cost**

Particulars	Formula	Amount (Rs. Cr.)
Total Power Purchase Cost estimated for FY 2023-24	A	12593.82
<b>Less:</b> *Estimated Energy Charge to be recovered through trading of surplus power	B	357.08

<b>Particulars</b>	<b>Formula</b>	<b>Amount (Rs. Cr.)</b>
Additional Power Purchase Cost	C	1072.41
<b>Power Purchase Cost claimed</b>	<b>D= A-B+C</b>	<b>13309.16</b>

*\*It is clarified that the energy charge estimated for the surplus energy to be traded has not been claimed in the calculation of ARR for FY 2023-24.*

### **Other issues**

#### **Views of Objectors**

236. Some of the Objectors submitted that instead of furnishing audited balance sheet and cash flow statement, GRIDCO enclosed authenticated un-audited annual accounts. GRIDCO needs to submit their audited balance sheet, without that the truing up exercise, and determination of ARR & Tariff will be an unnecessary exercise. GRIDCO also needs to submit Business Plan, trueing up, Performance review related document in the ARR.
237. Further, the Objectors submitted that, it is not clear based on which Regulations GRIDCO has filed the present ARR and approval of BSP application. GRIDCO is requested to submit their license condition and copy of the regulations based on which it has filed the present petition. The Objectors requested the Commission to be guided by Regulations and Licensee condition of GRIDCO while hearing of the present tariff petition of GRIDCO.
238. Few Objectors requested GRIDCO to submit the copy of energy bills served by the CGP and RE based power plant.
239. An Objector submitted that GRIDCO & OHPC, being a wholly Govt. owned Company, should sit together and see that the mini Hydro Power Projects now under OPGC should be transferred to OHPC for green power generation.
240. Another Objector submitted that GRIDCO has to produce the year-wise payment of Electricity Duty paid to Govt. Electricity Duty received for different units & water cess received from 01/04/2010 to 31/12/2022.
241. An Objector strongly oppose the ARR application of GRIDCO for the following reasons:
- i. As per the Odisha Electricity Reform Act, 1995, GRIDCO has to perform:
    - a) Engaged in business of procurement & bulk supply of power.

- b) To undertake planning & coordination to determine the electricity requirement of the state.
  - c) Purchase power in economical manner with a transparent power purchase procurement process.
  - d) Establish a tariff or to calculate its charges from time to time in accordance to the requirement prescribed by the commission
  - e) The statutory obligation to procure power & act as a bulk supplier to supply power to DISCOMs & meet the electricity demand of the state.
- ii. Also, GRIDCO is representing on the behalf of Govt.of Odisha, 49% shareholder of each DISCOMs & 3 nos. of Directors along with Chairman Posts are reserved for them. The no-performance of NESCO, WESCO & SOUTHCO till 2015 & as an Administrator and supervisor to supervise the distribution work of all such companies from 2015 to 2020 & the management of CESU from 2000 to 2020 by the Energy Dept. & GRIDCO officials acquired outstanding dues of Rs. 7788.30 Cr.. All the officials are responsible for such non-payment of DISCOMS.

242. The Commission should direct GRIDCO authorities to produce the name of such officers those who are representing as Director in different DISCOMs from 2000 to 2020 to ascertain the truth by such amounts are outstanding.

243. GRIDCO have mentioned that DISCOMs demand for FY 2023-24 are 37554.41 MU, whereas power available for FY 2023-24 are 38453.07 MU. Balance surplus power are available for trading. But, the trading rate per unit is Rs. 3.40/- should not be accepted, because the Govt. & GRIDCO are not able to change PPA & purchase low cost power for state use.

**GRIDCO'S Response:-**

244. GRIDCO submitted that it has filed the ARR and BSP application for the ensuing year FY 2023-24 on 30.11.2022 and True-Up Petition for FY 2021-22 along with annual audited accounts on 29.11.2022 before the Commission. GRIDCO shall submit any other documents / Clarifications, if required, as per direction of the Commission for determination of ARR and BSP for FY 2023-24 in line with the prayers made in the instant petition.

245. GRIDCO submitted that the Annual Reports of GRIDCO for FY 2020-21 which encompass the Audited Annual Accounts for the respective years are uploaded in

GRIDCO's website. Further, the Audited Annual Accounts for the FY 2021-22 along with the Truing Up Application for FY 2021-22 has been mailed to the stakeholder.

246. GRIDCO always submits information documents in respect of its Performance Review as directed by the Commission from time to time. Performance Review of GRIDCO for FY 2021-22 and FY 2022-23 (Apr'22 to Sep'22) has been conducted by the Commission on 17.06.2022 & 28.12.2022 respectively.
247. GRIDCO submitted that the transmission loss of OPTCL was approved @ 3.00% by the Commission for FY 2022-23. The same rate has been considered by the Petitioner to project Intra State transmission losses for FY 2023-24. In view of the same, GRIDCO has requested the Commission to consider the approved Intra-State transmission loss for FY 2022-23 or revised approved losses based on ARR Order of OPTCL for FY 2023-24.
248. In order to maintain grid discipline every grid connected entity needs to adhere to their respective drawl/ injection schedule. Any deviation from the schedule attracts penalty under different regulations/ tariff order. Similarly, the industries having CGP willing to avail power through TPA arrangement should maintain their drawl within their respective drawl schedule. Thus, the proposal of Vedanta Ltd. in this regard may not be considered.
249. The ramp up/ ramp down flexibility will vary from industry to industry thus generalizing the same may not be prudent. Thus, the proposal of Vedanta Ltd. in this regard may not be considered.
250. Technologies for Battery Energy Storage System and Pumped storage Hydro are in the process of adoption and implementation, thus, it may take some time to penetrate and stabilize with the cost of supply of power from the above sources for growth of the respective sector through adequate investment in the above sectors. GRIDCO shall take necessary steps for procurement of power from such sources after framing of Regulation for the State by OERC.
251. In respect of the Audit of GRIDCO Accounts, GRIDCO submitted that the Accounts of GRIDCO are being audited by the Statutory Auditors as per the provisions of the Companies Act as well as by the Comptroller & Auditor General (C & AG) of India since GRIDCO is a State PSU i.e., Government of Odisha Corporation.

## **OBSERVATIONS OF THE STATE ADVISORY COMMITTEE (Para-252)**

252. The meeting with State Advisory Committee (SAC) was convened on 15.03.20223 to discuss about the proposed ARR and Tariff Applications of different utilities in the State for FY 2023-24. 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) Hirakud Power Station has never achieved the design energy and hence, GRIDCO is not able to receive the low cost power from this power station and purchasing high cost power from outside. GRIDCO, SLDC and OHPC should discuss regarding such reduction in generation of low cost power.
- b) M/s. Vedanta Ltd. should be operated as an IPP and should not get linkage coal as CGP. The IPPs, those are ready for operation, are not getting required quantum of coal. So, high-cost power purchase from exchange was required to meet the demand of the State. Therefore, it is suggested for procurement of power from CGPs.
- c) The generation cost will be very high, as the cost of coal has increased. The PPAs were signed with NTPC long back and the energy charge mentioned in the PPA is found to have increased significantly after commissioning of the projects (say, initially Rs 2.15/kWh to current level of Rs 6/kWh). It is suggested that an escalation factor can be considered in this regard, which may be based on RBI index only. Further, procurement of high-cost power from NTPC may be reduced. Although the installed capacity is huge, availability of power is low to meet the State requirement. A special committee can be constituted to see the availability vis-a-vis demand. Co-ordination between GRIDCO, CGPs and Generating Companies is required for better understanding of the power availability to avoid procurement of costly power from Central sector. This can be a win-win situation for all.
- d) Further, the earlier cost of CTU charges was lower, approx. 13 P/U and now it has increase substantially. Therefore, the central thermal project like Darlipalli STPS can be connected through STU network instead of CTU network. The R&D activity and standardization of elements at OPTCL / GRIDCO should be initiated.
- e) GRIDCO has not considered the shortfall of RPO of previous years. The RPO obligation should be fulfilled for FY 2023-24. There are opportunities to develop Small Hydro Project (SHP) in downstream of Machhakund. Further, the pump

storage project is highly essential because of large scale integration of RE power in near future. Development of pump storage project is also required from the perspective of energy security. It is also suggested for blending of biomass in OPGC thermal project.

- f) Further, to meet the target given in RE policy, RE projects inside the State should be promoted, which will lead to significant direct and indirect employment. As per the RE Policy, several Regulations are required to be framed. The Commission should decide the trading margin of GRIDCO so that GRIDCO can supply RE power to industries.
- g) M/s Vedanta has only opted to avail power under the tripartite agreement tariff (TPA tariff) proposed by TPWODL. About 900 MU surplus power available with GRIDCO. GRIDCO may have surplus power of around 3000 MU, if M/s. Vedanta will not opt for the same. It is matter of concern that how GRIDCO can meet the SMD, as at present overdrawal is not permitted under CERC DSM Regulations.
- h) Proposal GRIDCO for revision of Tripartite Agreement (TPA) tariff (from Rs 4.75/kVAh to Rs 5.25/kVAh) should not be considered by the Commission. Further, the commitment charges proposed by GRIDCO is not as per Regulations.
- i) GRIDCO is a lossmaking entity and as understood, it should get 7 p/u on each unit of transaction. Proper planning is necessary for its sustainability.
- j) The Managing Director, GRIDCO stated that situation of procurement of power vis-à-vis the requirement of the State is being regularly reviewed. The growth of electricity consumption was low during covid period, which has increased afterwards. The peak demand of the State is around 4800 MW and average power procurement cost is the lowest in Odisha and so also the average cost of supply, except few Union Territories. Further, the average billing rate is also lowest in the country. He pointed out that the reason for rise in power purchase cost in the current year and next year is due to addition of new thermal plants having higher fixed cost and retirement of old asset like TTPS. Although the RE penetration has increased, but it cannot supply RTC power, hence there is requirement of blending with RTC power. Now, there is a requirement to procure costly power to meet the additional demand of the State. He mentioned that due to shortage of coal, NTPC started blending of imported coal during last year, which caused increase in cost of power procurement. However, no imported coal was used by the State thermal

projects. There is a proposal of dual connectivity (STU and CTU) in case of the upcoming NLC and TTPS projects and hence, no ISTS charge would be applicable. OHPC has identified three pump storage projects, which will be developed shortly. GRIDCO is taking appropriate steps on the issues and concerns of DISCOMs with reference to power purchase. Discussions with IPPs/CGPs are going on to meet the demand requirement of the State during summer month. GRIDCO will approach the Commission to accord necessary approval in this regard. GRIDCO is carrying out the procurement planning taking the contingency factor in to consideration. Odisha is one of the five states where pilot study on redundancy has been conducted and the result shows that the incremental cost would be of 5-6 P/U for 11%-12% redundancy.

#### **VIEWS OF THE GOVT. OF ODISHA (Para-253)**

253. Govt. of Odisha in Energy Department vide their Letter No.3402 dated 21.03.2023 have communicated views/suggestions on various issues relating to tariff for FY 2023-24. Out of which, the views/suggestions of Government on the issues involving tariff setting of GRIDCO are reproduced hereunder:

- a) The PPAs are binding in nature. GRIDCO had moved OERC for disapproval of some PPAs with the hope that such disapproval would strengthen its case with MoP for surrender of those high cost PPAs. However, MoP has not agreed for permanent surrender of the PPAs; rather some PPAs have been temporarily allocated to other States which needed that power. Hence fixed cost of all PPAs signed by GRIDCO needs to be provided to ensure financial viability of GRIDCO.
- b) In the matter of adequate coal supply to M/s. Vedanta Ltd. for availing full entitlement of power as per PPA, GRIDCO is being advised to take necessary action.
- c) The OTS cost of KBUNL and Ash transportation costs of NTPC need to be recognised and provided for as it has already been paid. BSP of 3 DISCOMs namely, TPCODL, TPNODL & TPWODL may be increased as thought prudent by the Commission, to the extent not to increase RST during FY 2023-24. Remaining unrealized cost may be recognized as Regulatory Asset of GRIDCO to be recovered during subsequent years. The RST for FY 2023-24 may not be increased from present level.

- d) Interest burden of GRIDCO needs to be fully recognized in its ARR. The reason advanced by OERC for not recognising the interest cost of loans incurred beyond 2015-16 is not reasonable. On the other hand, Government has been supporting GRIDCO through various means. The State Government has provided soft loan of Rs.700 Crore to GRIDCO during FY 2022-23. Another Rs.700 Crore of soft loan is proposed to be provided during FY 2023-24. The State Government has also converted Rs.2039.39 Crore of loan to equity in FY2021-22.
- e) As intimated vide this Government letter No.3333 dated 24.03.2021, the Government has agreed to extend the status-quo on up-valuation of assets of OPTCL, Generators and other licensees till FY 2025-26.
- f) The Commission would have taken note of the submissions made by the Department's representatives during public hearings as well as SAC meeting. Hence, it is not necessary to provide further details in this regard. Especially it is requested that, necessary enabling provisions be made in the ARR/RST orders for giving effect to various provisions of RE Policy, 2022.

**OBSERVATIONS AND ANALYSIS OF THE COMMISSION ON THE ARR & BSP PROPOSAL OF GRIDCO (Para 254 to 488)**

254. In course of hearing of the present Applications, Learned Objectors Shri R. P. Mahapatra, Shri Soumya Ranjan Patnaik, Hon'ble MLA, Khandapada and Shri R. C. Satapathy raised the point of competency of this Commission, functioning with the Officiating Chairperson and another Member, embarking upon the exercise of determination of tariff and other related areas etc. which were held to be unsustainable in the order passed by this Commission on the date of hearing i.e. on 15.02.2023. Thus, that part of controversy has reached quietus in the wake of the provisions under Section 93 of the Electricity Act, 2003 read with Section 9(4) of the Orissa Electricity Reform Act, 1995 and Regulation 8(1)(b) of the OERC (Conduct of Business) Regulations, 2004.

**Legal Status of GRIDCO Ltd. and Nature of its Application**

255. Prior to enactment of the Electricity Act, 2003, GRIDCO Ltd. was "Transmission and Bulk Supply Licensee" under the Orissa Electricity Reforms Act, 1995 (in short, 'the Reforms Act'). As such GRIDCO Ltd. has entered into long-term Power Purchase Agreements (PPAs) with Generating Companies namely OHPC, OPGC, NTPC etc. for purchase of power and also Bulk Supply Agreements with the four Distribution

Companies of Odisha, namely TPCODL, TPNODL, TPWODL and TPSODL to supply power for meeting the State demand. Under the said agreements, GRIDCO Ltd. is obliged to sell power on priority basis to the aforesaid Distribution Companies of Odisha as per their requirements and the Distribution Utilities are obligated to buy power from GRIDCO Ltd. This type of bulk supply arrangement is known as the “Single- Buyer- Model” of power procurement for Distribution Companies of Odisha and the same is prevailing in the State as a historical legacy.

256. Under the Fifth Proviso to Section 14 of the Electricity Act, 2003 GRIDCO Ltd. has become a deemed licensee; but its position has had to be consistent with the provisions of the Electricity Act, 2003. GRIDCO Ltd. has had to belong to one of the categories of licensee as set forth in clauses (a) (b) or (c) of Section 14 of the Act. It could not continue to maintain its position as “Transmission and Bulk Supply Licensee” as per the Orissa Electricity Reforms Act, 1995. The transmission business was taken over by the OPTCL and GRIDCO’s present activity is now confined to bulk purchase of electricity for sale to the Distribution Companies of Odisha. This satisfies the definition of trading under Section 2(71) of the Act. Therefore, GRIDCO’s position as per the Fifth Proviso to Section 14 of the Electricity Act, 2003 is that of a deemed trading licensee, responsible for trading of electricity in bulk.
257. Bulk supply activities by a trader is not repugnant to any provisions of the Act, 2003. Such activity is tenable under law. It is a historical legacy coming down from the period under the Reforms Act, 1995 and continues so long as the long-term bulk supply agreements with Distribution Companies subsist. Some of the objectors have canvassed the view that the single buyer model is against the spirit of the Electricity Act, 2003 and adversely affects the consumers of Odisha. In this tariff proceeding, the Commission has to set tariff in the situation as it stands now and therefore it refrains from addressing this incoherent issue. Incoherent
258. Further, the Government of Odisha in Energy Department, vide Notification No. 7948 dated 17.08.2006, have notified GRIDCO as the State Designated Entity for execution of Power Purchase Agreements with generating companies involved in generation of power from thermal, hydro & renewable sources.
259. Regarding filing of ARR & BSP application of GRIDCO Ltd. before the OERC, it is to clarify that the Commission is empowered under Section 86 1(b) of the Electricity Act,

2003 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 Ltd. under the present arrangement and as such, the Commission is empowered to approve/disapprove the ARR & BSP of GRIDCO Ltd. Hence, GRIDCO's submission of its ARR & BSP application before the OERC for approval is quite logical and very much tenable under the law. Moreover, GRIDCO acts as a facilitator in the matter of regular and continuous procurement of power and safeguards the interest of the DISCOMs when they are put under financial hurdles and also protects possible Power Regulation by the generator(s).

260. Under Section 86(1)(b) of the Electricity Act, 2003, the Commission is vested with authority to regulate the price at which Distribution Companies may buy power from generating companies or licensees (such as GRIDCO Ltd., which is a deemed trading licensee) or from other sources through agreements. The power to regulate price includes the power to fix regulated price from time to time. This provision enables the Commission to fix a regulated price for procurement of power by Distribution Companies under the existing Bulk Supply Agreements with GRIDCO Ltd. Conceptually, this is different from fixing of general tariff for sale of electricity by GRIDCO Ltd. to any purchaser.

261. The Commission cannot and does not fix tariff for sale of electricity by a trader, vide Section 62 of the Act, and it does not intend to do so for GRIDCO Ltd. as a trader; even though under Section 86(1)(d) read with Section 62 of the Act, the Commission may determine tariff for whole-sale or bulk supply of electricity by generators or distributors (*i.e. licensees other than traders*). This follows from a harmonious reading of Section 62 and Section 86(1)(a) and Section 86(1)(j) of the Electricity Act, 2003. But it just happens that in the present situation of Single-Buyer-Model that the regulated purchase price for Distribution Companies fixed under Section 86(1)(b) of the Act coincides with the selling price of GRIDCO Ltd. as a trader for sale of power *only to the present Distribution Companies of Odisha*. If GRIDCO Ltd. sells surplus power, after meeting its contractual obligation under existing Bulk Supply Agreements, directly to any consumer under Section 42 read with Section 49 of the Act or another trader, or even to another distributor licensed under the 6<sup>th</sup> proviso to Section 14 of the Act, the

procurement price, which coincides with GRIDCO Ltd's selling price, fixed in this order is not applicable. **Thus, this order does not fix tariff for GRIDCO Ltd. as a trader.**

262. However, the single buyer model has put GRIDCO Ltd. in a dominant position, indeed a monopolistic position, so far as supply to the Distribution Companies of Odisha is concerned. By virtue of Section 60 of the Act, GRIDCO Ltd. is under an obligation to refrain from abusing its dominant position. In particular, GRIDCO Ltd. has to refrain from exploiting scarcity situation in the State arising from inability of generating companies to supply adequate power to GRIDCO Ltd. under their PPAs. Where, in such a situation, GRIDCO Ltd. chooses to purchase power from open market and *de hors* the PPAs, it has to do so prudently and following merit order dispatch principle. Also, in taking such decision, GRIDCO Ltd. has to weigh the possibility of over-burdening the tariff payable by the consumers of Odisha as against reasonable power regulation. It would be proper for GRIDCO Ltd. to present facts before the Commission and seek Commission's directions under Section 23 of the Act. In this connection Commission's Order dated 14.01.2010 in Case No.01/2010 regarding Power Regulation Protocol may be referred to. If it is established that GRIDCO Ltd. has not taken such steps and arbitrarily purchased power at high cost, the Commission would be within its rights not to allow such costs to be passed on to consumers.
263. In the process of re-organization of electricity industry, GRIDCO Ltd. as a trading licensee could not be a transferee of the liabilities either of erstwhile OSEB or of erstwhile GRIDCO Ltd. functioning as a distribution or transmission company vide Section 131 of the Act. Therefore, it has been contended that GRIDCO Ltd. as deemed trading licensee now is not entitled to consideration of past losses and other related costs indicated in the application. On deeper analysis it transpires that these past losses, securitization of liabilities and other related costs etc. are a mirror reflection or virtual image of what in reality are the liabilities of Distribution Companies and are actually being serviced by Distribution Companies. These liabilities are the Liabilities already incurred by GRIDCO Ltd. as on 01.04.1999 when its distribution business was transferred to Distribution Companies and liabilities of the DISCOMs after privatisation. These are arrears on account of power purchase payable to generators and incurred by GRIDCO Ltd. in the course of its role as a bulk supplier or deemed trading

licensee. These liabilities could not be transferred to Distribution Companies as Commission does not allow regulatory asset in the DISCOMs' account.

264. The regulatory power under Section 86(1)(b) of the Electricity Act,2003 can be exercised by the Commission Suo Motu. GRIDCO Ltd. has filed its application referring to Section 62, Section 64 and also referring to Section 86(1)(b) of the Act. GRIDCO Ltd. has however prayed for fixation of its selling price qua the present distribution companies by virtue of the subsisting Bulk Supply Agreements with the Distribution Companies and filed its Aggregate Revenue Requirement (ARR) along with the application. The Distribution Companies have filed their tariff applications through their Chief Executive Officers vide Case Nos. 80/2022 for TPWODL, 82/2022 for TPSODL, 83/2022 for TPNODL & Case No. 88/2021 forTPCODL. They have not prayed for fixation of their power procurement price but such fixation being fundamental determinant of tariff, is implicit in their prayer for determination of tariff. In the circumstances GRIDCO's application is not being treated as a tariff application but as material for the Commission to proceed Suo Motu for fixation of a regulatory price for power procurement by the present Distribution Companies of Odisha under the existing Bulk Supply Agreements. In this context GRIDCO Ltd. had been heard at length on its Aggregate Revenue Requirement (ARR) because under the prevailing single buyer model, the procurement price of the present Distribution Companies coincides with the selling price of GRIDCO Ltd. Therefore, GRIDCO Ltd. ought to have say in the matter and ought to be heard even though the Commission is essentially fixing the procurement price for the present Distribution Companies. Consideration and approval of Aggregate Revenue Requirement of GRIDCO is not possible unless GRIDCO is heard in length. It is in this context that Aggregate Revenue Requirement (ARR) of GRIDCO Ltd. was considered and analysed and not in the context of fixing a general tariff for GRIDCO Ltd.
265. On detailed scrutiny and examination of the Aggregate Revenue Requirement and Bulk Supply Price Application of GRIDCO Ltd. for 2023-24, the written and oral submission of the objectors, the Commission has passed the order as enunciated in the subsequent paragraphs.

### **Principle followed for approval of ARR for FY 2023-24**

266. The Commission, for determination and approval of the ARR of GRIDCO for FY 2023-24, continues to follow the principles laid down in terms and conditions for determination of tariff regulations and principles followed in the previous year. It 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.
267. Tariff determination is based on various assumptions and principles to arrive at the ARR components for the next financial year and hence, it is a reasonable estimate. The actual figures/amount may be different and this will be considered in the truing-up exercise. The Commission has determined the ARR for the FY 2023-24 using the following principles.
268. The cost of power purchase for GRIDCO, which constitutes about 99% of the total cost structure, has been considered on a merit-order basis. The availability of energy from state hydro generation has been estimated as per design energy and that of state thermal generation has been computed based on the generation plan submitted by OPGC and the cost has been considered as per norms of OERC Regulations/Power Purchase Agreement (PPA). Availability from the Central Sector Generating Stations/Inter State Generating Stations (ISGS) has been considered as per the allocation/shares of Odisha in these stations and the applicable tariff is as per CERC norms. The drawal from Independent Power Producers (IPPs), Captive Generating Plants (CGPs), Cogeneration Plants and energy from renewable sources have been estimated based on the proposal of GRIDCO, the requirement of the state and other obligations
269. Following the separation of the transmission business along with transfer of related assets, liabilities and personnel to OPTCL w.e.f. 01.04.2005, GRIDCO does not possess any asset on its books of account. It however continues to carry the accumulated burden of past liabilities arised due to non-payment of dues by the earlier DISCOMs in time. GRIDCO also does not have the benefit of depreciation provisions to meet these debt obligations. Keeping in line with earlier orders, to avoid a huge additional burden being passed on to the retail consumers, the Commission has provided for servicing a substantial part of debt liabilities from the non-core activities of GRIDCO, namely

earnings from export of power and un-scheduled interchange charges, after meeting the requirement of DISCOMs.

270. The Commission has scrutinised in detail the energy requirement proposed by the DISCOMs for FY 2023-24. Based on the energy availability, the Commission has observed that after drawal of power from all state-owned generating stations (both Thermal and Hydro), the State's share from central sector generating stations, and drawal from IPPs, Renewable sources, captive & co-generation sources, some surplus energy will be available after meeting the State demand for FY 2023-24. The availability of energy has been calculated based on normative loss. The quantum of surplus energy may increase or decrease based on hydrology and/or projected drawal from IPPs & central sector generating stations, though this has been estimated on normative basis for the ensuing year.

#### **Quantum of Power Purchase**

271. GRIDCO as a deemed trading licensee procures power from the generating stations within and outside the State to meet the requirement of the consumers of the State. The power purchased by GRIDCO is supplied to the DISCOMs through the OPTCL's transmission system.
272. GRIDCO Ltd. as well as DISCOMs have submitted their ARR applications for FY 2023-24 to the Commission separately for approval. In their applications, the Distribution Companies have furnished projections of drawal of power from GRIDCO for FY 2023-24 and GRIDCO has projected the total power to be purchased from the Generators after considering the requirement of distribution companies, emergency requirement of industries owning CGPs and the energy loss in OPTCL transmission system. The ARR applications filed by GRIDCO and DISCOMs in respect of expected quantum of power purchase by GRIDCO & energy drawl by DISCOMs have been examined & estimated by the Commission based on the quantum of present drawl of power and expected additional load growth during FY 2023-24.
273. The quantum of power to be purchased by the four Distribution Utilities for the FY 2023-24 has been assessed and approved by the Commission while determining their Revenue Requirement & Tariff in Case No.88/2022 (TPCODL), Case No.83/2022 (TPNODL), Case No.80/2022 (TPWODL) and Case No.82/2022 (TPSODL), in line with the provisions in the existing Regulations. The Commission has approved the total

energy requirement of 36970 MU for all the DISCOMs for the FY 2023-24 and this would be about 25% increase over previous FY 2022-23. Accordingly, the requirement of TPCODL, TPNODL, TPWODL and TPSODL would be about 11256 MU, 7508 MU, 13286 MU and 4920 MU respectively.

274. The Commission has considered 3% as loss in the transmission system of OPTCL for the FY 2023-24 and accordingly OPTCL's tariff order for the FY 2023-24 has been approved in Case No. 76 of 2022.

275. The sale of emergency power supply of 70 MU to the CGPs has been taken into account and approved for FY 2023-24 based on the submission of GRIDCO. Considering 3% as transmission loss, the estimated quantum of power purchase by GRIDCO to meet requirement of DISCOMs would be 38185.57 MU. The details of the estimated power purchase to meet the requirement/demand of the State is indicated in the Table below:

**Table –14**  
**Purchase of Power by GRIDCO for State Use for FY 2023-24**

Name of the DISCOMs	Commission's Approval for FY 2022-23	GRIDCO's Proposal in ARR for FY 2023-24	Commission's Approval for FY 2023-24
TPCODL	9790.00	10999.00	11256.00
TPNODL	6020.00	7750.00	7508.00
TPWODL	9300.00	13000.00	13286.00
TPSODL	4390.00	4609.00	4920.00
<b>TOTAL DISCOMs</b>	<b>29500.00</b>	<b>36358.00</b>	<b>36970.00</b>
CGP	60.00	70.00	70.00
<b>TOTAL SALE</b>	<b>29560.00</b>	<b>36428.00</b>	<b>37040.00</b>
Transmission loss at EHT in MU (DISCOMs Purchase only)	914.23 (@ 3.00% Transmission loss)	1126.00 (@ 3.00% Transmission loss)	1145.57 (@ 3.00% Transmission loss)
<b>Total Purchase</b>	<b>30474.23</b>	<b>37554.00</b>	<b>38185.57</b>

276. The Commission has approved the energy drawal by the Distribution Utilities for FY 2023-24 considering their present drawal pattern and the future projection due to additional load growth. Hence there should not be variations from the approved drawal. The Distribution Utilities need to plan their drawal in consultation with GRIDCO keeping in view the deviation settlement mechanism and actual losses in the system.

### Simultaneous Maximum Demand (SMD) in MVA

277. GRIDCO has projected the SMD of each DISCOM for FY 2023-24 considering the additional SMD on account of estimated additional load growth for the FY 2023-24 over the maximum SMD that occurred during the period from April, 2022 to October, 2022. Accordingly, the projection of SMD by GRIDCO for each DISCOM for the FY 2023-24 are given in the Table below:

**Table-15**  
**DISCOM-WISE Projection of SMD for FY 2023-24 (MVA/Month)**

<b>DISCOM Utility</b>	<b>OERC approval for FY 2022-23</b>	<b>Highest SMD recorded during FY 2022-23 (Apr.'22 to Oct'22)</b>	<b>Additional SMD on account of additional load growth</b>	<b>GRIDCO's Projection of SMD of DISCOMs for FY 2023-24</b>
<b>TPCODL</b>	1740	1892	112	2004
<b>TPNODL</b>	1150	1155	163	1318
<b>TPWODL</b>	1650	1710	238	1948
<b>TPSODL</b>	720	721	26	747

278. GRIDCO has submitted that during course of the year, there would be shut down of plants due to planned maintenance or force outage at any point of time and also the availability of renewable energy may not coincide with the time of maximum demand. Therefore, in order to meet the above projected maximum demand of the State at all times of the year, there could be requirement of scheduling of power from all thermal stations (for which PPAs has been signed with GRIDCO) to avoid load shedding. GRIDCO has requested the Commission to take into account above aspect while determining the power purchase cost.

279. The Commission observed that 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 ARR application, GRIDCO has considered the simultaneous maximum demand as furnished by Distribution Utilities to GRIDCO with additional amount towards projected additional growth for the ensuing year. As per the RST application of DISCOMs, the monthly demand for the period from April'22 to Dec'22 is as given in the table below:

**Table -16**  
**Demand in MVA during 2022-23 (Upto Dec' 22)**

	<b>TPCODL</b>	<b>TPNODL</b>	<b>TPWODL</b>	<b>TPSODL</b>	<b>Total</b>
<b>Apr-22</b>	1776.60	979.80	1520.90	668.50	4945.80

	<b>TPCODL</b>	<b>TPNODL</b>	<b>TPWODL</b>	<b>TPSODL</b>	<b>Total</b>
<b>May-22</b>	<b>2068.30</b>	1051.30	1464.00	708.60	<b>5292.30</b>
<b>Jun-22</b>	1891.50	<b>1154.70</b>	1479.30	<b>721.40</b>	5246.90
<b>Jul-22</b>	1707.20	990.00	1621.40	674.60	4993.20
<b>Aug-22</b>	1692.10	1055.10	1710.30	665.40	5122.90
<b>Sep-22</b>	1760.80	1105.50	1706.00	682.40	5254.80
<b>Oct-22</b>	1521.00	1001.30	1563.80	628.00	4714.10
<b>Nov-22</b>	1464.00	918.00	<b>1794.10</b>	664.00	4840.00
<b>Dec-22</b>	1216.90	954.70	1582.90	639.00	4393.40
<b>Average (4/22 to 12/22)</b>	<b>1677.60</b>	<b>1023.40</b>	<b>1604.70</b>	<b>672.40</b>	<b>4978.20</b>

280. From the above table, it is observed that the total demand of all four DISCOMs varies over the year and the peak demand of 5292.30 MVA is observed in the month of May, 2022. However, the maximum demand in areas of operation of each DISCOM occurs in different months of the year. TPCODL, TPNODL, TPWODL, TPSODL have maximum demand in the month of May (2068.30 MVA), June (1154.70 MVA), November (1794.10 MVA) and June (721.40 MVA) respectively.

281. The Commission analyzed the demand pattern of DISCOMs during the current FY 2022-23 (upto December, 2022) and observed that there is minor variation in Average SMD of the DISCOMs with respect to the approved SMD for the FY 2022-23. After recasting the estimated requirement of power, it is observed that due to industrial load growth and the scheme for electricity to every household, there is likely increase of additional requirement of about 2899 MU by the DISCOMs during FY 2023-24 over the FY 2022-23 (prorating the actual upto December, 2022). Thus, the matching MVA requirement works out to be 367.71 MVA. Hence, the Commission approves the maximum demand for the FY 2023-24 considering the maximum demand of each DISCOM during April, 2022 to December, 2022 plus the estimated demand on account of additional load growth for the FY 2023-24. The DISCOMs are likely to operate within the approved SMD subject to a maximum overdrawal of 10% in a month. The details of estimation of SMD for the DISCOMs are given in the table below:

**Table -17**  
**Demand in MVA for FY 2023-24**

DISCOMs	OERC Approval for 2022-23	Proposal by DISCOMs for 2023-24	Proposal by GRIDCO for 2023-24	Average SMD during 4/22 to 12/22	Maximum SMD during 4/22 to 12/22	Additional Load growth as estimated for 2023-24 (MU)	Additional load growth converted to MVA at 0.9 power factor	Maximum SMD during 4/22 to 12/22 + Additional load growth in MVA	OERC Approval for 2023-24
<b>TPCODL</b>	1740.00	2192.47	2004.00	1677.60	2068.30	1158.00	146.88	2215.21	<b>2190.00</b>
<b>TPNODL</b>	1150.00	1500.00	1318.00	1023.40	1154.70	952.00	120.75	1275.40	<b>1280.00</b>
<b>TPWODL</b>	1650.00	1850.00	1948.00	1604.70	1794.10	502.00	63.67	1857.80	<b>1860.00</b>
<b>TPSODL</b>	720.00	800.00	747.00	672.40	721.40	287.00	36.40	757.81	<b>760.00</b>

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

### **Purchase of Power from Different Generating Stations**

#### **OHPC Hydro Power Stations**

282. The ARR and Generation Tariff of individual power stations of OHPC for the FY 2023-24 has been dealt in Case No.74/2022 separately based on the application of OHPC filed under Section 62, 64 and 86 of the Electricity Act, 2003. The details of energy available to GRIDCO from various power stations of OHPC and the rates thereon have been dealt in the order passed in Case No. 74/2022, wherein the Commission has considered the existing design energy of the power stations of OHPC for the purpose. Further, the design energy of Machhkund Joint Venture H.E. Project is 525 MU. Considering 1% auxiliary consumption and Odisha share of 50%, the net energy drawal from this station comes to 259.88 MU. Hence, the Commission approves an availability of 259.88 MU to GRIDCO from Machhkund (Jt.) HE project. The Commission desires that the State should draw its full share from Machhkund power station every day in a planned and economical manner. GRIDCO/OPTCL and TPSODL should co-ordinate to maximise the drawal from Machhkund in consultation with Government of Odisha whenever necessary. GRIDCO's proposal and Commission's approval for drawal of energy from OHPC stations for the FY 2023-24 are given in the Table below:

**Table -18**  
**Drawal from Hydro Power Stations of OHPC (in MU)**

Source of Generation	FY 2022-23	FY 2023-24	
	Commission's Approval	GRIDCO's Proposal	Commission's Approval
OHPC (Old Stations)	3660.22	3452.36	3660.22
Upper Indravati	1942.38	1703.79	1942.38

Source of Generation	FY 2022-23	FY 2023-24	
	Commission's Approval	GRIDCO's Proposal	Commission's Approval
Machhkund	259.88	259.88	259.88
<b>Total Hydro</b>	<b>5862.48</b>	<b>5416.03</b>	<b>5862.48</b>

283. The tariff approved for OHPC Stations in the order passed in Case No.74/2022 will be considered for determination of the power procurement cost of GRIDCO in respect of all stations of OHPC. Accordingly, the cost of power purchase by GRIDCO from each of the power stations of OHPC is given in the table below:

**Table –19**  
**Cost of Power Purchase from Power Stations of OHPC for FY 2023-24**

Name of the Power Station	Quantum of Power Purchase for 2023-24 (MU)	Approved Average Tariff for 2023-24 (P/U)	Cost of Power Purchase for FY 2023-24 (Rs. Crore)
Burla	660.52	139.64	92.23
Chipilima	485.10	79.40	38.52
Balimela	1171.17	78.84	92.34
Rengali	519.75	135.64	70.50
Upper Kolab	823.68	76.51	63.02
Upper Indravati	1942.38	86.07	167.18
<b>Sub-Total</b>	<b>5602.60</b>	<b>93.49</b>	<b>523.79</b>
Machhkund	259.88	116.97	30.40
<b>Total</b>	<b>5862.48</b>	<b>94.53</b>	<b>554.19</b>

#### **IB Thermal Power Station of OPGC**

284. Orissa Power Generation Corporation (OPGC) owns IB Thermal Power Station at Banharpalli in the district of Jharsuguda with an installed capacity of 2x210 MW (Units-I & II) in Stage-I and GRIDCO is entitled to draw 100% power from Stage-I. In its application, GRIDCO has projected to procure the net energy of 2509.73 MU from the Units-I&II (Stage-I) for FY 2023-24 based on the auxiliary consumption @9.50% and PLF at which the plant is operating for the FY 2021-22. The Commission observed that OPGC in its generation plan for FY 2023-24 has projected the gross generation of 3018.41 MU considering planned outage of Unit-I for 25 days from 21.03.2023. The Commission consider the gross generation of 3018.41 MU as projected by OPGC and further considering the auxiliary energy consumption @ 9.50% as per PPA, the net energy availability to GRIDCO comes to 2731.66 MU. Accordingly, the Commission approves the net drawal of 2731.66 MU from Units-I & II of IB Thermal Power Station of OPGC at power procurement cost of Rs.748.57 Crore at the average rate of

Rs.274.04 P/U, for the purpose of determination of ARR and BSP of GRIDCO for the FY 2023-24.

285. GRIDCO has submitted that for purchase of power from OPGC Units-I&II during FY 2023-24, they have provisionally considered Annual Fixed Charges of Rs. 291.07 Crore, Energy Charge Rate (ECR) of 161.09 Paise/kWh as submitted by OPGC along with its generation plan. Further, GRIDCO has projected Year End charges of Rs. 25.76 Crore in respect of OPGC Units-I & II for the FY 2023-24 by prorating the actual Year End Charges for the first six months of the FY 2022-23.
286. The Commission observed that OPGC has filed its ARR & Tariff application before OERC for determination of Generation Tariff of its existing Units-I & II (2x210 MW) of Ib Thermal Power Station for the year 2023-24, which has been registered in Case No.75 of 2022. The Commission in its order passed in Case No.75 of 2022 has determined the annual capacity charges to the tune of Rs. 291.95 Crore and provisionally considers the energy charge @ 167.16 P/U for the said generating units of OPGC. Hence the procurement cost for the approved drawal of 2731.66 MU from the Units-I & II of OPGC comes to Rs.748.57 Crore at an average rate of 274.04 P/U. The Year End charges shall be reimbursed as per the existing practice.
287. Further, from the expansion project of OPGC in Stage-II (Units-III&IV) with installed capacity of 1320 MW (2 x 660 MW), GRIDCO has the share of 100% from the FY 2023-24. GRIDCO has submitted that OPGC in its generation plan has projected gross generation of 9914.33 MU from its expansion Units- III & IV (2x660 MW) for the FY 2023-24 considering planned outage of Unit-III for 30 days in July, 2023. Further, considering auxiliary energy consumption @6.25%, OPGC has projected net generation of 9294.69 MU from its Units-III&IV. Accordingly, GRIDCO has projected to procure the same from OPGC Stage-II during FY 2023-24.
288. The Commission observed that Department of Energy, Government of Odisha, vide its Notification No. 10485 dated 20.12.2018, have enhanced the contracted capacity of OPGC expansion project Units-III&IV (2x660 MW) from 50% to 75% of the installed capacity for the period from the COD of the station to 31.03.2023 and 100% w.e.f. 01.04.2023 till completion of 25 years i.e. upto 31.03.2048. Accordingly, GRIDCO has entered into a supplementary PPA with OPGC on 24.01.2019 and the Commission vide its order dated 22.06.2021 has approved the said PPA. Now GRIDCO has proposed to

procure 9294.69 MU (100% of the projected net energy) from the OPGC expansion project (Units-III & IV) during the FY 2023-24 as projected by OPGC considering normative auxiliary consumption of 6.25%. The Commission accepts the above proposal of GRIDCO and allows GRIDCO to procure 9294.69 MU from OPGC expansion Units-III&IV during the FY 2023-24 for State consumption.

289. In its application, GRIDCO has submitted that pending determination of tariff for OPGC Units III & IV by the Commission, it has proposed to consider the provisional tariff of Rs 3.30/kWh towards purchase of power from Units-III&IV of OPGC during FY 2023-24 as approved for the previous year. Accordingly, GRIDCO has projected Annual Fixed Charge of Rs.1487.15 Crore and energy charges of Rs.1580.10 Crore (@ 170 P/U) towards purchase of 9294.69 MU from OPGC Units-III&IV during FY 2023-24. GRIDCO has further projected the year end charges of Rs. 39.65 Crore towards procurement of such power by prorating the actual year end charges as admitted by GRIDCO during the 1<sup>st</sup> half of the FY 2022-23. Accordingly, GRIDCO has estimated the Power Procurement Cost of Rs.3106.90 Crore towards proposed procurement of 9294.69 MU of energy from OPGC Units-III & IV during FY 2023-24.
290. The Commission observed that the generation tariff for OPGC Units-III & IV has already been determined by the Commission vide its order dated 07.01.2023 passed in Case No.96 of 2021. The Commission in the said order has approved Annual Fixed Charge of Rs.1904.70 Crore provisionally computed the ECR @ 126.15 P/U in respect of the Units-III & IV of OPGC for the FY 2023-24. The Commission provisionally considers the same ECR for estimation of ARR & BSP of GRIDCO for the FY 2023-24. However, the monthly energy charges shall be computed by OPGC in accordance with the OERC Generation Tariff Regulations, 2020 and billed to GRIDCO along with the details of required data/information on coal and oil used for generation as per the said Regulations. The Year-end Charges claimed by GRIDCO in respect of OPGC Units-III & IV for the FY 2023-24 shall be reimbursed by GRIDCO to OPGC on actual basis after verification of the relevant data/information furnished by OPGC. Accordingly, the Commission estimates the power procurement cost from OPGC Units-III & IV as Rs.3077.23 Crore for procurement of 9294.69 MU during the FY 2023-24 at an average rate of 331.07 P/U.
291. As an Objector to the instant case, Shri Soumya Ranjan Patnaik, Hon'ble MLA, Khandapada, in his additional submission through e-mail dated 06.03.2003, has

submitted that Odisha Coal & Power Limited (OCPL), a Joint Venture of OPGC (51%) and OHPC (49%), has been allotted Monoharpur and Dip-side of Manoharpur coal blocks by the Central Government for the OPGC expansion power projects (Units-3,4,5 & 6) of IB Thermal Power Station with total capacity of 2640 MW (4x 660 MW).As per various notifications/orders of the Central Government as well as the terms and conditions specified in the allotment order, OCPL, cannot make any profit on production and sale of coal to OPGC, so that the benefit of such integrated coal mines will be passed on to the ultimate consumers.He submitted that the CERC Tariff Regulations (Second Amendment), 2021 specifies input price of the coal i.e.the Run of Mine (ROM) cost of coal in case of integrated mines allotted through auction/ allotment route under Coal Mines (Special Provision) Act, 2015 and the additional charges. As per the objector, in case of OCPL, the production cost of coal is Rs.399 per MT as per the agreement done with BGR Mines and the input price of coal should be Rs.450 per MT. But the input price of coal at which OCPL has billed to OPGC is Rs.758 per MT as fixed by Coal India, which is illegal. As per the calculation of the objector, the billing price of coal should be Rs.1294.50 per MT, whereas OCPL has billed to OPGC @Rs.1668.25 per MT, which is more by Rs.373.75 per MT.Accordingly, OCPL has made profit by supplying coal to OPGC at higher price, which is against the terms and conditions specified by Ministry of Coal for allotment of the aforesaid coal mines to OCPL. As per the objector, OCPL has made a profit of Rs.479.33 Crore during FY 22 & FY 23, which should be factored in the tariff and passed on to the consumers.

292. He has further submitted that the Commission in its order dated 07.01.2023 in Case No.96 of 2021, while determining the tariff for Units-III&IV of OPGC has considered the cost of coal as Rs.1786.68 per MT, which is in excess by Rs.492.54 per MT. Consideration of higher cost of coal causes rise in ECR and interest on working capital. The Commission has not considered the terms and conditions specified in the allotment order of the aforesaid two coal mines to OCPL which clearly indicate that OCPL cannot make profit out of such mining and supply of coal to OPGC. Further, this Commission should follow the principle and methodology specified by the Central Commission for determination of tariff applicable to generating company. In view of the above, the objector prayed the Commission to review the MYT order dated 07.01.2023 passed in Case No.96 of 2021 in the matter of determination of tariff of OPGC Units-III&IV and pass on the profits made by OCPL/OPGC/OHPC in the tariff.

293. The Commission examined the above submission of the objector and observed that OCPL is a separate entity which is not a party to the instant petition. The Commission has also not received any reply from GRIDCO and OPGC on the issues raised by the objector. Further, in his submission, the objector has also not furnished any authentic supporting document in favour of his calculation of determining input price and billing price of coal by OCPL to OPGC. In view of the above, the Commission is not inclined to consider the submission of the objector in the instant case. However, the Commission directs GRIDCO to take up the matter with OPGC and the State Government and furnish a comprehensive report to the Commission in this matter. After obtaining the report from GRIDCO in this matter, the Commission shall appropriately deal the matter separately.
294. Further, regarding the matter of reviewing the Commission's order dated 07.01.2023 passed in Case No.96 of 2021 in the matter of determination of tariff of OPGC Units-III&IV, it is observed that in the said order the tariff of OPGC Unit III & IV has been determined strictly as per the OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020, wherein the Energy Charge Rate (ECR), computed based on the available cost and GCV of coal, is provisional and indicative in nature and OPGC is required to compute the monthly energy charges in accordance with the provisions of OERC Generation Tariff Regulations basing on the actual price and GCV of coal. In view of the above, the Commission feels that there is no requirement for review of the aforesaid order dated 07.01.2023 passed in Case No.96 of 2021.

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

295. In the application, GRIDCO has submitted that with availability of OPGC Units-III &IV and NTPC Stations i.e. Darlipalli (1600 MW), North Karanpura, Barh-I and capacity addition from renewable sources, there would not be any requirement of power from CGP sources during the ensuing FY 2023-24 on regular basis. However, procurement of power from CGPs and Co-Generation Plants may be resorted to as per the Order dated 09.04.2019 of the Commission in Case No.62 of 2017. GRIDCO may resort to source power from CGPs provided the economics of power procurement works out in favour of GRIDCO and depending on the power supply & demand situation of the State and exigency/force majeure conditions justify such procurement. CGP power is not a firm source of power since it is essentially meant for the captive consumption

and hence, GRIDCO cannot propose procurement of a definite quantum of power from the CGPs. GRIDCO has further submitted that drawal of firm power from the generators with whom it has signed PPAs, has to be sourced in order to economise the procurement cost, otherwise the liability of payment of fixed cost remains with GRIDCO irrespective of quantum of drawal of power. However, as directed by the Commission in the tariff order for FY 2022-23, GRIDCO will try to procure power from captive sources based on requirement and Merit Order Despatch (MOD) principles.

296. Some of the objectors have stated that the CGPs operating in the State are having huge surplus power after meeting their captive demand and the cheaper CGP power is being exported to other States. But GRIDCO has proposed not to procure any power from the CGPs saying that the surplus power from CGPs is infirm in nature. The objectors submit that regular generation of surplus power cannot be treated as infirm power. However, the CGPs are injecting inadvertent power of 1500 MU to the State grid with no cost to GRIDCO. GRIDCO does not carry out energy audit for ascertaining exact amount of inadvertent power injected by the CGPs. But it admits that CGPs are injecting inadvertent power of about 500 MU per annum. The objectors submit that this quantum of energy should be included in the power availability of GRIDCO. Further, GRIDCO should purchase lowcost available surplus power from the CGPs for State consumption and procure full State quota from the other generators as per PPA for trading purpose which is in the interest of the State.

297. In response to the above objections, GRIDCO has stated that with full entitlement of OPGC Unit # 3 & 4, NTPC- Darlipalli (1600 MW), Renewable capacity addition and Barh-I, there would not be any requirement of sourcing power from CGP sources during the FY 2023-24 on regular basis. However, procurement of power from CGPs and Co-Generation Plants may be resorted to as per the Order dated 09.04.2019 of the Commission in Case No.62 of 2017. Further, CGPs are not firm sources of power as they are essentially meant for the captive consumption and hence, GRIDCO cannot propose procurement of a definite quantum of power from the CGPs. Further, drawal of firm power from the Generators with whom PPAs have been signed, has to be sourced in order to economize the procurement cost; otherwise, the liability of payment of Fixed Cost remains with GRIDCO irrespective of quantum of drawal of power. GRIDCO is not out rightly denying the proposal of procurement from CGPs, but the option of

sourcing power from CGPs has been kept open for procurement under “force majeure” or “exigency conditions” and in cost effective situations. GRIDCO may consider procuring power from CGPs, provided the economics of power procurement works out in its favour and also depending on the Power Supply & Demand Configurations of the State and the exigency conditions justifying such procurement from CGPs. GRIDCO further submitted that as per the Judgement of the Hon’ble APTEL dated 08.05.2017 in Appeal No. 120 of 2016 & IA No. 272 of 2016, the generator can’t pump electricity into the grid without having consent/ contractual agreement with the distribution licensee and without approval / scheduling power by the SLDC. Injection of inadvertent power from CGPs or any other sources demands levy of additional cost due to imposition of penalty on GRIDCO as per the DSM Regulations. Injection of inadvertent power is detrimental for stability of the State Grid and the consumers of the State which requires grid balancing on real time basis to accommodate this unscheduled power. In view of the same, GRIDCO should ideally charge penalty on the CGPs for injecting inadvertent power as the same is negatively impacting the stability of grid. Further, inadvertent power cannot be used for trading since the power cannot be scheduled without real time basis. In view of the above, GRIDCO has requested the Commission not to consider the proposition for inadvertent power for calculation of total availability of surplus power for FY 2023-24.

298. Considering the objections/suggestions of the objectors as well as the submission of GRIDCO, the Commission observed that contribution of CGPs in industrial growth, maintaining voltage profile and meeting the shortages cannot be ignored. There is scope for drawal of power, particularly when the marginal cost of such power is low compared to the other power stations. Hence, the Commission directs GRIDCO to purchase available surplus power from the CGPs and Co-generation plants for state consumption in case of shortfall in drawal from other sources as approved by Commission. While purchasing such power GRIDCO must ensure that the price of the CGP power is cheaper than variable component of firm power. Further, the Commission also advises GRIDCO to purchase the available surplus power from CGPs and Co-generation plants at a negotiable price for trading purposes after meeting the state demand subject to commercial viability.

## Availability of Energy and Procurement Cost of Renewable Energy

### Small Hydro Sources:

299. GRIDCO has submitted that considering procurement of 377.27 MU during FY 2021-22 and drawal of 242.43 MU during the first six months of FY 2022-23 from Small/Mini Hydro Projects and also considering the present availability of Water, it is expected an availability of around 483.35 MU of Renewable Energy during FY 2023-24 from the SHEPs i.e. Meenakshi, Samal, Lower Baitarani, Saptadhara, Bargarh Head Regulator and OPGC Mini Hydel Project. The details are given in the Table below.

**Table-20**

**Proposed Drawl from the SHE Projects by FY 2023- 24**

Sl. No.	Name of the SHEPs	Installed Capacity	Energy drawal during FY 2021-22	Energy drawal during Apr-Sep' 22	Proposed Energy procurement for FY 2023-24
		MW	MU	MU	MU
1	Meenaskhi Small Hydro through PTC	37	159.26	96.43	200.00
2	SAMAL Small Hydro through PTC	20	98.66	49.93	90.00
3	OPGC MHP	1.15	0.25	-----	0.35
4	Lower Baitarani SHEP by M/s BPPPL	24	112.10	56.22	100
5	Saptadhara SHEP by M/s APPPL	18	7.01	34.37	57
6	Bargarh Head Regulator SHEP by M/s Kakatiya Industries Pvt. Ltd.	09	-	5.49	36
	<b>Total</b>	<b>109.15</b>	<b>377.27</b>	<b>242.43</b>	<b>483.35</b>

300. GRIDCO has further submitted that OERC (Procurement of Energy from Renewable Sources and its Compliance) Regulations, 2021 dated 17.01.2022, allowed generation from SHEPs commissioned on and after 08.03.2019 can qualify towards HPO. Accordingly, generation from 24 MW Lower Baitarani SHEP, 18 MW Saptadhara SHEP and 09 MW Bargarh Head Regulator SHEP is to be considered towards HPO compliance.

301. GRIDCO has proposed the cost of power procurement from the above SHEPs are under:

- a. **Meenakshi SHEP:** Procurement of 200 MU from M/s. Meenakshi Power Pvt. Limited (M/s. MPPL) has been proposed at a rate of 368 P/U including PTC Trading Margin of 04 P/U. Accordingly, power procurement cost of 200 MU comes to Rs. 73.60 Crore.
- b. **Samal SHEP:** Procurement of 90 MU from 20 MW Samal Barrage SHEP has been proposed at a rate of 371 P/U including PTC Trading Margin of 04 P/U. Accordingly, the power procurement cost of 90 MU comes to Rs.33.39 Crore.
- c. **Lower Baitarani SHEP:** Procurement of 100 MU of energy from 24 MW Lower Baitarani SHEP has been proposed at a tariff of 571 P/U. Accordingly, the power procurement cost of 100 MU comes to Rs.57.10 Crore.
- d. **Saptadhara SHEP:** Procurement of 57 MU Energy from Saptadhara SHEP has been proposed at a tariff of 506 P/U as approved by the Commission vide order dated 07.05.2022 in Case No. 100/2021. Accordingly, the power procurement cost of 57 MU comes to Rs. 28.83 Crore.
- e. **Bargarh Head Regulator SHEP:** Procurement of 36 MU energy from Bargarh Head Regulator SHEP has been proposed at a rate of 506 P/U as per the PPA dated 02.12.2015. Accordingly, the power procurement cost of 36 MU comes to Rs.18.22 Crore.
- f. **Biribati & Kendupatna OPGC MHPs:** Procurement of 0.35 MU from Biribati & Kendupatna MHPs has been proposed @ 391 P/U based on the Commission's order dated 05.01.2019 passed in Case No.35 of 2018. Accordingly, the power purchase cost of 0.35 MU comes to Rs. 0.14 Crore.
- g. Accordingly, the total power purchase cost of the above Small/Mini Hydel Projects comes to Rs.211.28 Crore towards purchase of total 483.35 MU at an average price of 437.12 P/U.

302. The above proposal of GRIDCO is scrutinised by the Commission. It is observed that the Commission in its order dtd.19.05.2011 passed in Case Nos.17 & 24 of 2011 have fixed 368.00 P/U (inclusive of 4 P/U as trading margin of PTC) towards procurement of power by GRIDCO from PTC in respect of drawal from Lower Kolab & Middle Kolab SHEPs of M/s. Meenaskhi Power Pvt. Ltd. Similarly, the Commission vide its order dated 04.02.2016 passed in Case No. 15/2015 have fixed 371.00 P/U (inclusive of 4 P/U 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. Further, the Commission

vide its order dated 06.01.2023 passed in Case No. 88/2020 has approved 503 P/U towards procurement of power from the SHEP of M/s Baitarani Power Projects Pvt. Ltd. The Commission further observed that the tariff of 506 P/U has been approved vide order dated 07.05.2022 in Case No. 100/2021 towards procurement of power from Saptadhara SHEP. Further, GRIDCO has proposed to procure 36 MU energy from Bargarh Head Regulator SHEP at a rate of 506 P/U as per the PPA executed by GRIDCO with the project developer. Further, vide Commission's order dated 05.01.2019 passed in Case No. 35/2018, the tariff for procurement of power from Biribati and Kendupatna mini hydel projects of OPGC has been fixed at Rs.3.91/kWh. As proposed by GRIDCO, the Commission allows quantum of 483.35 MU of energy to be procured by GRIDCO from the small/mini hydel sources during the FY 2023-24. Accordingly, the Commission approves the procurement cost of Rs.204.49 Crore towards purchase of total 483.35 MU by GRIDCO from the Mini and Small Hydro sources during the FY 2023-24 for state consumption at an average rate of 423.07 P/U. The details of which is given in the Table below:

**Table-21**  
**Procurement & Cost of Power from Mini /Small Hydro Sources for FY 2023-24**

Sl. No.	Name of the Projects	Installed Capacity (MW)	Energy Approved for Drawal (MU)	Rate (P/U)	Total Cost (Rs. Cr.)
1.	Meenakshi SHEP	37	200.00	368.00	73.60
2.	SAMAL SHEP	20	90.00	371.00	33.39
3.	Lower Baitarani SHEP	24	100.00	503.00	50.30
4.	Saptadhara SHEP	18	57.00	506.00	28.84
5.	Bargarh Head Regulator SHEP	09	36.00	506.00	18.22
6.	Biribati&Kendupatna MHPs by OPGC	1.15	0.35	391.00	0.14
	<b>Total</b>	<b>109.15</b>	<b>483.35</b>	<b>423.06</b>	<b>204.48</b>

**Bio-mass Energy:**

303. In its ARR application, GRIDCO has proposed to procure Biomass Energy of 80 MU during FY 2023-24 from the 20 MW of Bio-mass plant of M/s. Shalivahan Green Energy Ltd. (located at Nimidha in Dhenkanal district), at a cost of Rs. 60.80 Crore at the rate of 760 P/U.
304. The Commission observed that as per the order dated 01.10.2020 passed in Case No. 12/2019, the tariff for procurement of Bio-mass energy from M/s. Shalivahan Green Energy Ltd. is 760 P/U for the FY 2023-24. Hence, the Commission accepts the

proposal of GRIDCO and approves the cost of Rs.60.80 Crore towards procurement of 80 MU of Biomass energy from M/s. Shalivahana Green Energy Ltd. at the rate of 760 P/U for computation of ARR of GRIDCO for the FY 2023-24.

**Wind Energy:**

305. GRIDCO has submitted that Power Sale Agreements (PSAs) have been executed with PTC India Ltd. and SECI to purchase total 350 MW of wind power under different schemes of MNRE, GoI where ISTS Charges are waived off for lifetime of the Wind Power Projects as given below:
- a. GRIDCO has signed PSA with PTC on dated 20.07.2017 to avail 50 MW “Wind Power” through “ISTS Connected Wind Power Projects Scheme” of MNRE, Govt. of India. This 50 MW of Wind Power has been allocated to GRIDCO from M/s. Ostro Kutch Wind Pvt. Ltd. located in Kutch District of Gujarat at the applicable tariff of 353 Paise per kWh including Trading Margin of 7 Paise per kWh of M/s. PTC India Ltd.
  - b. GRIDCO has signed PSA with SECI on dated 24.11.2017 for availing 100 MW Wind power under the “ISTS Connected Wind Power Projects Scheme, Phase-II” of MNRE, Govt. of India, at the applicable tariff of 272 Paise per kWh including Trading Margin of 7 Paise per kWh of SECI.
  - c. GRIDCO has executed PSA with SECI on dated 23.03.2018 to avail 50 MW Wind Power under the “ISTS Connected Wind Power Projects Scheme, Phase-III” of MNRE, Govt. of India at the applicable tariff of 251 Paise per kWh including Trading Margin of 7 Paise per kWh of SECI.
  - d. GRIDCO has executed PSA with SECI on dated 15.06.2018 to avail 100 MW Wind Power under the “ISTS Connected Wind Power Projects Scheme, Phase-IV” of MNRE, Govt. of India at the applicable tariff of 258 Paise per kWh, including Trading Margin of 7 Paise per kWh of SECI.
  - e. GRIDCO has executed PSA with SECI on dated 22.08.2019 to avail 50 MW Wind Power under the “ISTS Connected Wind Power Projects Scheme, Phase-VI” of MNRE, Govt. of India at the applicable tariff of 289 Paise per kWh including Trading Margin of 7 Paise per kWh of SECI.
306. GRIDCO has submitted that at present it is availing 321.5 MW wind power out of the contracted 350 MW as the balance is yet to be commissioned. GRIDCO has proposed to draw 1060.43 MU of Wind power during FY 2023- 24 from the aforesaid sources with

the procurement cost of Rs.296.86 Crore at an average rate of 279.93 P/U. The details are given in the Table below:

**Table-22**  
**Proposed Procurement of Wind Energy by GRIDCO for FY 2023-24**

Sl. No.	MNRE ISTS – connected Wind Project Scheme	Contracted Capacity (MW)	Capacity Commissioned (MW)	Applicable Tariff (Rs / kWh)	Proposed Energy for FY 2023-24 (MU)	Rate (P/U)	Total Cost (Rs. Cr.)
1	Tranche – I	50	50	3.53	157.68	353.00	55.66
2	Tranche – II	100	100	2.72	303.98	272.00	82.68
3	Tranche – III	50	37.5	2.51	124.26	251.00	31.19
4	Tranche – IV	100	84	2.58	316.72	258.00	81.71
5	Tranche – VI	50	50	2.89	157.79	289.00	45.60
	<b>Total</b>	<b>350</b>	<b>321.5</b>		<b>1060.43</b>	<b>279.93</b>	<b>296.85</b>

307. After scrutiny, the Commission accepts the above proposal of GRIDCO and approves the procurement cost of Rs.296.86 Crore towards purchase of 1060.43 MU of wind energy by GRIDCO during the FY 2023-24 at an average rate of 279.93P/U for State consumption.

### **Solar Energy**

308. In its submission, GRIDCO has proposed to procure 2160 MU of solar energy from different sources during the FY 2023-24 with the total cost of Rs. 746.50 Crore at an average rate of 345.60 P/U. The details are given hereunder:

- (i) 13 MU at the rate of 628 P/U from 8 Nos. of Solar PV Projects, each of 1 MW capacity commissioned in the State under ‘Rooftop PV and Small Solar Power Generation Programme’ (RPSSGP) guidelines of MNRE, GoI.
- (ii) 34 MU @ 1065 P/U from 20 MW Solar capacity as per the PSA executed with NTPC Vidyut Vyapar Nigam Limited (NVVNL) on 12<sup>th</sup> January 2011 under ‘New Projects Scheme’ 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 from Dadri Solar PV project in

U.P. (8.50 MU @ 1294 P/U) and another 5 MW from Faridabad Solar PV Project in Haryana (8.50 MU @ 935 P/U).

- (iv) 7 MU@ 700 P/U 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 @ 728 P/U from 25 MW Solar PV Project developed by M/s ACME Odisha Solar Power Pvt. Ltd. in Bolangir district under OREDA State Scheme Phase-II.
- (vi) 108 MU @ 550 P/U from 70 MW Solar Capacity allocated to GRIDCO through SECI under Viable Gap Funding (VGF) Scheme under JNNSM Phase-II, Batch-I.
- (vii) 401 MU @ 450 P/U from 270 MW capacity Solar PV Projects allocated to GRIDCO through SECI under Viability Gap Funding (VGF) Scheme under JNNSM Phase-II, Batch-IV.
- (viii) 112 MU @ 306 P/U from the 75 MW Solar PV project developed by M/s. Aditya Birla Renewables Limited, selected under GRIDCO e-bidding Scheme as per the Ministry of Power, Government of India Resolution dated 03.08.2017.
- (ix) 635 MU @ 260 P/U from the 300 MW Solar Power being procured through SECI under ISTS-connected Solar power Projects Scheme which is expected to be available during FY 2023-24.
- (x) 409 MU @ 265 P/U from the 200 MW Solar power allocated to GRIDCO through SECI under ISTS-connected Solar power Projects Scheme. Out of this 200 MW solar capacity, is expected to be available during FY 2023-24.
- (xi) 12 MU @ 284 P/U from the upcoming 8 MW Solar PV Project developed by GEDCOL in 5 nos. of location (3 nos. of OPTCL sub-stations, one at Mukhiguda Power House and another is Manamunda Solar Project of GEDCOL) in the un-utilized surplus land.
- (xii) 363 MU @ 261 P/U from 500 MW solar project through SECI under ISTS – connected manufacturing linked scheme is expected to be available from November, 2023 as per PSA dated 22.07.2021 with SECI.

(xiii) 7 MU @ 277 P/U is expected to be available from November, 2023 of FY 2023-24 from 10 MW solar project under MNRE Scheme of ‘100% Solarisation of Konark Temple and Town’ implemented by OREDA as per the PPA executed with M/s. Konark Suryanagari Pvt. Ltd. on 19.10.2022.

309. The above proposal of GRIDCO for procuring solar energy during the FY 2023-24 is summarised in the Table below:

**Table –23**  
**Proposed Quantum & Power Purchase Cost of Solar Energy during FY 2023-24**

Sl. No.	Solar RE Sources	Quantum	Rate	Estimated Power Purchase Cost for FY 2023-24
		(MU)	(P/U)	(Rs. Cr.)
1	8 Nos. of Solar PV projects of 1MW each under RPSSGP*	13	628	8.16
2	20 MW through NVVN under 'New Projects scheme' under JNNSM, Ph-1	34	1065	36.21
3	10 MW through NTPC from 5 MW Solar PV projects at Dadri & Faridabad	17	8.50 MU @1294 P/U & 8.50 MU @935 P/U	18.95
4	5 MW from M/s Alex Green Energy Ltd. through OREDA State scheme	7	700	4.90
5	25 MW from ACME Odisha Solar Power Private Ltd.	42	728	30.58
6	70MW through Solar Energy Corporation of India (SECI) under JNNSM, Phase –II, Batch-I	108	550	59.40
7	270MW through SECI under JNNSM, Phase –II, Batch-IV	401	450	180.45
8	75 MW from M/s. Aditya Birla Renewables Ltd. under GRIDCO e-bidding.	112	306	34.27
9	300 MW through SECI under ISTS – Connected Solar Power Projects Scheme	635	260	165.10
10	200 MW through SECI under ISTS – Connected Solar Power Projects Scheme	409	265	108.39
11	8 MW from GEDCOL implemented in un-utilized surplus land	12	284	3.41
12	500 MW through SECI under manufacturing linked Scheme	363	261	94.74
13	MNRE Scheme of 100 % Solarisation of Konark Temple and	7	277	1.94

Sl. No.	Solar RE Sources	Quantum	Rate	Estimated Power Purchase Cost for FY 2023-24
		(MU)	(P/U)	(Rs. Cr.)
	Town			
	<b>Total</b>	<b>2160</b>	<b>345.60</b>	<b>746.49</b>

310. The Commission examined the above proposal of GRIDCO and the accepts same. Accordingly, the Commission approves procurement of 2160 MU of solar power during the FY 2023-24 from various sources as proposed by GRIDCO with the cost of Rs.746.50 Crore at an average rate of 345.60 P/U.

311. The Commission, in the above paragraphs, has approved total 3783.78 MU from renewable energy sources (both solar and non-solar) to be purchased by GRIDCO during the FY 2023-24 based on its proposal and availability of the same. The total procurement cost of such renewable energy is estimated at Rs.1308.63 Crore at an average rate of 345.85 P/U as summarized in the Table below:

**Table-24**  
**Estimated Cost of Renewable Energy Procurement for FY 2023- 24**

RE Sources	RE Procurement Approved for FY 2023-24	Average Rate	Estimated Cost
	(MU)	(P/U)	(Rs. Crore)
<b>Non-Solar</b>			
SHEP	483.35	423.06	204.48
Biomass	80.00	760.00	60.80
Wind	1060.43	279.93	296.85
<b>Total Non-Solar</b>	<b>1623.78</b>	<b>346.19</b>	<b>562.14</b>
<b>Total Solar</b>	<b>2160.00</b>	<b>345.60</b>	<b>746.49</b>
<b>TOTAL (Non-Solar &amp; Solar)</b>	<b>3783.78</b>	<b>345.85</b>	<b>1308.63</b>

312. The Commission observed that as per OERC (Procurement of Energy from Renewable Sources and its Compliance) Regulations, 2021, for FY 2023-24, Solar RPO is 8.75%, the 'Non-solar RPO' is 7.25% which includes 0.66% of Hydropower Purchase Obligation (HPO) and 6.59% of 'Other Non-solar RPO'. The HPO shall be met from the eligible large hydro plants commissioned on or after 08.03.2019. If power from eligible large hydro plants is insufficient to meet HPO, generation from small hydro sources commissioned on and after 08.03.2019 would qualify for fulfilment of HPO. In such cases, if small hydro generation exceeds the desired HPO, the surplus will then be considered under category 'Other Non-solar RPO'. Further, as per the said Regulation, the RPO shall be calculated in energy terms as a percentage of total consumption of electricity excluding consumption met from large hydro sources of power (both State

and Central). For the FY 2023-24, the Commission has estimated a quantum of 7049.05 MU to be purchased by GRIDCO from large hydro sources (5862.48 MU from State hydro and 1186.57 MU from Central hydro). Further, the Commission has estimated a quantum of 37040 MU to be sold by GRIDCO for State consumption during FY 2023-24. Thus, deducting the quantum of power from large hydro sources, the State consumption for the purpose of computation of RPO comes to 29990.95 MU. The source-wise estimated power procurement from Renewable Energy sources and projected compliance of RPO by GRIDCO (on behalf of DISCOMs) are indicated in the Table below:

**Table –25  
Drawal from Renewable Energy Sources during FY 2023-24**

Sl. No.	RE Sources	Renewable Energy approved for drawal during FY 2023-24 (MU)	Percentage w.r.t. the total estimated drawl of DISCOMs (%)	RPO fixed in the Regulation for FY 2023-24 (%)
A.	<b>Non-Solar (including HPO)</b>			
(i)	Mini / Small Hydro Electric Projects (SHEPs)	483.35	1.61	
(ii)	Bio-mass Energy	80.00	0.27	
(iii)	Wind Energy	1060.43	3.54	
	<b>Sub-Total(Non-Solar &amp; HPO)</b>	<b>1623.78</b>	<b>5.42</b>	<b>7.25</b>
B.	<b>Solar</b>	<b>2160.00</b>	<b>7.20</b>	<b>8.75</b>
C.	<b>Total (Solar &amp; Non-Solar)</b>	<b>3783.78</b>	<b>12.62</b>	<b>16.00</b>

313. It is observed from the above table that with procurement of renewable energy of this magnitude, GRIDCO will not be able to meet its RPO fixed by the Commission for the ensuing year 2023-24. In its reply to the Commission’s queries, GRIDCO has submitted that it has entered into PPAs with different RE developers over the period basing on the RPO requirements and currently they have RE contracted capacity of 2450 MW. Besides there are several proposals in the pipeline for procurement of solar and wind power in near future as given below:

**Table –26**

Schemes	Capacity (MW)
ISTS Wind Projects	390
PM-KUSUM	100-200
Roof top Solar-II	20
OREDA SPV Projects in the OPTCL surplus land	29
Modern Solar city Schemes	10

314. GRIDCO has submitted that in addition to the above, they are exploring other RE sources such as RE with storage capacity, hybrid RE sources and some hydro power procurement with cheaper cost to meet the RPO. Due to non-availability of non-solar RE project within and outside the State, it could not meet the non-solar RPO fully as there is a steep increase in the non-solar RPO target. However, all sorts of planning and necessary steps are being taken by GRIDCO for procurement of required quantum of renewable energy to meet its specified RPO targets. The Commission directs GRIDCO to explore all possibility with reasonable endeavour to purchase renewable energy from other sources to meet its RPO target. GRIDCO should also make efforts to encourage renewable power producers and facilitate them for setting up of renewable power plant in our State, sources of which are available here.
315. The Commission observed that as per the RST order for FY 2023-24, the consumers of any category can get a 'Green Consumer Certificate', if 100% of their power requirement is met by DISCOMs from renewable sources, for which the consumer has to pay additional 25 Paise/Unit as premium over and above the normal rate of energy charges. For this purpose, the quantum of renewable energy purchased by GRIDCO needs to be apportioned in favour of each DISCOM in order to facilitate them to provide renewable power to the green consumers to that extent. In view of the above, the Commission apportions the total projected available renewable energy to the DISCOMs in proportion to their estimated total energy requirement for the FY 2023-24. Accordingly, out of the total projected renewable energy of 3783.78 MU available to GRIDCO for the ensuing year, 1152.02 MU, 768.42 MU, 1359.79 MU & 503.56 MU are allocated to TPCODL, TPNODL, TPWODL & TPSODL respectively for the above purpose. The DISCOMs can issue 'Green Consumer Certificate' to the consumers desirous of availing such certificates in their respective area within the above ceiling limit of renewable energy.

#### **Independent Power Producers (IPPs)**

316. In its application GRIDCO has submitted that it is entitled to draw power from four nos. of IPPs in the State, namely M/s. Vedanta Limited, M/s. GMR Kamalanga Energy Limited (M/s. GKEL), M/s. Nava Bharat Venture Limited (M/s. NBVL) and M/s. Jindal (India) Thermal Power Limited (M/s. JITPL). GRIDCO has stated that the actual supply of power from IPPs is varying from the State's entitlement, for which there have been substantial difference in units supplied from IPPs and approved by the Commission.

The approved Vs. actual power purchase from the IPPs during last four years is given hereunder:

**Table-27**  
**Actual vs Approved Power Purchase from IPPs (MU)**

IPP	FY 2018-19		FY 2019-20		FY 2020-21		FY 2021-22		Actual (Avg.)
	Approval	Actual	Approval	Actual	Approval	Actual	Approval	Actual	
M/s. Vedanta Ltd.	5039.45	978.11	5039.45	747.84	3053.00	2806.01	3003.48	2101.19	1658.29
M/s. GKEL	1842.19	1702.44	2167.28	1814.75	2167.28	1769.88	1844.00	1960.32	1811.85
M/s. JITPL	1007.89	261.14	1010.57	11.95	1010.57	0	0	0	68.27
M/s. NBVL	-	-	-	-	-	-	-	3.83	-
<b>Total</b>	<b>7889.53</b>	<b>2865.67</b>	<b>8217.30</b>	<b>2574.54</b>	<b>6230.85</b>	<b>4575.89</b>	<b>4847.48</b>	<b>4102.52</b>	<b>3528.70</b>

317. GRIDCO stated that the significant gap between the Commission's approval/ projection vis-à-vis actual quantum of power supplied by the IPPs adversely impacts the BSP and during real time operation, GRIDCO depends on the high-cost power sources to meet/cater State demand. Therefore, GRIDCO requests the Commission to approve energy availability from IPPs based on realistic levels and direct the IPPs to comply/adhere to the subsisting contracts to supply power to GRIDCO as per the contracted capacity without fail. GRIDCO has further submitted that it had requested the IPPs to submit their generation plan and tentative tariff proposal for FY 2023-24. In response three IPPs, except M/s. JITPL, have furnished their tentative generation plan to GRIDCO. Based on their generation plan GRIDCO has projected availability of power of the individual IPPs as stated in the following paragraphs.

**M/s. Vedanta Limited**

318. GRIDCO has submitted that the Commission, vide its order dated 05.10.2021 in Case No. 34 of 2018, has changed the status of State dedicated IPP Unit #2 (600 MW) of M/s. Vedanta Ltd reversing their earlier order dated 27.01.2016 in Case No.21 of 2015. GRIDCO has filed a review petition before the Commission in Case No. 129 of 2021 for review of aforesaid Order dated 05.10.2021 and the Commission vide its Order dated 28.10.2022 was pleased to allow the review petition of GRIDCO directing Case No. 34 of 2018 to be reheard. As a result of this order the rights and liabilities of both the parties stand relegated to the situation that existed prior to the date of order dated 05.10.2021. Accordingly, the entitlement of State's share of power, as per OERC order

dated 27.01.2016 in Case No. 21 of 2015, is 25%+7%/5% of total energy sent out from the power station or total ex-bus generation from Unit-II whichever is higher. The Commission has approved the quantum of power towards State's share of entitlement in GRIDCO's ARR orders for the respective financial years as per the existing PPA and order dated 27.01.2016 in Case No. 21 of 2015. The quantum of energy approved by the Commission vis-a-vis the actual power supply made by M/s Vedanta Ltd to GRIDCO is summarized in the table below:

**Table-28**  
**Quantum of energy approved by the Commission vis-a-vis the actual power supplied by M/s. Vedanta Ltd.**

FY	Approval of State Demand by Commission (MU)	Quantum of Power available from Vedanta- IPP as approved by OERC (MU)	% Share of Vedanta Power availability	Actual Quantum of power supplied to GRIDCO (MU)	% Share of Vedanta Power actually supplied to GRIDCO against approved quantum	Approved power purchase rate by Commission (P/U)
21-22	28791.96	3003.48	10.43	2101.19	69.96	251.99
20-21	29018.76	3053.00	10.52	2806.01	91.91	251.29
19-20	28731.03	5039.45	17.54	747.84	14.84	243.26
18-19	26803.81	5039.45	18.80	978.11	19.41	260.96
17-18	26051.63	5039.45	19.34	1061.52	21.06	237.78
16-17	25492.87	5039.45	19.77	3216.84	63.83	223.10
15-16	25776.23	4199.54	16.29	3414.16	81.30	212.09
14-15	25495.71	4199.54	16.47	3093.07	73.65	207.32
13-14	24058.42	3132.90	13.02	2849.67	90.96	275.00
12-13	24096.98	2612.57	10.84	3027.27	115.87	275.00
11-12	23489.18	3357.12	14.29	1964.55	58.52	275.00
10-11	21003.75	646.23	3.08	468.50	72.50	243.45
<b>AVG.</b>	<b>25734.19</b>	<b>3696.85</b>	<b>14.37</b>	<b>2144.06</b>	<b>58.00</b>	<b>246.35</b>

319. GRIDCO has submitted that from the above table, it is evident that average quantum of power availability from the IPP Unit-II of Vedanta was about 14% of total power demand of the State as approved by the Commission. However, actual supply of power by Vedanta-IPP to GRIDCO in the respective financial years was only 58% of availability of power from IPP Unit as approved by the Commission. The Commission had approved availability of full normative entitlement/State share of power from Vedanta's IPP Unit till date which has resulted into lower BSP because of lower cost of procurement from the said IPP Unit which is in operation since last 12 years. The cost of power is low on account of recovery of capital cost through Annual Fixed Charges comprising of depreciation, interest on loan, Return on Equity etc. and Linkage Coal available under long term Fuel Supply Agreement with MCL based on long term PPA

with GRIDCO (25 years validity). The Commission has time and again directed GRIDCO in its ARR orders to avail full entitlement of power from the said IPP. Accordingly, GRIDCO always endeavours to avail the full entitlement of power from the State dedicated IPP Unit of Vedanta since its commercial operation in 2010. However, M/s. Vedanta has intimated GRIDCO that on the basis of allocation of linkage coal under FSA and considering the coal grade (~3000~3400 kCal/kg) supplied by MCL it shall be able to supply net power in the range of 300~340 MW during the FY 2023-24.

320. Accordingly, GRIDCO has estimated the availability of 2803.20 MU for FY 2023-24 from IPP Unit-II of M/s. Vedanta Ltd. considering availability of 320 MW capacity at 85% PLF basing on the intimation of M/s. Vedanta Ltd. However, the entitlement of State's share of power as per OERC Order dated 27.01.2016 in Case No. 21 of 2015 at normative generation (i.e., 85% PLF and 6.55% Auxiliary Energy Consumption) works out to be 5010 MU of power. Hence, the projection of GRIDCO fall short of 2206.80 MU (approx.) from IPP of Vedanta during FY 2023-24. But to avoid over projection of availability, GRIDCO has considered the above generation projection.
321. GRIDCO submitted that the Commission may direct Vedanta to supply full entitlement of power to the State as per the terms of existing PPA and the subsequent Order in Case No. 21 of 2015 dated 27.01.2016. M/s. Vedanta may also be directed to avail good quality of linkage coal under the FSA for Unit #2 (600 MW). Further, Vedanta is getting credit/debit notes under the FSA based on the grade of GCV of linkage coal. Therefore, Vedanta may not be allowed to take plea of lower GCV of linkage coal to supply power lower than the State entitlement under the subsisting PPA and Commission's order. In case of non-supply of power from Vedanta, power will have to be scheduled from the costlier stations as per merit order. GRIDCO has requested the Commission for approving the projected quantum of 2803.20 MU of power from M/s Vedanta Ltd during the FY 2023-24 for State requirement in order to optimize the power procurement cost so as to have lower BSP for the State consumers.
322. GRIDCO has submitted that the Commission in its Order dated 29.06.2018 has disposed of the MYT Petition filed by Vedanta Ltd for FY: 2014-19 vide Case No.95 of 2013 and Vedanta has filed MYT application for the period 2019-24 vide Case No. 20 of 2020 which is sub judice before the Commission. However, the Commission in the ARR Order of GRIDCO for FY 2022-23 has fixed a provisional average tariff of 279.05

Paise/kWh (i.e., Fixed Charge: 95.67 P/kWh + ECR: 179.52 P/kWh+ ED: 3.86 P/kWh) towards procurement of power by GRIDCO from the said IPP.

323. As per Regulation 3(ff) of OERC (Terms and Conditions of Determination of Generation Tariff) Regulations, 2020, the GCV of Coal has to be considered on “As Received” basis for the purpose of determination of Energy Charge Rate (ECR). However, considering the “As Billed” GCV data provided by Vedanta in Form -15 format along with energy bills for the month of April, 2022 to September, 2022, the “As Received” GCV has been derived and based on which the average ECR works out to be 186.59 P/U as shown in table below. GRIDCO proposes the same for procurement of power from Vedanta during FY 2023-24.

**Table-29**  
**Energy Charge Rate (ECR) of Vedanta IPP from April-22 to Sept-22**

Month	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
LPPF (Rs. /kg)	2.402	2.313	2.301	2.315	2.241	2.264
CVPF (kCal /kg)	3363	3328	3329	3335	3265	3278
GHR (kCal /kwh)	2375	2375	2375	2375	2375	2375
SFC (ml/kWh)	1	1	1	1	1	1
CVSF (kCal/ml)	9.85	9.85	9.85	9.85	9.85	9.85
LPSFi (Rs. /Lit.)	0.093665	0.101609	0.103987	0.109577	0.092092	0.093490
AUX (%)	6.55	6.55	6.55	6.55	6.55	6.55
ECR (P/U)	190.792	186.775	186.065	187.411	183.570	184.806
<b>Average (P/U)</b>						<b>186.59</b>

324. GRIDCO has estimated the Year-end Charges for FY 2023-24 by considering Electricity Duty @55 P/U on total projected drawl of 2803.20 MU amounting to Rs.10.81 Crore and SOC & MOC charges amounting to Rs. 0.51 Crore. Thus, the total projected Year-end Charges works out by GRIDCO to be Rs. 11.32 Crore payable to M/s. Vedanta for FY 2023-24. Accordingly, GRIDCO has estimated the power procurement cost of projected energy to be procured from Vedanta-IPP during FY 2023-24 as given in the table below:

**Table-30**  
**Power Procurement Cost of Vedanta-IPP for FY 2023-24**

Projected Energy (MU)	Fixed Charges (Rs. Cr.)	Energy Charges (Rs. Cr.)	Year-end Charges (Rs Cr.)	Total Estimated Cost (Rs. Cr.)	Unit Rate (P/U)
2803.20	268.18	522.98	11.32	802.48	286.27

325. M/s. Vedanta Limited, as an objector to the present case has submitted that APTEL, vide its judgment dated 13.01.2023 in Appeal No.437 of 2022, has set aside the Commission's order dated 28.10.2022 passed in Case No.129 of 2021 *inter alia* on the ground that the said order did not provide sufficient reason for allowing the review petition of GRIDCO and passing order for rehearing of the order dated 05.10.2021 passed in Case No.34 of 2018. Hence, in view of the above judgment of the APTEL, GRIDCO is required to submit requisition to avail power from IPP Unit-II of M/s. Vedanta Limited in terms of the Commission's order dated 05.10.2021 in Case No. 34 of 2018.
326. M/s. Vedanta Limited has further submitted that as per the FSA, M/s. Vedanta Ltd. is entitled to receive linkage coal of GCV between G8 (5200-4900 kCal/Kg) to G13 (3400-3700 kCal/Kg). On the basis of the norms of CEA for coal consumption for different capacity of thermal units, Annual Contracted Quantity (ACQ) of 20.56 lakh tonne/annum of G-8 grade is required for 600 MW unit at 85% availability. Similarly, ACQ of 29.87 lakh tonne/annum of G-13 grade is required for generation of 600 MW unit at 85% availability. But MCL has been supplying linkage coal having GCV of G-14 (3400 – 3100 kCal/Kg) grade under FSA dated 27.08.2013 and the quantity of linkage coal allocated under the said FSA is 25.70 lakh tonne/annum. On the basis of the CEA norms and the GCV of coal supplied by MCL, the coal allocation of M/s. Vedanta Ltd. is required to be increased to 33.09 lakh tonne/annum. In view of the above, M/s. Vedanta Ltd. has shortage of linkage coal of around 7.5 lakh tonne/annum to supply 564 MW at 85% PLF. The maximum power that can be generated from Unit-II with G-14 grade of coal is 350 MW. M/s. Vedanta Ltd. is now paying short supply compensation to GRIDCO for the above reason, which is beyond its control. Therefore, they have requested MCL several times to provide additional linkage coal and the response of MCL still awaited. Further, OERC in its various orders has directed to supply power from IPP Unit-II towards State entitlement from the linkage coal only.
327. M/s. Vedanta Limited has further submitted that it has filed a petition before the Commission for determination of Multi Year Tariff for the block period FY 2019-2024 in Case No. 20 of 2020 which is pending before the Commission for adjudication. M/s. Vedanta Limited has requested the Commission to allow the provisional rate of 282.26 P/U (Fixed Cost @ 95.67 P/U + Energy Charge @ 186.59 P/U) towards supply of power to GRIDCO during FY 2023-24 as proposed by GRIDCO in its application and

the Year End Charges may be allowed to be reimbursed by GRIDCO to M/s. Vedanta Limited on actual basis. However, M/s. Vedanta Limited reserves its right to claim any differential amount as per the tariff to be determined by the Commission in Case No.20 of 2020.

328. The Commission scrutinised the above proposal of GRIDCO and observed that as per the Commission's order dated 27.01.2016 passed in Case No. 21/2015, the Unit-II (600 MW) of 2400 MW (4x600 MW) power plant of M/s. Vedanta Ltd. will continue to remain as IPP and must remain connected to STU network as state dedicated unit and the other three Units-I, III & IV of the power plant are converted to Captive Generating Plant w.e.f. 01.04.2015. As per the said order, the quantum of power supply to GRIDCO towards state entitlement should be 25% at full cost and 7% / 5% (depending upon the allotment of coal block within the State) of the total energy sent out of the power station at variable cost as per the PPA in force. The power supply to GRIDCO must be 25% of the total energy sent out of the power station or total ex-bus generation from Unit-II whichever is higher plus 7%/5% of the total energy sent out from the power station. The Commission further observed that as per the OERC Tariff Regulations, 2020, the normative auxiliary consumption for the thermal generating stations with unit capacity of more than 300 MW is 5.75% and additional 0.8% where tube type coal mill is used. Therefore, considering PLF of 85% and auxiliary consumption of 6.55%, the State share of energy from the thermal power plant of M/s. Vedanta Limited comes to 5009.97 MU.
329. Further, the Commission at Para-30 of its order dated 05.10.2021 passed in Case No. 34/2018 has observed as under:

*"30. Accordingly, considering the submission of parties and basing on the above analysis we allow GRIDCO to operate its PPA without losing its entitlement under the same.*

- (a) *The Unit-II of M/s. Vedanta shall normally operate as CGP. If in any quarter, GRIDCO requires power from M/s. Vedanta for State consumption they can avail the same giving three months prior notice to M/s. Vedanta and avail the same for a period of at least three months. During that period the CGP will operate as IPP and GRIDCO will be required to pay fixed cost for the said period in addition to energy charge and other charges.*
- (b) *During IPP mode of operation, Quantum of power supply to GRIDCO towards State entitlement should be 25% (at full cost) and 7% / 5% (at variable cost) of total energy sent out from the power station (4 x 600 MW) as per the PPA in force. The Unit-II must remain connected to STU as State dedicated unit and*

*accordingly supply to GRIDCO must be 25%+7%/5% of total energy sent out from the power station or total ex-bus generation from Unit-II whichever is higher. Such quantum of power supply should not be disturbed at any point of time.*

- (c) During IPP mode of operation, the coal used for generating power for State entitlement shall be linkage coal / captive mines allocated to the Petitioner for State use.*
- (d) If M/s. Vedanta fails to supply power after requisition by GRIDCO within the stipulated period, M/s. Vedanta will compensate GRIDCO by paying the differential cost incurred by GRIDCO for such drawal at margin over and above the cost of normal power purchase from M/s. Vedanta IPP Unit-II.*
- (e) If at any time it is found that M/s. Vedanta has failed to supply IPP power after requisition by GRIDCO and is trading the same, M/s. Vedanta will have to pay, in compensation, two times the differential cost incurred by GRIDCO at margin over and above the IPP power cost from M/s. Vedanta.*
- (f) In order to prevent dislocation in the current supply of power, the Unit-II will continue as IPP for the current quarter. GRIDCO has to exercise its option to avail IPP power from M/s. Vedanta for the next quarter within one month of this order failing which the IPP Unit –II of M/s. Vedanta shall operate as CGP with effect from the 1<sup>st</sup> of January, 2022. Thereafter, as stated in sub-para (a) above, GRIDCO will have to give three months prior notice for availing power in any quarter.*
- (g) The option of GRIDCO to avail IPP power shall be prudently exercised in order to minimise the total power purchase cost and shall be scrutinised by the Commission at any time.”*

330. GRIDCO had filed a review petition before this Commission against the above order dated 05.10.2021 passed in Case No.34 of 2018 which was registered as Case No. 129 of 2021. The Commission upon hearing of the said Review Petition, vide its order dated 28.10.2022, had directed to re-hear the Case No.34 of 2018. M/s. Vedanta Limited had filed an Appeal before the Hon’ble APTEL challenging the said order dated 28.10.2022 in Appeal No.437 of 2022 and the Hon’ble APTEL in its judgment dated 13.01.2023 has allowed the appeal setting aside the order of the Commission on the ground that the Commission has not indicated the reasons why it had reviewed the earlier order.

331. M/s. Vedanta Limited as an objector to the present case has stated that in view of the above judgment of the Hon’ble APTEL, GRIDCO is required to submit requisition for availing power from its IPP Unit-II in terms of the Commission’s order dated 05.10.2021 passed in Case No. 34 of 2018. In its reply to the above submission of M/s. Vedanta Limited, GRIDCO has submitted that they have placed requisition on 23.09.2022 to avail power for the period from January, 2023 to March, 2023. Since the Commission, vide its notice dated 12.01.2023/21.01.2023, has been directed to pass a

reasoned order in Case No.129 of 2021 as per the said judgment of the Hon'ble APTEL, GRIDCO is not required to place requisition for availing the power from the IPP Unit-II of M/s. Vedanta Limited till disposal of the Case No.129 of 2021.

332. The Commission observed that as per the order dated 05.10.2021 passed in Case No.34 of 2018, when GRIDCO requires power from the IPP-Unit-II of M/s. Vedanta Limited, it has to give three months prior notice and pay fixed cost for the said periods in addition to energy charge and other charges. In the present tariff petition, GRIDCO has proposed to avail 2803.20 MU of energy from M/s Vedanta Ltd during the FY 2023-24 for State requirement based on the aforesaid submission of M/s. Vedanta Ltd., in place of estimated normative State share of 5009.97 MU. However, the Commission observed that GRIDCO has drawn about 2007.91 MU from M/s. Vedanta Ltd. during the period from April, 2022 to November, 2022 of the current year and prorating the same for the entire year, the energy drawal is estimated as 3011.87 MU. Therefore, the Commission approves an availability of 3011.87 MU from the Unit-II of M/s. Vedanta Limited for ensuing FY 2023-24 to be purchased by GRIDCO for State consumption. However, apart from the above approval, GRIDCO must purchase power from M/s. Vedanta Limited to the extent of generation from the available linkage coal. Further, GRIDCO may purchase power beyond the generation from the available linkage coal upto the State entitlement, if it is commercially viable.

333. The Commission observed that the Multi-Year Tariff (MYT) has been determined by the Commission for the FY 2014-15 to 2018-19 in respect of the IPP of M/s. Vedanta Ltd. vide order dated 29.06.2018 in Case No.95 of 2013. The same for the period from FY 2019-20 to FY 2023-24 is yet to be determined by the Commission. In the order dated 29.06.2018, the fixed cost of the IPP of M/s. Vedanta Ltd. was determined as 95.11 P/U for FY 2018-19. However, now considering auxiliary consumption of 6.55% as per the OERC Generation Tariff Regulations, 2020, per unit fixed cost is computed as 95.67 P/U. The Commission provisionally considers the same for the ensuing year 2023-24. Further, considering the average of actual ECR paid by the GRIDCO for the period of last 10 months i.e. from April, 2022 to January, 2023, the Commission provisionally consider the ECR of 185.69 P/U for the purpose of computation of ARR of GRIDCO for the FY 2023-24. Further, the Commission allows Rs. 12.12 Crore in tariff towards payment of E.D. on normative auxiliary consumption (Rs.11.61 Crore) and SLDC charges (Rs.0.51 Crore), the per unit cost of which comes to 4.02 P/U.

Accordingly, the average tariff for M/s. Vedanta Ltd. comes to 285.39 P/U. The Commission has approved 3011.87 MU, against normative State share of 5009.97 MU, for procurement by GRIDCO from M/s. Vedanta Ltd. Accordingly, the power procurement cost is estimated at Rs.859.55 Crore towards procurement of 3011.87 MU @ 285.39 P/U from M/s. Vedanta Ltd. during the FY 2023-24.

**M/s. GMR Kamalanga Energy Limited (M/s. GKEL)**

334. GRIDCO has submitted that M/s. GKEL, in its generation plan for the FY 2023-24 has projected to supply 1906.90 MU to GRIDCO towards State entitlement which shows that the PLF is 88%. GRIDCO, in its ARR application for the FY 2023-24 has proposed to draw the same. GRIDCO states that fixed charges have been considered at normative availability of 85%. Above normative availability of 85%, the incentive claimed by M/s. GKEL will be reproduced during the truing up for FY 2023-24.
335. GRIDCO has submitted that CERC, vide its order dated 29.06.2018 in Petition No.61/GT/2016, had passed the final Order for the control period 2014-19 in respect of procurement of contracted capacity of 262.5 MW by GRIDCO from GKEL. M/s. GKEL has filed MYT application for determination of tariff for the period 2019-24, vide Petition No. 407/GT/2020, and for installation of emission control system (i.e., FGD) vide Petition No. 300/MP/2018. Both the petitions are now sub-judice before the CERC. The Annual Fixed Charges (AFC) fixed by CERC in Petition No. 61/GT/2016 in respect of GKEL for the control period 2014-19 is as given below and GRIDCO has considered the AFC of FY 2018-19 as AFC for FY 2023-24.

**Table-31  
Fixed Charge for GMR for the period FY 2014-19 (Rs Cr.)**

<b>Item</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Total AFC of the IPP	1,228.89	1,255.99	1,272.95	1,280.79	1,258.96
GRIDCO's Share of AFC	307.22	314.00	318.24	320.20	314.74

336. GRIDCO has submitted that, as per the Order dated 20.12.2019 of the Hon'ble APTEL in Appeal No. 135/2018 & 54/2018, the firm and tapering linkage assured/supplied to the M/s GKEL has to be apportioned on pro-rata basis among all its beneficiaries. The said Order of APTEL has been challenged by GRIDCO before Hon'ble Supreme Court of India on dated 13.10.2020, vide Civil Appeal No 3429 of 2020. However, GRIDCO is now paying the Energy Charge to GKEL provisionally based on the said Order of APTEL. Accordingly, GRIDCO has worked out the average of actual monthly Energy

Charge Rate (ECR) at 198.31 P/U considering the ECR for the period from April, 2022 to Sept., 2022 with availability of Linkage, SHAKTI and other sources of coal to GKEL and proposed the same as the ECR for FY 2023-24. Accordingly, GRIDCO has proposed the procurement cost of Rs.692.91 Crore towards purchase of 1906.90 MU of energy from M/s. GKEL at an average rate of 363.37 P/U.

**Table -32  
Proposed Power Purchase Cost of GMR-IPP for FY 2023-24**

<b>Name of the IPP</b>	<b>Energy (MU)</b>	<b>Annual Fixed charges (Rs. Cr)</b>	<b>Energy Charges (Rs. Cr.)</b>	<b>Total Projected Cost (Rs. Cr.)</b>	<b>Average Rate (P/U)</b>
M/s. GKEL	1906.90	314.74	378.17	692.91	363.37

337. The Commission observed that as per the PPA with M/s. GKEL the State share is 25% of the total energy sent out from the station at 80% PLF and power generated in excess of 80% PLF shall be available to the State at variable cost. Since the IPP of M/s. GKEL is supplying power to more than one State, its tariff has been determined by CERC. As per CERC Tariff Regulations, 2019, the auxiliary consumption shall be 6.25% for the IPP of M/s. GKEL. The Commission further observed that the present installed capacity of the IPP is 1050 MW (3x350 MW) and considering normative plant availability of 85% & auxiliary consumption at 6.25% as per CERC norms, the net generation comes to 7329.66 MU. Further, considering plant availability of 80% and auxiliary consumption of 6.25%, net generation comes to 6898.50 MU. As per the PPA, energy available to GRIDCO is 25% of total energy sent out at 80% PLF i.e. 1724.62 MU (i.e. 25% of 6898.50 MU) plus excess power generated beyond 80% PLF i.e. 431.16 MU (7329.66 MU – 6898.50 MU). Thus, total energy available to GRIDCO would be 2155.78 MU (1724.62 MU + 431.16 MU). However, GRIDCO, in its application, has proposed to draw the 1906.90 MU from M/s. GKEL towards State entitlement of power as per its generation plan for the FY 2023-24. Hence, based on the proposal of GRIDCO, the Commission approves the availability of 1906.90 MU from the IPP of M/s. GKEL for the FY 2023-24.

338. The Commission observed that M/s GKEL has filed MYT application for determination of tariff for the period 2019-24 in Petition No. 407/GT/2020 and for installation of emission control system (i.e., FGD) in Petition No. 300/MP/2018. Both these petitions are now sub-judice before CERC. However, CERC, vide its order dated 29.06.2018 in Petition No.61/GT/2016, have pronounced the tariff order for the control period 2014-

19 in respect of procurement of power by GRIDCO from M/s. GKEL. Since no further order has been issued by CERC in respect of the tariff for IPP-M/s. GKEL, GRIDCO has proposed the Annual Fixed Charges (AFC) for FY 2023-24 same as that approved by CERC for FY 2018-19, vide its order dated 29.06.2018 in Petition No.61/GT/2016.

339. The Commission observed that as per the abovesaid CERC order, GRIDCO's share of AFC is Rs. 314.74 Crore towards 25% of the State share of installed capacity. The Commission has accepted the proposal of GRIDCO to draw 1906.90 MU by from M/s. GKEL during FY 2023-24, which is more than 25% of total energy sent out at 80% PLF i.e. 1724.62 MU. Hence, GRIDCO has to pay its share of fixed cost in full as approved by CERC i.e. Rs. 314.74 Crore to M/s. GKEL towards drawal of State share of power. Further, considering the actual of ECR of M/s. GKEL from the month of April'22 to January'23, as submitted by GRIDCO, the average ECR is computed as 206.35 P/U, which has been provisionally considered by the Commission for procurement of power from M/s. GKEL during FY 2023-24. Hence, the total energy charges for procurement of approved quantum of 1906.90 MU comes out Rs.393.49 Crore. Accordingly, the total power procurement cost is arrived at Rs. 708.23 Crore at an average rate of 371.40 P/U for drawal of the approved quantum of 1906.90 MU for State use during the FY 2023-24.

**M/s. Nava Bharat Ventures Limited (M/s. NBVL)**

340. GRIDCO has submitted that on its request, M/s. NBVL, vide its letter dated 27.09.2022, has furnished the generation plan and projected tariff for FY 2023-24. In its generation plan, M/s. NBVL has considered to supply 39.94 MU of energy towards State entitlement. GRIDCO has proposed to procure the entire State entitled power available from M/s. NBVL. Considering the tariff at which it has procured power from M/s. NBVL during first six months of FY 2022-23, GRIDCO has proposed the tariff of 199.50P/U to purchase power from M/s. NBVL during FY 2023-24. Accordingly, GRIDCO has estimated the power purchase cost of Rs.7.97 Crore towards procurement of 39.94 MU from M/s. NBVL during FY 2023-24 at the rate of 199.50P/U.

**Table -33  
Power purchase cost of NBVL-IPP for FY 2023-24**

<b>Name of the IPP</b>	<b>Energy (MU)</b>	<b>AEC at 11% (MU)</b>	<b>Net Generation (MU)</b>	<b>Odisha Share (12%) (MU)</b>	<b>Total Cost (Rs. Cr.)</b>
M/s. NBVL	373.96	41.13	332.83	39.94	7.97

341. The Commission observed that as per the PPA dated 31.10.2014 and supplementary PPA dated 23.09.2015 executed between GRIDCO and M/s. NBVL, GRIDCO is entitled to draw 12% of total energy sent out from the 60 MW power plant of M/s. NBVL as State share at variable cost (ECR), which is to be determined by the Commission. M/s. NBVL had approached the Commission for determination of ECR in respect of its 60 MW power plant in Case No. 44/2021. The Commission, vide its order dated 12.01.2022, has fixed the annual plant availability factor of 85% and auxiliary energy consumption @ 10% for the 60 MW power plant of M/s. NBVL. Accordingly, the energy availability to GRIDCO from this power plant comes out to 48.25 MU considering State share of 12% of total energy sent out. However, M/s. NBVL in its generation plan has projected generation of 373.96 MU for the FY 2023-24. Considering auxiliary energy consumption @ 10% and State entitlement of 12% of total energy sent out, the net availability to GRIDCO from the power plant comes out to 40.39 MU. Therefore, the Commission approves the drawal of 40.39 MU by GRIDCO from 60 MW power plant of M/s. NBVL during the ensuing financial year 2023-24.
342. The Commission, vide its order dated 12.01.2022, has fixed the annual plant availability factor, auxiliary energy consumption gross station heat rate and norms of secondary fuel oil consumption for the 60 MW IPP of M/s. NBVL. The Commission observed that the energy charge is to be calculated as per Regulations 27 (8) and 27 (9) and ECR is to be calculated as per Regulations 27 (10) and 27 (11) of OERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 and accordingly billing shall be prepared by the generator. The Commission further observed that GRIDCO has proposed the ECR of 199.50 P/U to purchase power from M/s. NBVL during FY 2023-24 basing on the ECR at which it has procured power from M/s. NBVL during first six months of FY 2022-23. The Commission provisionally consider the same for computation of ARR of GRIDCO for the FY 2023-24. Accordingly, the Commission approves the power procurement cost of Rs.8.06 Crore towards procurement of 40.39 MU by GRIDCO from 60 MW IPP of M/s. NBVL at the rate of 199.50 P/U during the ensuing financial year 2023-24.

**M/s. Jindal (India) Thermal Power Limited (M/s. JITPL)**

343. GRIDCO has submitted that M/s. JITPL has not supplied power to GRIDCO from May, 2019 to March, 2022 under the shelter of interim Order dated 16.05.2019 of Hon'ble High Court of Orissa. M/s. JITPL has started supplying power to GRIDCO from its IPP

after issue of interim Order dated 29.04.2022 by the Hon'ble High Court of Orissa. The Hon'ble High Court of Orissa have fixed a provisional flat tariff of JITPL at Rs. 3.36/kWh, on the further condition of payment of 50% of the transmission cost of the demand raised by the CTU subject to the cap of Rs.5(Five) Crore payable by GRIDCO.

344. GRIDCO has submitted that, vide its letter dated 12.09.2022, M/s. JITPL was requested to furnish their Generation Plan for FY 2023-24, but no response has been received from them. In absence of the generation plan of M/s. JITPL for FY 2023-24, GRIDCO has considered the average supply for three months (July 2022 to September 2022) of FY 2022-23 and pro-rated the same to derive the estimated quantum of power i.e. 512.10 MU to be supplied by JITPL during FY 2023-24. Considering the State entitled energy of 1008 MU from M/s. JITPL, there will be a shortfall of 495.90 MU.
345. Considering the tariff of 336 P/U as fixed by the Hon'ble High Court of Orissa in their interim Order dated 29.04.2022, GRIDCO has calculated the power purchase cost of Rs.172.07 Crore towards procurement of 512.10 MU from M/s. JITPL. GRIDCO submitted that the above projection of availing power from M/s. JITPL is subject to continuation/extension of interim order dated 29.04.2022 of the Hon'ble High Court of Orissa in W.P. (C) No. 18150 of 2018, which has been extended upto 25.01.2023.
346. The Commission observed that the installed capacity of M/s Jindal India Thermal Power Limited (M/s. JITPL) is 1800 MW (3x600 MW), out of which two units (i.e. 2x600 MW) are in commercial operation. As per PPA dated 05.01.2011 with M/s JITPL, GRIDCO is entitled for 12% (after de-allocation of coal blocks by the Hon'ble Supreme Court of India) of the power sent out at Variable Cost/Energy Charge Rate (ECR) to be determined by the Commission. Considering the State share of 12%, normative PLF of 85% and normative auxiliary consumption of 6.25%, energy availability to the State from the existing 1200 MW (2X600 MW) capacity of M/s JITPL would be 1005.21 MU.
347. The Commission further observed that M/s. JITPL has challenged the MoU and PPA with GRIDCO before the Hon'ble High Court of Orissa in W.P.(C). No. 18150/2018 and based on the interim stay order dated 16.05.2019 of Hon'ble High Court of Orissa in this writ petition, M/s. JITPL was not supplying power to the State since 22.05.2019. M/s. JITPL has also challenged the Commission's order dated 04.06.2019 passed in Case No.01/2017 before APTEL on the matter of PPA approval. However, as submitted

by GRIDCO, M/s. JITPL is supplying power to GRIDCO after issue of the interim order date 29.04.2022 by the Hon'ble High Court of Orissa and the Hon'ble Court has fixed a provisional flat tariff of 336 P/U for drawal of power from M/s. JITPL, on the further condition of payment of 50% of the transmission cost of CTU subject to a cap of Rs.5.00 Crore payable by GRIDCO. In its application, GRIDCO has proposed to draw 512.10 MU energy from M/s. JITPL during the FY 2023-24, which is computed based on the actual drawal for the period from July, 2022 to September, 2022. Accordingly, GRIDCO has proposed the power purchase cost of Rs.172.07 Crore towards drawal of 512.10 MU from M/s. JITPL. In view of the above, the Commission accepts the proposal of GRIDCO and allows procurement of 512.10 MU from M/s. JITPL during FY 2023-24 for State consumption with the cost of Rs.172.07 Crore at the rate of 336 P/U as fixed by the Hon'ble High Court of Orissa. However, the Commission directs GRIDCO to take up the matter with State Government and pursue the cases related to M/s. JITPL at appropriate judicial forum for early resolution of the disputes as State share of energy would be available at the variable cost only. After resolution of disputes, GRIDCO should draw State share of power in full from the IPP of M/s. JITPL at the ECR based on the formula given in OERC Generation Tariff Regulations, 2020 and considering linkage coal.

348. In view of the above, the Commission considers the availability of 5471.25 MU for the FY 2023-24 from the IPPs operating in the State. Though some of the objectors have suggested for drawal of full State share of power by GRIDCO from the IPPs, the Commission has approved only 5471.25 MU from the IPPs for the reasons cited in the above paragraphs. The proposal of GRIDCO and approval of the Commission in respect of purchase of power from the IPPs for the FY 2023-24 is as indicated in the table below.

**Table -34**  
**Power Procurement Cost from IPPs during FY 2023-24**

IPPs	GRIDCO's Proposal			Commission's Approval		
	Quantity (MU)	Rate (Prov.) (P/U)	Cost (Rs. Crore)	Quantity (MU)	Rate (P/U)	Cost (Rs. Crore)
M/s. Vedanta Ltd.	2803.20	286.27	802.48	3011.87	285.39	859.55
M/s GKEL	1906.90	363.37	692.91	1906.90	371.40	708.23
M/s. NBVL	39.94	199.50	7.97	40.39	199.50	8.06
M/s. JITPL	512.10	336.00	172.07	512.10	336.00	172.07
<b>Total</b>	<b>5262.14</b>	<b>318.39</b>	<b>1675.43</b>	<b>5471.25</b>	<b>319.47</b>	<b>1747.90</b>

349. The Commission has provisionally considered the above price of the IPPs for the purpose of computation of ARR of GRIDCO for the FY 2023-24. However, GRIDCO should make payment of the energy bill of these IPPs after due scrutiny as per the PPA and tariff determined by the appropriate Commission. Further, the Commission directs that deviations/adjustment in revenue, if any, on this account shall be considered in the truing up exercise.

#### **Power Purchase from Central Generating Stations**

350. Odisha has been allocated shares in the NTPC's stations located in the Eastern Region as well as from the Chukha, Tala and Mangdechhu 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/Ministry of Power, GoI from time to time. In the instant case the percentage of share allocation in favour of Odisha has been considered based on the latest Regional Energy Accounts (REA) of the Eastern Regional Power Committee (ERPC).

#### **Central Transmission Loss:**

351. GRIDCO has submitted that from 1<sup>st</sup> November, 2020, the central transmission losses are being calculated at all India level as per CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020. GRIDCO has considered the average Inter-State Transmission Loss of 3.33% based on the month wise transmission loss from the month of April, 2022 to September, 2022 and has projected the same for FY 2023-24. After scrutiny, the Commission accepts the above proposal of GRIDCO and provisionally considers the Inter-State Transmission Loss @ 3.33% for drawal of power by GRIDCO from central sector generating stations during the FY 2023-24.

#### **Hydro Generating Stations of Central Sector and Neighbouring Country (Bhutan)**

352. **Chukha HEP (Bhutan):** GRIDCO has submitted that Odisha has a share of 15.19% from the ER allocation of 270 MW from Chukha Hydro Electric Project of Bhutan (4x84 MW). GRIDCO has proposed the availability of 276.90 MU from Chukha HEP for FY 2023-24 considering the average drawal of last 6 years i.e. from FY 2016-17 to 2021-22 and deducting Inter-State transmission loss @ 3.33%, the net drawal of GRIDCO from Chukha HEP has been projected at 267.68 MU for the FY 2023-24.
353. In its application, GRIDCO has considered the rate of 240.16 P/U (including trading margin @ 4 P/U) for procuring power from Chukha hydro power station during the FY

2023-24, based on the Office Memorandum dated 08.03.2018 of Ministry of External Affairs, Govt. of India and PTC letter No. C/PTC/Chukha/7388 dtd.13.03.2018. Further, considering Inter-State Transmission Loss of 3.33%, GRIDCO has estimated the rate of 248.43 P/U towards procurement of power from Chukha hydro power station for the FY 2023-24. Thus, the power purchase cost of the proposed drawal of 267.68 MU is worked out to Rs. 66.50 crore by GRIDCO, which excludes transmission charges of ISTS.

354. The Commission scrutinized the above proposal of GRIDCO and observed that the drawal of GRIDCO from Chukha during the period from FY 2016-17 to 2021-22 were 312.17 MU, 263.90 MU, 223.86 MU, 269.90 MU, 315.27 MU and 276.30 MU respectively, which varies from 223.86 MU during FY 2018-19 to 315.27 MU during the FY 2020-21. Due to such variations, the Commission estimates drawal of 276.90 MU from Chukha considering the average drawal in last 6 years i.e. from FY 2016-17 to 2021-22. Further, deducting the Inter-State Transmission Loss @ 3.33%, the Commission approves the net drawl of 267.68 MU by GRIDCO from Chukha hydro station for FY 2023-24. Further, the Commission approves power procurement from Chukka HEP for FY 2022-23 at the rate of 248.43 P/U considering Inter-State transmission loss @ 3.33%. Hence, the cost of power from Chukka power station comes out Rs. 66.50 Crore for the approved drawal of 267.68 MU for FY 2023-24. The details are given in Table below:

**Table – 35**

<b>Chukha HEP</b>	<b>GRIDCO's Proposal</b>	<b>Commission's Approval</b>
Net Energy Drawal (MU)	267.68	267.68
Energy Charge Rate (P/U)	240.16	240.16
Energy Charge Rate considering Inter-State Tr. Loss (P/U)	248.43 (C.T.L. @ 3.33%)	248.43 (C.T.L. @ 3.33%)
<b>Cost of Chukka Power (Rs. Cr.)</b>	<b>66.50</b>	<b>66.50</b>

355. **TALA HEP (Bhutan)**: GRIDCO has submitted that Odisha has an allocated share of 4.25% from Tala HEP, Bhutan having installed capacity of 1020 MW (6X170 MW). GRIDCO has proposed the availability of 126.41 MU of energy from Tala HEP during FY 2023-24 by averaging the drawal of last 6 years i.e. from FY 2016-17 to 2021-22 and deducting Inter-State transmission loss @ 3.33%, GRIDCO has projected net drawal of 122.20 MU from Tala HEP for FY 2023-24.

356. In its application, GRIDCO has considered the rate of 227 P/U (including trading margin @ 4 P/U) for procuring power from TALA HEP during the FY 2023-24 based on the bills served to GRIDCO in accordance to the PTC Letter No.C/PTC/Tala/2220 dated 11.11.2021. Further, considering Inter-State Transmission Loss of 3.33%, GRIDCO has estimated the rate of 234.82 P/U towards procurement of power from TALA HEP for the FY 2023-24. Thus, the power purchase cost of the proposed drawal of 122.20 MU is worked out by GRIDCO as Rs. 28.69 Crore for the FY 2023-24 excluding transmission charges of ISTS.
357. After scrutiny, the Commission observed that the availability to GRIDCO from Tala Hydro Power Station during the period from FY 2016-17 to 2021-22 were 140.57 MU, 122.81 MU, 107.96 MU, 125.71 MU, 144.14 MU and 117.25 MU respectively, which varies from 107.96 MU during FY 2018-19 to 144.14 MU during the FY 2020-21. Due to such variations, the Commission estimates the availability of 126.41 MU from Tala Hydro Power Station considering the average drawal of last 6 years i.e. from FY 2016-17 to 2021-22. Further, deducting the Inter-State Transmission Loss @ 3.33%, the Commission approves the net drawl of 122.20 MU by GRIDCO from Tala hydro station for FY 2023-24.
358. Further, considering the submission of GRIDCO, the Commission approves the power procurement from TALA HEP for FY 2023-24 at the rate of 234.82 P/U including the Inter-State transmission loss @ 3.33%. Hence, the cost of TALA power comes to Rs.28.69 Crore for the approved drawal of 122.20 MU for FY 2023-24. The details are given in Table below:

**Table –36**

<b>Tala HEP</b>	<b>GRIDCO Proposal for 2023-24</b>	<b>Commission's Approval for 2023-24</b>
Net Energy Drawal (MU)	122.20	122.20
Energy Charge Rate (P/U)	227.00	227.00
Energy Charge Rate considering Inter-State Tr. Loss (P/U)	234.82 (C.T.L. @ 3.33%)	234.82 (C.T.L. @ 3.33%)
<b>Cost of Tala Power (Rs. Cr.)</b>	<b>28.69</b>	<b>28.69</b>

**Mangdechhu HEP (Bhutan):**

359. GRIDCO has submitted that Odisha has share of 10.97% (equivalent to share of 79.01 MW) from Mangdechhu Hydro Electric Project in Bhutan having Installed Capacity of 720 MW (4x180 MW). GRIDCO has proposed to draw 323.83 MU from Mangdechhu

HEP during FY 2023-24 considering the average drawal of last 2 years i.e. for FY 2020-21 & 2021-22. Further, considering the Inter-State transmission loss of 3.33%, the net availability to GRIDCO has been proposed as 313.04 MU from Mangdechhu HEP during FY 2023-24.

360. In its application, GRIDCO has considered the cost of power from Mangdechu HEP as 419 P/U (including the PTC Margin of 7 P/U) based on the protocol to the Agreement (signed on 23.04.2019) between the Govt. of the Republic of India & the Royal Govt. of Bhutan regarding Mangdechu HEP and the Power Sale Agreement executed between PTC & GRIDCO on 30.08.2019 to this effect. Further, considering Inter-State Transmission Loss @ 3.33%, the rate of Mangdechu power has been proposed as 433.43 P/U. Accordingly, GRIDCO has estimated the power purchase cost of Mangdechu power at Rs.135.68 Crore for procurement of 313.04 MU @ 433.43 P/U during FY 2023-24.
361. The Commission scrutinized the above proposal of GRIDCO and observed that the average annual drawal from Mangdechhu HEP comes to 324.09 MU considering the average drawal of FY 2020-21 & 2021-22. Further, deducting the Inter-State transmission loss @ 3.33%, the net availability to GRIDCO comes to 313.30 MU. Hence, the Commission approves an availability of 313.30 MU from Mangdechhu HEP during FY 2023-24 for State consumption.
362. Further, the Commission approves the power procurement from Mangdechhu HEP for FY 2023-24 at the rate of 433.43 P/U including Inter-State transmission loss @ 3.33% basing on the submission of GRIDCO. Hence, the cost of Mangdechhu hydel power comes to Rs.135.79 Crore towards procurement of the approved drawal of 313.30 MU during FY 2023-24. The details are given in Table below:

**Table –37**

<b>Mangdechu HEP</b>	<b>GRIDCO's Proposal for 2023-24</b>	<b>Commission's Approval for 2023-24</b>
Net Energy Drawal MU	313.04	313.30
Energy Charge (P/U)	419.00	419.00
Energy Charge including Inter-State Tr.Loss (P/U)	433.43 (C.T.L. @ 3.33%)	433.43 (C.T.L. @ 3.33%)
<b>Cost of Mangdechhu Power (Rs. in Cr.)</b>	<b>135.68</b>	<b>135.79</b>

363. **TEESTA HEP (NHPC):** GRIDCO in its ARR application has submitted that Teesta-V HEP having installed capacity of 510 MW is situated in Sikkim and Odisha has a share

of 23.39% of the saleable energy from this power station. The annual design energy of Teesta-V HEP is 2572.67 MU. Considering 12% free energy to Home State and 1.20% of Auxiliary Consumption, the annual saleable energy of the project is 2236.78 MU. Further, considering Odisha share of 23.40% of saleable energy, GRIDCO has estimated an availability of 523.18 MU and deducting the Inter-State Sector loss @ 3.33% GRIDCO has proposed to procure net energy of 505.76 MU from Teesta-V HEP during FY 2023-24.

364. Further, GRIDCO has relied on the tariff petition filed by NHPC before CERC for determination of Annual Fixed Charges (AFC) of Teesta-V HEP for the control period FY 2019-20 to FY 2023-24 which is sub-judice. Thus, GRIDCO has prayed the Commission to approve power purchase cost of Teesta-V based on the said tariff petition filed by NHPC, subject to revision considering the final tariff determined by CERC. GRIDCO further submits that relying on actual data of NHPC bills would not be appropriate for deciding the tariff for the FY 2023-24 as the methodology now being adopted in the NHPC bills is of the previous control period. As per petition filed by NHPC before CERC, the AFC of Teesta-V power station is Rs.437.98 Crore. GRIDCO's share in the AFC of this power station would be to the tune of Rs.102.44 crore for the FY 2022-23 considering the State share of 20.59%. Accordingly, GRIDCO has estimated the power procurement cost as Rs.102.44 Crore (Fixed Charge Rs.51.22 Crore & Energy Charge Rs.51.22 Crore) towards proposed drawal of 505.76 MU from Teesta-V Hydro Station of NHPC during FY 2023-24 with an average rate of 202.55 P/U. The proposal of GRIDCO is summarized in the table below:

**Table-38**  
**Power purchase cost of Teesta V for FY 2023-24**

<b>Name of the Power Stations</b>	<b>Energy (MU)</b>	<b>Fixed Charges (Rs. Cr.)</b>	<b>Energy Charges (Rs. Cr.)</b>	<b>Year End Charges (Rs. Cr.)</b>	<b>Total Projected Cost (Rs. Cr.)</b>	<b>Rate (P/U)</b>
Teesta V	505.76	51.22	51.22	-	102.44	202.55

365. The Commission scrutinized the above proposal of GRIDCO with reference to Regional Energy Account (REA) prepared by ERPC. It is observed that the share of GRIDCO from Teesta-V HEP has been reduced to 19.29% and hence, GRIDCO is entitled to get 19.29% on the total generation less auxiliary consumption. Accordingly, the Commission estimates an availability of 490.38 MU from Teesta-V power station considering the State share of 19.29% on annual saleable energy of 2541.80 MU i.e. the

design energy (2572.67 MU) less auxiliary consumption @ 1.20%. Further, considering the Inter-State sector transmission loss @ 3.33%, the Commission approves the net drawl of 474.05 MU from Teesta-V HEP during FY 2023-24.

366. The Commission further observed that as per the petition filed by NHPC before CERC, the Annual Fixed charges of TEESTA-V for FY 2023-24 is Rs. 437.98 Crore and accordingly the average rate of TEESTA Power comes to 195.81 P/U considering the net energy of 2236.78 MU (design energy less normative auxiliary consumption @1.2% and 12% free power to the home State). Hence, considering inter-state transmission loss @3.33%, the average rate of TEESTA power is computed to be 202.55 P/U for FY 2023-24. Accordingly, the cost of TEESTA power estimated as Rs.96.02 Crore for the approved drawal of 474.05 MU during FY 2023-24. The details are given in Table below:

**Table –39**

	<b>GRIDCO Proposal for FY 2023-24</b>	<b>Commission’s Approval for FY 2023-24</b>
Net Energy Drawal MU	505.76	474.05
Rate (P/U)	-	195.81
Rate incl. Tr. Loss (P/U)	202.55 (C.T.L. @ 3.33 %)	202.55 (C.T.L. @ 3.33%)
<b>Cost of Teesta Power (Rs. in Crore)</b>	<b>102.44</b>	<b>96.02</b>

367. The Commission observed that now the Ministry of Power, GoI have allocated share to Odisha from the un-allocated quota of the Eastern Region Central Hydro Generating Stations of NHPC. From the recent REA, it is observed that 1.778% has been allocated to the State from 60 MW Rangeet Hydro Power Station and 1.111% has been allocated from 60 MW Kurichu Hydro Power Station. Considering the recent bills raised by NHPC for the month of February, 2023, the Commission provisionally approves net drawl of 5.75 MU from Rangeet HEP @346.86 P/U and 3.59 MU from Kurichu HEP @227.00 P/U for computation of ARR of GRIDCO for the ensuing year 2023-24.

368. In view of the above, the Commission approves the total energy drawal of 1186.57 MU from the Central Hydro Generating Stations during the FY 2023-24 with the estimated procurement cost of Rs.329.82 Crore at an average rate of 277.96 P/U. The proposal of GRIDCO and approval of the Commission are summarised in the Table below:

**Table –40**  
**Drawal from Central Hydro Stations during FY 2023-24**

Central Hydro Stations	Installed Capacity (MW)	GRIDCO Share (MW)	GRIDCO's Proposal			Commission's approval		
			Net Energy Drawal (MU)	Rate (P/U)	Cost (Rs. Cr.)	Net Energy Drawal (MU)	Rate (P/U)	Cost (Rs. Cr.)
<b>Chukha</b>	336 (4*84) (ER Allocation =270)	41.01 (15.19%)	267.68	248.43	66.50	267.68	248.43	66.50
<b>Tala</b>	1020 (6*170)	43.35 (4.25%)	122.20	234.82	28.69	122.20	234.82	28.69
<b>Mang-dechhu</b>	720 (4*180)	79.01 (10.97%)	313.04	433.43	135.68	313.30	433.43	135.79
<b>Teesta-V</b>	510 (3*170)	105.00 (20.59%)	505.76	202.55	102.44	474.05	202.55	96.02
<b>Rangeet</b>	60	1.07 (1.78%)	-	-	-	5.75	346.86	2.00
<b>Kurichu</b>	60	0.67 (1.11%)	-	-	-	3.59	227.00	0.82
<b>TOTAL</b>			<b>1208.68</b>	<b>275.77</b>	<b>333.32</b>	<b>1186.57</b>	<b>277.96</b>	<b>329.82</b>

### Central Sector Thermal Generating Stations

369. GRIDCO has submitted that as per the CERC (Determination of Terms & Conditions of Tariff) Regulations, 2019 (in short, CERC Tariff Regulations, 2019) which is effective from 01.04.2019 to 31.03.2024, the Normative Annual Plant Availability Factor (NAPAF) for Thermal Generating Station is mentioned as 85%. Accordingly, GRIDCO has estimated the energy drawal from Central Sector Thermal Generating Stations for FY 2023-24 by considering the allocated share of Odisha from the respective stations as per REA of ERPC, normative Plant Load factor of 85%, Auxiliary Consumption as per the CERC Tariff Regulations, 2019 and the all India Transmission Loss as per the CERC (ISTS Charges and Losses), Regulation 2020 implemented with effect from 01.11.2020.
370. GRIDCO has submitted that the life of the Talcher Super Thermal Power Station Stage-I (TSTPS-I) has expired on 30.06.2022. However, due to increase in demand-supply growth of the State in post pandemic period and industrial growth in near future, GRIDCO is considering availing power from TSTPS-I during FY 2023-24 under the merit order. Considering State share of 32.34% (including Dadri, Faridabad, NVVN Thermal Power) from TSTPS-I (1000 MW), Auxiliary Consumption of 7.05%, as per

the CERC Tariff Regulations, 2019, Plant Load Factor (PLF) of 85% and the ISTS Transmission Loss of 3.33%, GRIDCO has estimated the energy availability of 2164.05 MU from TSTPS-I for FY 2023-24. However, considering the drawl pattern from this power station during FY 2022-23, GRIDCO expects to avail 2042.32 MU before ISTS loss and considering ISTS loss of 3.33%, GRIDCO has proposed to draw the net energy of 1974.31 MU from TSTPS-I during FY 2023-24.

371. Further, considering State share of 10% (200 MW) of power from Talcher Super Thermal Power Station Stage-II(TSTPS-II)having Installed Capacity of 2,000 MW, Auxiliary Consumption of 6.25%, PLF of 85% and the ISTS Loss of 3.33%, GRIDCO has estimated the energy availability of 1349.65 MU from TSTPS-II for FY 2023-24.However, considering the drawl pattern from this power station during FY 2022-23, GRIDCO has projected to avail 1601.86 MU before ISTS loss and considering ISTS loss of 3.33%, GRIDCO has proposed to draw the net energy of 1548.52 MU from TSTPS-II during FY 2023-24.
372. GRIDCO has submitted that Odisha had an allocation of 227 MW with State Share of 14.18% (including Dadri, Faridabad & NVVN bundled thermal power) from Farakka Super Thermal Power Station (FSTPS-I&II) having installed capacity of 1600 MW. The plant completed its life period of 25 years on 30.06.2021. Based on the MoP, GoI Notification dtd. 22.03.2021, GRIDCO had filed an application before OERC to relinquish the State share of power from FSTPS-I & II (218 MW), but to retain the share of 8.86 MW of bundled thermal power, which has been bundled with solar power. The OERC, vide their order dtd. 29.10.2021, have approved for relinquishment of State share of 218 MW power from FSTPS-I &II and further directed GRIDCO to estimate solar RPO for future years and based on the same, GRIDCO may also relinquish 8.86 MW bundled thermal power. I n the present petition, GRIDCO has proposed to procure the said bundled power. Considering the allocation of 0.55% of bundled thermal power from FSTPS-I &II, Auxiliary Consumption @ 6.78%, and ISTS Loss of 3.33%, GRIDCO has the estimated energy availability of 59.05 MU from FSTPS-I & II for FY 2023-24. However, considering the drawl pattern of first six months of FY 2022-23, GRIDCO has projected to avail of 51.41 MU before ISTS loss. Considering CTU loss of 3.33%, GRIDCO has proposed to draw 49.70 MU from FSTPS-I&II for FY 2023-24.
373. GRIDCO has submitted that considering State share of 17.15% from Farakka Super Thermal Power Station Stage-III (FSTPS-III) (including Dadri, Faridabad & NVVNL

bundled thermal power), Auxiliary Consumption @6.25%, PLF of 85% and ISTS Loss of 3.33%, the energy availability from FSTPS-III is estimated as 578.66 MU. However, considering the drawl pattern of first six months of FY 2022-23, GRIDCO has projected 332.80 MU from FSTPS-III before ISTS loss. Considering ISTS loss of 3.33%, GRIDCO has proposed to draw net energy of 321.72 MU from FSTPS-III during FY 2023-24.

374. GRIDCO has submitted that Odisha had an allocation of 132 MW (15.77%) (including Dadri, Faridabad & NVVN bundled thermal power) from Kahalgaon Super Thermal Power Station-Stage-I (KhSTPS-I) having installed capacity of 840 MW. The plant completed its life period of 25 years on 30.07.2021. Based on the MoP, GoI Notification dtd. 22.03.2021, GRIDCO had filed an application before OERC to relinquish the State share of power from KhSTPS-I (128 MW) and to retain 4.5 MW of bundled thermal power, which has been bundled with solar power. The OERC, vide their order dtd 29.10.2021, have approved for relinquishment of State share of 128 MW power from KhSTPS-I and further directed GRIDCO to estimate solar RPO for future years and based on the same, GRIDCO may also relinquish the said bundled thermal power. In the present petition, GRIDCO has proposed to procure the said bundled power for meeting the RPO target. Accordingly, considering an allocation of 0.54% of bundled thermal power from KhSTPS-I, Auxiliary Consumption @9.00%, normative PLF of 85% and ISTS Loss of 3.33%, GRIDCO has estimated energy availability of 29.49 MU for FY 2023-24. However, considering the drawl pattern of first six months of FY 2022-23, GRIDCO has projected availability of 25.83 MU from KhSTPS-I before ISTS loss. Further, considering ISTS loss of 3.33%, GRIDCO has proposed to draw net energy of 24.97 MU from KhSTPS-I during FY 2023-24.
375. GRIDCO has submitted that considering State share of 2.62 % (including Dadri bundled thermal power) from Kahalgaon Super Thermal Power Station Stage-II (KhSTPS-II) having installed Capacity of 1500 MW), Auxiliary Consumption of 6.25%, normative PLF of 85% and ISTS Loss of 3.33%, the availability from KhSTPS-II is estimated as 265.27 MU. However, considering the drawl pattern of first six months of FY 2022-23, GRIDCO has projected availability of 212.11 MU from KhSTPS-II before ISTS loss. Further, considering ISTS loss of 3.33%, GRIDCO has proposed to draw net energy of 205.05 MU from KhSTPS-II during FY 2023-24.

376. GRIDCO has submitted that the 2<sup>nd</sup> unit of Darlipali Super Thermal Power Station-I (DSTPS-I) was put into commercial operation on 01.09.2021 and the State share from DSTPS-I(2x800 MW) is 58.82 % (including un-allocated quota of 8.82%). Considering the normative PLF of 85%, Auxiliary Consumption of 6.25% and ISTS loss of 3.33%, GRIDCO has estimated availability of 6350.93 MU from DSTPS-I. However, considering the drawl pattern of first six months of FY 2022-23, GRIDCO has projected an availability of 5693.29 MU from DSTPS-I before ISTS loss. Further, considering ISTS loss of 3.33%, GRIDCO has proposed to draw net energy of 5503.70 MU from DSTPS-I during FY 2023-24.
377. GRIDCO has submitted that first unit of Barh Super Thermal Power Station Stage-I (Barh STPS-I) (3x660 MW) has been put into commercial operation on 12.11.2021 and as per the CEA Thermal Broad Status Report dated October 2021, the trial run of the second unit of Barh STPS-I is expected in December-2022. The Commission, vide its order dtd. 01.11.2021, has dis-approved the PPA executed between NTPC and GRIDCO towards purchase of Power from Barh STPS-I and directed GRIDCO to approach Ministry of Power, Govt. of India through State Government for immediate de-allocation of Odisha share from Barh STPS-I. Accordingly, GRIDCO is taking up the matter with DoE, GoO and Govt. of Odisha has already taken up the matter with MoP, GoI for de-allocation of Odisha share of power from this power station at the earliest. The matter of de-allocation of Barh STPS-I has been discussed with MoP, GoI under the Chairmanship of Secretary (Power) on 01.11.2021, wherein it was decided that till the time of re-allocation, the original beneficiary is liable to pay fixed charges. Accordingly, GRIDCO has the obligation to make payment of capacity charge as per the prevailing CERC Regulation in force, even in the absence of any drawl of power from the station. Further, there is also every possibility that the system operator, considering the existing practice, may schedule power to GRIDCO from Barh STPS-I under technical minimum operation.
378. GRIDCO has further submitted that MoP, GoI, vide their order dtd 12.11.2021, have directed Central Public Sector Enterprise (CPSE) GENCOs and IPPs to regulate supplies to DISCOMs defaulting in payments immediately after 30 days of their due date i.e. about two and half months from presentation of the bill and at the same time, the DISCOMs would not have any recourse to alternate power arrangements from any other sources including Power Exchange during the time of regulation. Further, MoP,

GoI, vide notification dtd 09.11.2021, have issued a revised procedure for scheduling of power to DISCOMs in the event of non-maintenance of LC in accordance with Electricity (Late Payment Surcharge) Rules 2021. As per the revised procedure, DISCOMs shall be liable to be debarred from procurement through Power Exchange(s) or STOA in case of outstanding dues more than seven months is overdue.

379. In view of the above, GRIDCO has prayed the Commission to allow it to draw power from Barh STPS-I on merit order basis, as and when required for the State. Accordingly, GRIDCO has estimated availability of 972.58 MU from the existing one unit of Barh STPS-I considering State share of 21.11%, normative PLF of 85% and Auxiliary Consumption @ 6.25%. Further, considering ISTS loss of 3.33%, GRIDCO has proposed to draw 940.20 MU during FY 2023-24 from Barh STPS-I.

**Fixed Cost Proposed by GRIDCO for Central Thermal (NTPC-ER) Stations**

380. GRIDCO has submitted that it has claimed the Capacity Charge (Fixed Cost) of the NTPC Thermal Power Stations as per the relevant Tariff Orders / Regulations issued by the CERC from time to time and has made apportionment of Capacity Charges of the respective power stations as per the State share. But the proposed tariff for Barh STPS-I has been considered on the basis of the petition filed by NTPC before CERC and the Fixed Cost of this power station has been estimated at Rs. 261.62 Crore for the existing one unit only based on the share of energy drawal. GRIDCO has submitted that irrespective of the drawal from the Central Generating Stations, it is mandatory to pay the Fixed Charge as per the allocated share according to the Plant Availability Factor. In case of Normative Plant Availability of 85%, GRIDCO is bound to pay the full Fixed Cost. Hence, GRIDCO has requested the Commission to approve the fixed cost for all the tied up PPAs.

**Energy Charge Rate (ECR) Proposed by GRIDCO for Central Thermal Stations**

381. GRIDCO has submitted that as per the existing CERC Tariff Regulations, the Energy Charges of Central Thermal Stations shall include charges towards both Primary as well as Secondary Fuel Oil (SFO) & shall be payable by every beneficiary for the total energy scheduled to be supplied to each of such beneficiaries during the calendar month on ex-power plant basis. Accordingly, NTPC is claiming the monthly energy charges every month as per the Energy Charge Rate (ECR) worked out from the landed price and GCV of Coal & Oil for the respective month, considering the operational

parameters laid down in CERC Tariff Regulation, 2019. Keeping in view the present trend of Energy Charges billed by NTPC, GRIDCO has projected the variable cost of the central thermal stations as per the actual ECR claimed by NTPC for the month of September 2022:

**Table-41**  
**Variable Charges of NTPC Stations Proposed by GRIDCO**

<b>Sl. No.</b>	<b>Name of the Generating Station</b>	<b>ECR (Sep-22) (Rs./kWh) before CTU loss</b>	<b>Variable Cost (Rs. Cr.)</b>
1	FSTPS-I & II	4.39	22.57
2	FSTPS-III	4.31	143.44
3	KhSTPS-I	4.02	10.38
4	KhSTPS-II	3.81	80.82
5	TSTPS-I	2.25	460.34
6	TSTPS-II	2.24	359.30
7	DSTPS-I	1.04	592.10
8	Barh STPS-I	2.55 (Prov.)	248.01

**Claim of Year-end Adjustment Charges of Central Sector Generating Stations**

382. GRIDCO has projected the Year-end Adjustment (YEA) Charges of existing Central Generating Stations for FY 2023-24 as per the actual Year End Charges paid by it for FY 2021-22. The Year End Charges include RLDC Charges, ED on APC, and Ash Transportation Cost etc. However, for FSTPS-I & II and KHTPS-I, the actual year-end charges for FY 2021-22 has been prorated to estimate the year-end charges for FY 2023-24.
383. GRIDCO has stated that NTPC has filed before CERC for recovery of additional expenditure incurred on account of Ash Transportation Charges in view of MOEF&CC Notification dated 03.11.2009 & Notification dated 25.01.2016 on a recurring basis. CERC, vide its order dtd. 28.10.2022, has hold that the additional expenditure incurred by NTPC towards fly ash transportation for the period 2019-24, is admissible as additional O&M expenses in terms of the MOEF&CC notifications dated 25.1.2016 and 31.12.2021. Accordingly, GRIDCO has considered the ash transportation cost incurred by NTPC for FY 2021-22 and claimed the same in the year-end charges projected for FY 2023-24 are given in the table below:

**Table-42**  
**Year-End Charges Projected by GRIDCO for FY 2023-24**

Sl. No.	Name of the Generating Station	RLDC Charges (Rs. Cr.)	ED (Rs. Cr.)	Ash Transportation Charge (Rs. Cr.)	Total (Rs. Cr.)
1	FSTPS-I & II	0.02		9.44	9.46
2	FSTPS-III	0.06		11.11	11.17
3	KhSTPS-I	0.00		4.33	4.33
4	KhSTPS-II	0.02		2.74	2.76
5	TSTPS-I	0.24	8.52	20.27	29.03
6	TSTPS-II	0.13	5.87	13.71	19.71
7	DSTPS-I	0.70	20.88	47.54	69.11
8	Barh STPS-I	0.03		0.54	0.57

384. The summary of power procurement cost of Central Thermal Generating Stations as proposed by GRIDCO is summarized in the table below:

**Table-43**  
**Proposed Power Procurement Cost of Central Thermal Stations for FY 2023-24**

Sl. No.	Name of the Generating Station	Fixed Charge	Variable Charge	Year End Charge	Total
		Rs. Cr.	Rs. Cr.	Rs. Cr.	Rs. Cr.
1	FSTPS-I & II	5.77	22.57	9.46	37.81
2	FSTPS-III	98.61	143.44	11.17	253.22
3	KhSTPS-I	3.26	10.38	4.33	17.96
4	KhSTPS-II	26.53	80.82	2.76	110.10
5	TSTPS-I	213.08	460.34	29.03	702.45
6	TSTPS-II	130.36	359.30	19.71	509.37
7	DSTPS-I	1314.32	592.10	69.11	1975.53
8	Barh STPS-I	261.62	248.01	0.57	510.21
	<b>Total</b>	<b>2053.55</b>	<b>1916.95</b>	<b>146.15</b>	<b>4116.65</b>

385. In its additional submission, GRIDCO has submitted that it had signed PPA on 11.08.2006 with NTPC for purchase of State share of power from the upcoming North Karanpura STPS (3X660 MW) and MoP, GoI, vide their order Dtd 07.09.2015, have allocated 20% of firm power to GRIDCO from the aforesaid project. The Commission, vide Order dtd. 07.05.2022, have approved the said PPA. Due to uncertainty in commissioning of the projects, GRIDCO in its original petition had not projected any drawal from North Karanpura STPS. However, now GRID INDIA, vide its letter dtd. 19.01.2023, informed beneficiaries regarding the successful trial operation of first unit of North Karanpura having installed capacity of 660 MW and NTPC, vide its letter dtd. 28.02.2023, has informed the beneficiaries regarding Commercial

Operation of first unit of the power station. Further, ERPC, vide their letter dtd. 28.02.2023 allocated 2% from the unallocated quota of the said project, thus raising the total share of 22% from the project. Considering State share of 20% (excluding the share from unallocated quota), auxiliary consumption @6.25%, PLF of 85% and ISTS Transmission Loss of 3.33%, GRIDCO has projected net availability of 891 MU from North Karanpura STPS for the FY 2023-24.

386. GRIDCO has further submitted that NTPC has filed Petition before CERC for approval of tariff of North Karanpura STPS for the period 01.03.2023 to 31.03.2024, wherein NTPC has claimed Rs.1267.91 Crore of fixed cost for the FY 2023-24. Considering the firm share of 20% from the project, GRIDCO has estimated to bear Rs.254 Crore towards capacity charge annually. Similarly, in its petition, NTPC has claimed Ex-bus Energy Charge Rate of Rs.1.96 per unit for the project. Accordingly, GRIDCO has estimated annual variable cost of approximately Rs.175 Crore to be borne by it for the projected quantum of 891 MU. Accordingly, GRIDCO has projected total cost of Rs.428 Crore for availing 891 MU of energy from the first unit of North Karanpura STPS for FY 2023-24 and prays the Commission to consider the same in the ARR of GRIDCO for the FY 2023-24.
387. GRIDCO has further submitted that the ERPC, vide its letter dtd. 15.02.2023, has implemented the re-allocation of power of Central Generating Stations of Eastern Region and Bhutan HPS for uniform allocation of unallocated share of power among all the ER beneficiaries from Eastern Region pool. The above implementation stipulates the beneficiaries to sign/ extend PPA and enter into commercial arrangements/ maintain LC for the power so allocated. The above implementation has been done as per the directives of CEA, Ministry of Power, Govt. of India vide their letter dated 26.10.2022 to Regional Power Committees. The revised allocation has been implemented with effect from 17.02.2023 at 00:00 Hrs. Subsequently, ERPC, vide its letter dtd. 28.02.2023, revised the allocation after adding the unallocated quota of 50 MW of Darlipali (39MW) and Mangdechhu HEP (11MW) which had been transferred to Uttarakhand w.e.f. 13.01.2023 to 28.02.2023 and also commencement of Commercial operation of 1<sup>st</sup> unit of North Karanpura from 01.03.2023. GRIDCO has stated that prior to implementation of the aforesaid methodology, MoP, GoI had been allocating the unallocated quota of 15% in proportion to the firm share of the beneficiaries in the absence of requisitions received from the interested beneficiaries from the respective

stations. However, due to the implementation of the new methodology, re-distribution of unallocated quota of CGSs in Regional Pool has been done, so that all the beneficiaries are assigned with the unallocated share from all CGSs.

388. GRIDCO has submitted that the total unallocated quota of 188 MW from Darlipali, Teesta-V and Chukha HEP and North Karanpura. The unallocated share have been redistributed for all generating stations of Eastern Region at the applicable rate to the beneficiary states based on their respective unallocated quantum to the total unallocated share. Accordingly, GRIDCO has been allocated with the revised unallocated share of 13.342% towards existing hydro and thermal generating stations of the Eastern Region irrespective of firm share allocation from the respective stations. In this process, though GRIDCO does not have any firm share allocation from FSTPS-I&II, KHSPTS-I, Barh-I, Barh-II, Muzaffarpur Thermal Project, Nabinagar STPP-I due to de-allocation to other States, unallocated share from these stations has been allocated to GRIDCO in the above proportion of 13.342% for the first time including Rangit HEP, Kurichhu HEP, in absence of any firm allocation and PPAs. GRIDCO has stated that in the above backdrop, it is obligated to comply the above directives of CEA, Govt. of India and accordingly would sign/ extend PPA and enter into commercial arrangements/ maintain LC with the allocated power from the unallocated pool of the Region.
389. GRIDCO has further submitted that energy has been scheduled to GRIDCO by ERPC from the unallocated pool w.e.f. 17.02.2023 and hence, there would be burden of additional estimated cost of Rs.316Crore for FY 2023-24 on it, computed on the basis of cost components of the respective stations as approved by CERC. Further, ERPC has started scheduling of power from all new thermal and hydro generating stations as per its allocation order dtd. 15.02.2023.
390. GRIDCO has submitted that, as per clause (7) of the MoP, GoI Notification dtd. 03.06.2022 of Electricity (Late Payment Surcharge) Rules, 2021, in case of non-payment of dues by the distribution licensee after two and half months from presentation of bill by the generating company, short-term access for sale and purchase of electricity including purchase through the power exchange shall be regulated entirely. If the dues remain unpaid for three and half months, apart from the regulation of the short-term access in its entirety, the long-term and medium-term access shall be regulated by 10% and the quantum of reduction in drawl schedule increases progressively by 10% for each month of default. The payment of dues by the

distribution licensees is stringently monitored on continuous basis by MoP/GoI through “PRAAPTI Portal”. In case of default in payment beyond trigger date, immediate action is taken to curtail the schedule of the beneficiaries.

391. Hence, in view of implementation of new methodology for allocation of unallocated power by ERPC/CEA, Govt. of India and the existing stringent payment security mechanism implemented by MoP/GoI, GRIDCO has prayed the Commission to consider the drawal of unallocated share of power from all the ER stations including those stations without having PPA such as Rangit, Kurichhu, FSTPS-I&II, KHSPTS-I, Barh-I, Barh-II, Muzaffarpur Thermal Project, Nabinagar STPP-I along with the Capacity Charges, Variable Charges and other charges that would accrue thereon for the ensuing FY 2023-24.
392. The Commission examined the above submissions of GRIDCO and observed that Central Electricity Authority (CEA) is the statutory body of the Govt. of India for allocation/deallocation of share from the Central Generating Stations and by the order of the CEA, ERPC has revised the share allocation of Odisha from central sector and also allocated share to the State from the unallocated share of Central Generating Stations irrespective of the PPA. They have also directed the beneficiaries to sign/extend PPA and enter into commercial arrangements/maintain LC in accordance with the newly allocated share to the respective States. It is also observed that power is now being supplied to GRIDCO as per the revised share allocation and bills for the month of February, 2023 has been raised on GRIDCO. Further, as per the MoP, GoI Notification dtd. 03.06.2022 of Electricity (Late Payment Surcharge) Rules, 2021, in case of non-payment of electricity bills of the central generating stations, there would be power regulation to the States. It is further observed that now there is a growing demand of power in our State. In such a scenario, there would be difficulty in meeting the State requirement in case of power regulation is made by the Central Authority. In view of the above, the Commission accepts the proposal of GRIDCO for purchasing power from all available sources of central generating stations. However, the Commission does not consider the proposal of GRIDCO in respect of Barh STPS-I as the Unit-I of Barh STPS-I has been deallocated to other State and Unit-II of this power station is yet to be commissioned. Only the allocation of unallocated share from Unit-I of Barh STPS-I has been considered by the Commission.

393. The Commission provisionally considers the normative plant availability factor for the purpose of computation of availability of power from the central thermal power stations of NTPC during the FY 2023-24. Further, the State share of power purchase by GRIDCO from ER-NTPC thermal stations has been considered by the Commission based on the latest share allocation of the CEA, Government of India. Considering the normative NAPAF of 85%, normative auxiliary consumption as per CERC guidelines and central sector transmission loss of 3.33%, the availability of power from Central Sector Thermal Stations has been estimated for the FY 2023-24 and GRIDCO's drawal approved by the Commission for State requirement are given in the Table below:

**Table -44**  
**Approved Drawal from Central Thermal Generating Stations for FY 2023-24**

Central Thermal Stations	Installed Capacity (MW)	Aux. Cons. (%)	Plant Availability Factor (PAF) considered (%)	GRIDCO Share (%)	GRIDCO Share (MU)	Central Trans. Loss (%)	Estimated Energy after Central Sector Transmission Loss (MU)	OERC Approval for State Consumption (MU)
TSTPS –I	1000	7.05	85	33.527	2320.39	3.33	2243.12	1912.93
TSTPS –II	2000	6.25	85	10.000	1396.13	3.33	1349.63	1349.63
FSTPS-I& II	1600	6.78	85	1.872	207.85	3.33	200.93	-
FSTPS-III	500	6.25	85	18.788	655.76	3.33	633.92	-
KhSTPS–I	840	9.00	85	1.736	98.83	3.33	95.54	-
KhSTPS–II	1500	6.25	85	3.452	361.42	3.33	349.39	-
DSTPS-I&II	1600	6.25	85	51.984	5806.09	3.33	5612.74	5612.74
North Karanpura	660	6.25	85	22.000	1013.59	3.33	979.83	979.83
Barh STPS-I (Unit-1)	660	6.25	85	1.219	56.16	3.33	54.29	-
Barh STPS-II	1320	6.25	85	1.755	161.70	3.33	156.32	-
Muzaffarpur TPS	390	9.00	85	0.970	25.63	3.33	24.78	-
Nabinagar STPS-I	1980	6.25	85	0.861	119.00	3.33	115.04	-
<b>TOTAL</b>					<b>12222.55</b>		<b>11815.54</b>	<b>9855.15</b>

394. **Fixed Charge:** The Commission scrutinized the proposal of GRIDCO and observed that since no tariff orders have been issued for the FY 2023-24 in respect of NTPC-ER Thermal Generating Stations, GRIDCO has considered the Fixed Charges of these power stations in line with the claim of NTPC as per the relevant tariff orders/regulations approved by CERC. However, the Commission has provisionally considered the fixed cost of NTPC thermal generating stations based on the latest bills raised by NTPC to GRIDCO for the month of February, 2023. But in case of North Karanpura Power Station, the Commission has considered 85% of the total fixed cost

proposed by NTPC in its tariff filing and has factored the same with the latest allocated State share.

395. **Energy Charge Rate (ECR):** The Commission observed that GRIDCO has considered the energy charge rate of NTPC stations for the FY 2023-24 based on the ECR claimed by NTPC for the month of September, 2022. The Commission scrutinized the bills submitted by NTPC to GRIDCO from the month of April, 2022 to January, 2023 for the existing thermal power stations and observed that the variation in ECRs of the central sector generating stations do not follow any particular pattern. Therefore, the Commission has considered the average of actual ECR of first ten months of the current FY 2022-23 (i.e. from April, 2022 to January, 2023) of the existing Central Sector Thermal Power Stations for the purpose of computation of ARR of GRIDCO for FY 2023-24. However, for the North Karanpura Power Station, the Commission has considered the ECR as proposed by NTPC in its tariff filing before CERC for the FY 2023-24. In case of newly allotted share from the unallocated share of ER-NTPC thermal power stations, the Commission has considered the ECR as billed by NTPC in the monthly energy bills for the month of February, 2023. The ECR of central generating stations considered by the Commission for the FY 2023-24 are given in the table below:

**Table –45**  
**Energy Charge Rate (ECR) of CGSs approved for 2023-24**  
**(Paise/Unit)**

<b>Central Thermal Stations</b>	<b>GRIDCO's Proposal for 2023-24 (including Loss)</b>	<b>Approval of the Commission considering the Avg. of actual ECR from April'22 to Jan'23 (excluding ISTS Loss)</b>	<b>Approval of the Commission including ISTS Loss</b>
TSTPS-I	225.40	193.31	199.97
TSTPS-II	224.30	191.33	197.92
FSTPS-I & II	439.10	392.92	406.46
FSTPS -III	431.00	385.69	398.97
KHSTPS-I	401.80	376.72	389.69
KHSTPS-II	381.00	357.25	369.55
DSTPS-I&II	104.00	117.04	121.08
North Karanpura STPS	-	-	196.00
Barh STPS-I	-	310.60	321.30
Barh STPS-II	-	332.90	344.37
Muzaffarpur TPS	-	266.50	275.68
Nabinagar STPS	-	219.50	227.06

396. In case of any variation in ECR during 2023-24 over the rate approved by the Commission, the same may be recovered in accordance with the procedure and guidelines outlined in Regulation 5.7 of OERC (Terms and Conditions for Determination of Wheeling Tariff and Retail Supply Tariff) Regulations, 2022. This would be over and above the normal tariff applicable. Alternatively, the differential amount would be considered during trueing up exercise for FY 2023-24.
397. **Year-end Adjustment (YEA) Charges:** In its application GRIDCO has proposed the year-end adjustment charges of central sector generating stations for FY 2023-24 to the tune of Rs.146.15 Crore based on the actual data for the FY 2021-22 which includes auxiliary consumption, RLDC charges and ash transportation charges. GRIDCO has included ash transportation charges in the year-end charges in view of the MOEF & CC Notifications dated 25.06.2016 & 31.12.2021 and CERC order dated 28.10.2022.
398. The Commission examined the above proposal of GRIDCO and after scrutiny provisionally approves the Year-end Charges of Rs.125.47 Crore for the FY 2023-24 in respect of existing NTPC's thermal power stations, which includes ED on normative auxiliary consumption, RLDC charges and ash transportation charges only. The above approval is based on the actual data of these stations for FY 2021-22 and State share of power for FY 2023-24. The Commission does not allow any incentive as normative generation has been considered for FY 2023-24. The Year-end Charges of North Karanpura STPS has not been considered as no such data is available in respect of this new power station. The details of the year-end charges approved by the Commission are given in the table below:

**Table –46**  
**Year End Charges Approved for the FY 2023-24**

Central Generating Stations	Electricity Duty (Rs. Cr.)	RLDC Charges (Rs. Cr.)	Ash Transportation Charges (Rs. Cr.)	Total (Rs. Cr.)	Estimated energy after ISTS Loss (MU)	Rate including loss (P/U)
TSTPS –I	8.21	0.22	20.27	28.71	2243.12	12.80
TSTPS-II	5.13	0.12	12.78	18.03	1349.63	13.36
FSTPS- I & II	0.00	0.06	3.89	3.95	200.93	19.68
FSTPS – III	0.00	0.06	11.11	11.17	633.92	17.62
KhSTPS –I	0.00	0.38	1.26	1.64	95.54	17.13
KhSTPS –II	0.00	0.19	2.74	2.93	349.39	8.39
DSTPS-I&II	18.13	0.49	40.43	59.04	5612.74	10.52
<b>Total</b>	<b>31.47</b>	<b>1.53</b>	<b>92.47</b>	<b>125.47</b>	<b>10485.28</b>	<b>11.97</b>

399. Taking all the above costs into account, the summary of estimated power purchase cost in respect of drawl of power from Central Sector Thermal Generating Stations by GRIDCO for FY 2023-24 is given in the table below:

**Table –47**  
**Summary of Power Purchase Cost from Central Generating Stations for FY 2023-24**

Sl. No.	Generators	Estimated Availability of Energy (MU)	Approved drawal of Energy for the State (MU)	Fixed Cost (Rs. Cr.)	Fixed Cost (P/U)	Energy Charge Rate (P/U)	Other Cost (P/U)	Total Rate (P/U)	TOTAL Cost (Rs Cr)
1	TSTPS St-I	2243.12	1912.93	222.51	99.20	199.97	12.80	311.96	629.51
2	TSTPS St-II	1349.63	1349.63	99.70	73.87	197.92	13.36	285.15	384.84
3	FSTPS I&II	200.93	-	17.14	85.28	406.46	19.68	511.42	17.14
4	FSTPS III	633.92	-	97.81	154.29	398.97	17.62	570.88	97.81
5	KhTPS St-I	95.54	-	10.36	108.41	389.69	17.13	515.23	10.36
6	KhTPS St-II	349.39	-	39.37	112.70	369.55	8.39	490.64	39.37
7	DSTPS-I&II	5612.74	5612.74	964.70	171.88	121.08	10.52	303.47	1703.31
8	North Karanpura STPS	979.83	979.83	237.10	241.98	196.00	-	437.98	429.15
9	Barh STPS-I	54.29	-	13.61	250.72	321.30	-	572.01	13.61
10	Barh STPS-II	156.32	-	29.76	190.38	344.37	-	534.75	29.76
11	Muzaffarpur TPS	24.78	-	7.03	283.59	275.68	-	559.27	7.03
12	Nabinagar STPS	115.04	-	25.87	224.88	227.06	-	451.95	25.87
	<b>Total</b>	<b>11815.54</b>	<b>9855.15</b>	<b>1764.95</b>				<b>343.76</b>	<b>3387.76</b>
<b>NB: The rates include ISTS Transmission Loss.</b>									

#### Inter-State Transmission System (ISTS) Charges

400. GRIDCO has submitted that the ISTS Charges of CTUIL / PGCIL are being determined as per the norms and principles laid down by the CERC from time to time. The CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 has been notified on 04.05.2020 by CERC, which is effective from 01.11.2020. According to the said Regulations, the Inter-State Transmission System charges are divided into the following four components:

- a. National Component (NC)
- b. Regional Component (RC)
- c. Transformer Component (TC)
- d. AC system Component (ACC)

401. GRIDCO has submitted that each of the above four components are also divided into some sub-components and the total ISTS charges include Bill # 1, Bill # 2 & Bill # 3 raised by CTUIL and the Non-PoC Bills raised by PGCIL. All the components and sub-components of the ISTS Charges claimed for the Billing Months April 2022 to November 2022 is amounting to Rs. 466.94 Crore. As per the CERC (Connectivity and General Network Access to Inter-State Transmission System) Regulations, 2022, notified by CERC on 07.06.2022, the Deemed GNA of Odisha is 2157 MW. But GRIDCO found that, it includes 295 MW of STOA drawal by embedded entities other than GRIDCO. GRIDCO has intimated the fact to CTUIL and asked for bifurcation of Deemed GNA. Presently the LTA of GRIDCO is 1764.77 MW as on November 2022. Further, the GNA of GRIDCO would be 1863 MW excluding STOA drawal and considering Unit #1 of Barh STPS-I (LTA-130.62 MW), the GNA of Odisha for FY 2023-24 is estimated as 1993.62 MW. Based on this estimated GNA, GRIDCO has estimated the ISTS Charges of Odisha as Rs. 775 Crore for calculation of its ARR for FY 2023-24. GRIDCO has calculated the energy drawl from Central Sector Generators as 17,464 MU based on estimated GNA. GRIDCO has stated that the per unit ISTS Charge before Loss and after Loss computed to be 44.36 P/U and 45.89 P/U respectively. As the per unit ISTS charges depend upon the quantum drawal from Central Sector, the average per unit ISTS charges will increase if the scheduling of power will be less. The ISTS charges proposed by GRIDCO for FY 2023-24 is as calculated in the table below:

**Table-48**  
**Proposed Transmission charges for FY 2023-24 (Rs Cr.)**

Net amount payable by GRIDCO towards Transmission Charges (Rs. Cr)	775
Energy Drawal by GRIDCO (MU)	17,464
ISTS Charge (P/U)	<b>44.36</b>
Average All India Central Sector Transmission Loss (%)	<b>3.33%</b>
ISTS Charge including loss (P/U)	<b>45.89</b>

402. The Commission observed that the transmission charges for Inter-State Transmission System (ISTS) shall be payable as per the principles and norms laid down by the CERC from time to time. CERC has notified CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, which is effective from 04.05.2020. The Commission further observed that as per the Regional Transmission Accounts (RTA), the total ISTS transmission charges payable by GRIDCO for the FY 2022-23 i.e. from

April, 2022 to March, 2023 is Rs.725.63 Crore (factoring the receivable from STOA customers) which is based on the average LTA of 1787.81 MW. However, as per the CERC (Connectivity and General Network Access to Inter-State Transmission System) Regulations, 2022, the deemed GNA of Odisha is 2157 MW. But as per Clause 18.1 (e) of the said Regulation, the deemed GNA of Odisha has been segregated by SLDC and intimated to STU, CTU and NLDC. Accordingly, GNA of GRIDCO would be 1709 MW. The ISTS charges of GRIDCO apportioned to the GNA quantum of 1709 MW is estimated as Rs.693.64 Crore. Therefore, the Commission provisionally approves Rs.693.64 Crore in the ARR of GRIDCO towards transmission charges of ISTS for the FY 2023-24.

#### **POSOCO Fees and Charges**

403. GRIDCO has submitted that as per CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations 2019, the RLDC fees and charges shall comprise of fees to be recovered by POSOCO towards registration for commencement of Grid access, scheduling and also annual charges to be collected in the form of annual LDC charges from the users. The RLDC charges shall be collected equally (1/3rd of Monthly Charges) from (a) Distribution Licensees & Buyers (b) Generating Stations & Sellers and (c) Transmission Licensees. GRIDCO has forecasted the ERLDC fees and POSOCO charges of Rs 2.81 Crore for FY 2023-24 by prorating the actual expenses for the period from April' 2022 to Nov.' 2022. The Commission scrutinised the above proposal of GRIDCO and allows Rs.2.71 Crore in the ARR of GRIDCO towards ERLDC fees and POSOCO charges for the FY 2023-24, considering the actual charges for FY 2022-23 i.e. for the period from April, 2022 to March, 2023.
404. Accordingly, the Commission approves Rs. 696.35 Crore towards ISTS Transmission Charges and POSOCO Charges payable by GRIDCO for the FY 2023-24 as given in the table below:

**Table –49**  
**ISTS Transmission Charges and POSOCO Charges for FY 2023-24**

<b>Particulars</b>	<b>Commission's Approval</b>
ISTS Transmission charge payable by GRIDCO factoring the amount receivable from STOA customers (Rs. Cr.)	693.64
POSOCO Charges (Rs. Cr.)	2.71
<b>Total amount payable by GRIDCO (Rs. Cr.)</b>	<b>696.35</b>

### Summary of Availability and Requirement of Power for State Consumption

405. The Commission observed that the total estimated availability of power from different sources comes to 40145.96 MU, whereas total power requirement of GRIDCO is estimated at 38185.57 MU only for State consumption. Therefore, following the merit order despatch principle, procurement of costly power from generating stations has not been considered in the ARR of GRIDCO for consumption inside the State. However, GRIDCO may trade available surplus power if commercially viable and earn some revenue to reduce its past losses. Hence, taking the least cost power procurement from different generating stations for the State consumption, the Commission approves the quantum of purchase for FY 2023-24 as given in the table below:

**Table –50**  
**Quantum of Power Purchase from Various Sources for FY 2023-24**

(Figures in MU)

Sources of Purchase	Commission's Approval for State Drawl for 2022-23	GRIDCO's Proposal for 2023-24	Estimated Availability for 2023-24	Commission's Approval for State Drawl for 2023-24
HYDRO (OLD)	3660.22	3635.51	3660.22	3660.22
Indravati	1942.38	1930.50	1942.38	1942.38
Machakund	259.88	259.88	259.88	259.88
<b>Total State Hydro</b>	<b>5862.48</b>	<b>5825.89</b>	<b>5862.48</b>	<b>5862.48</b>
OPGC (I & II)	2636.04	2509.73	2731.66	2731.66
OPGC (III & IV)	4862.04	9294.69	9294.69	9294.69
IPPs	4338.36	5262.14	5471.25	5471.25
<b>Total State Thermal</b>	<b>11836.44</b>	<b>17066.56</b>	<b>17497.60</b>	<b>17497.60</b>
Small Hydro	456.35	483.35	483.35	483.35
Biomass Energy	80.00	80.00	80.00	80.00
Wind Energy	975.87	1060.43	1060.43	1060.43
Solar Energy	1800.00	2160.00	2160.00	2160.00
<b>Total Renewable</b>	<b>3312.22</b>	<b>3783.78</b>	<b>3783.78</b>	<b>3783.78</b>
<b>TOTAL STATE</b>	<b>21011.13</b>	<b>26676.23</b>	<b>27143.86</b>	<b>27143.86</b>
Chukha HEP	267.05	267.68	267.68	267.68
Tala HEP	125.80	122.20	122.20	122.20
Mangdechhu HEP	322.84	313.04	313.30	313.30
Teesta-V HEP	505.93	505.76	474.05	474.05
Kurichu HEP	-	-	3.59	3.59
Rangeet HEP	-	-	5.75	5.75
<b>Total Central Hydro</b>	<b>1221.62</b>	<b>1208.68</b>	<b>1186.57</b>	<b>1186.57</b>
DSTPS-I&II	6350.84	5503.70	5612.74	5612.74
North Karanpura	-	-	979.83	979.83
TSTPS-I	541.01	1974.31	2243.12	1912.93
TSTPS-II	1349.63	1548.52	1349.63	1349.63
FSTPS-I & II	0.00	49.70	200.93	0.00

Sources of Purchase	Commission's Approval for State Drawl for 2022-23	GRIDCO's Proposal for 2023-24	Estimated Availability for 2023-24	Commission's Approval for State Drawl for 2023-24
FSTPS-III	0.00	321.72	633.92	0.00
KhSTPS-I	0.00	24.97	95.54	0.00
KhSTPS-II	0.00	205.05	349.39	0.00
Barh-I	-	-	54.29	0.00
Barh-II	-	940.19	156.32	0.00
Muzaffarpur TPS	-	-	24.78	0.00
Nabinagar STPS	-	-	115.04	0.00
<b>Total Central Thermal</b>	<b>8241.48</b>	<b>10568.16</b>	<b>11815.54</b>	<b>9855.15</b>
<b>Total Central Sector</b>	<b>9463.10</b>	<b>11776.84</b>	<b>13002.10</b>	<b>11041.71</b>
<b>TOTAL Availability</b>	<b>30474.23</b>	<b>38453.07</b>	<b>40145.96</b>	<b>38185.57</b>

406. GRIDCO has proposed to purchase 38453.07 MU from all available sources. Out of which 37554.41 MU is estimated by GRIDCO towards State requirement and balance 898.66 MU of energy is proposed for procurement towards trading purpose. However, the Commission has estimated availability of 40145.964 MU for FY 2023-24 from different sources, out of which procurement of 38185.57 MU is estimated towards State requirement. Although drawal of power would be from the least cost sources as indicated in the above table, the Commission has considered the payment towards fixed cost for all thermal stations.

407. 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 2023-24 are given in the table below:

**Table -51**  
**GRIDCO's Proposal & Commission's Approval for FY 2023-24**

Generators	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	Energy	Average Rate	Total Cost	Energy	Average Rate	Total Cost
	MU	P/U	Rs.in Cr.	MU	P/U	Rs.in Cr.
HYDRO (OLD)	3635.51	94.37	345.25	3660.22	97.43	356.60
Indravati	1930.50	88.33	170.52	1942.38	86.07	167.18
Machakund	259.88	116.98	30.40	259.88	116.97	30.40
<b>Total State Hydro</b>	<b>5825.89</b>	<b>93.75</b>	<b>546.17</b>	<b>5862.48</b>	<b>94.53</b>	<b>554.18</b>
OPGC 1 & 2 <sup>nd</sup> Unit	2509.73	287.33	721.12	2731.66	274.04	748.57
OPGC 3 & 4 <sup>th</sup> Units	9294.69	334.27	3106.90	9294.69	331.07	3077.23
IPPs	5262.14	318.39	1675.42	5471.25	319.47	1747.90
<b>Total State Thermal</b>	<b>17066.56</b>	<b>322.47</b>	<b>5503.44</b>	<b>17497.60</b>	<b>318.54</b>	<b>5573.70</b>

Generators	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	Energy	Average Rate	Total Cost	Energy	Average Rate	Total Cost
	MU	P/U	Rs.in Cr.	MU	P/U	Rs.in Cr.
Small Hydro	483.35	437.12	211.28	483.35	423.06	204.48
Biomass	80.00	360.00	60.80	80.00	760.00	60.80
Wind	1060.43	279.93	296.85	1060.43	279.93	296.85
Solar	2160.00	345.60	746.50	2160.00	345.60	746.49
<b>Total RE</b>	<b>3783.78</b>	<b>347.65</b>	<b>1315.42</b>	<b>3783.78</b>	<b>345.85</b>	<b>1308.63</b>
<b>TOTAL STATE</b>	<b>26676.23</b>	<b>276.09</b>	<b>7365.04</b>	<b>27143.86</b>	<b>273.97</b>	<b>7436.51</b>
CHUKHA	267.68	248.43	66.50	267.68	248.43	66.50
Tala HPS	122.20	234.82	29.69	122.20	234.82	28.69
Mangdechhu	313.04	433.43	135.68	313.30	433.43	135.79
Teesta-V	505.76	202.55	102.44	474.05	202.55	96.02
Kurichu HEP	-	-	-	3.59	227.00	0.82
Rangeet HEP	-	-	-	5.75	346.86	2.00
<b>Total Central Hydro</b>	<b>1208.68</b>	<b>275.77</b>	<b>333.32</b>	<b>1186.57</b>	<b>277.96</b>	<b>329.82</b>
DSTPS-I	5503.70	358.95	1975.53	5612.74	303.47	1703.31
North Karanpura	-	-	-	979.83	437.98	429.15
TSTPS - I	1974.31	355.80	702.45	1912.93	329.08	629.51
TSTPS - II	1548.52	328.94	509.37	1349.63	285.15	384.84
FSTPS -I & II	49.70	760.59	37.80	0.00	511.42	17.14
FSTPS –III	321.72	787.09	353.22	0.00	570.88	97.81
KhTPS – I	24.97	719.67	17.97	0.00	515.23	10.36
KhTPS – II	205.05	536.85	110.08	0.00	490.64	39.37
Barh-I	-	-	-	0.00	572.01	13.61
Barh-II	940.19	542.65	510.20	0.00	534.75	29.76
Muzaffarpur TPS	-	-	-	0.00	559.27	7.03
Nabinagar STPS	-	-	-	0.00	451.95	25.87
<b>Total Central Thermal</b>	<b>10568.16</b>	<b>389.53</b>	<b>4116.62</b>	<b>9855.15</b>	<b>343.76</b>	<b>3387.76</b>
<b>Total Central Sector</b>	<b>11776.84</b>	<b>377.86</b>	<b>4449.94</b>	<b>11041.71</b>	<b>336.68</b>	<b>3717.57</b>
PGCIL Tr. Charge	-	-	774.71	-	-	693.64
ERLDC Charges	-	-	4.09	-	-	2.71
<b>TOTAL GRIDCO</b>	<b>38453.07</b>	<b>327.51</b>	<b>12593.78</b>	<b>38185.57</b>	<b>310.34</b>	<b>11850.44</b>
Less: Revenue from trading of surplus power	898.66	397.31	357.05	-	-	-
<b>Net GRIDCO</b>	<b>37554.41</b>	<b>325.84</b>	<b>12236.73</b>	<b>38185.57</b>	<b>310.34</b>	<b>11850.44</b>

*NB: The rates of Central Sector Power Stations include ISTS Loss*

408. The Commission's approval of power purchase for State consumption is based on the merit order dispatch principles in order to optimise the power procurement cost. Hence, any deviation from the merit order dispatch principle should be avoided by GRIDCO. In

past years, it is observed that there have been differences between the Commission's approval and actual drawal of energy by GRIDCO. Therefore, the Commission directs GRIDCO to follow the merit order dispatch principle while purchasing power for State consumption. Any major deviation in real time power purchase should be intimated to the Commission. GRIDCO should put sincere effort to optimize and rationalize the cost of power purchase. The Commission shall review the quantum and cost of power purchase of GRIDCO based on merit order during performance review. Accordingly, GRIDCO shall furnish the relevant data during the review of its performance along with the justifications and rationales in case of any deviation from merit order dispatch principle. The Commission shall consider the same along with other expenses during truing up exercise.

**Pass through of Additional Costs in ARR & BSP of GRIDCO for FY 2023-24**

409. In its ARR application, GRIDCO has claimed an additional power purchase cost amounting to Rs.1072.41 crore to be pass through in its ARR for FY 2023-24 as detailed in the following paragraphs.

**OPGC Stage-I (Units- I & II)**

410. GRIDCO has claimed an amount of Rs.11.56 crore towards year-end charges of Units I&II of OPGC for the period from April, 2022 to September, 2022, which it has paid to OPGC. Further, GRIDCO has submitted that OPGC has claimed an amount of Rs.188.28 crore through fuel price adjustment bills towards of Secondary Fuel Oil Cost of its Units I & II for the period FY 2016-17 to FY 2020-21. Out of which GRIDCO has made adhoc payment of Rs.76.11 crore on 29.12.2021. GRIDCO has stated that without prejudice to its stand in Appeal No.189 of 2020, the balance FPA amount towards coal cost has not been paid by GRIDCO due to non-submission of credit/debit notes, third party GCV Sampling Reports and GCV of coal "as Received" basis. Similarly, OPGC, vide letter dated 17.05.2022 has claimed an amount of Rs.47.55 crore towards Fuel Price Adjustment for FY 2021-22 and vide letter dated 17.10.2022 claimed an amount of Rs.18.56 crore towards Half Yearly Fuel Price Adjustment for FY 2022-23. But GRIDCO has not paid these amounts due to the reasons cited above. Accordingly, GRIDCO has requested the Commission to allow pass through the above-mentioned amount of Rs. 11.56 Cr. and Rs. 76.11 Cr., which has already been paid by it.

411. The Commission observed that an amount of Rs.30.71 Crore has been allowed in the ARR of GRIDCO for FY 2022-23 towards Year-End Charges to be reimbursed by GRIDCO in respect of Units-I&II of OPGC. Hence, the Commission does not allowed GRIDCO's claim of Rs.11.56 Crore towards year-end charges of Units-I&II of OPGC for the period from April, 2022 to September, 2022. Further, GRIDCO has claimed an amount of Rs.76.11 Crore as pass through in its ARR for FY 2023-24, which has been paid by GRIDCO to OPGC on 29.12.2021 out of the total amount of Rs.188.28 Crore towards secondary fuel oil cost of OPGC Units-I&II for the period from FY 2016-17 to 2020-21. The Commission observed that since the amount of Rs.76.11 Crore has been paid during the FY 2021-22 and the Commission, in the instant order, has trued up the accounts of GRIDCO for FY 2021-22, the same could be accounted in the trued-up account of GRIDCO for FY 2021-22. Hence, the same cannot be pass through in the ARR of GRIDCO for the FY 2023-24.

#### **OPGC Stage-II (Units-III& IV)**

412. GRIDCO has claimed an amount of Rs.14.82 Crore, which has been paid by it to OPGC towards year-end charges of Units-III&IV of OPGC for the period from April, 2022 to September, 2022, as pass through in its ARR for the FY 2023-24.

413. The Commission scrutinized the above proposal of GRIDCO and observed that the claim of GRIDCO amounting to Rs.14.82 Crore is for a part period of the FY 2022-23. The Commission is of the view that after completion of the year 2022-23, the same shall be considered in the Truing-up of GRIDCO for the FY 2022-23 based on the audited accounts or in the ARR of GRIDCO for the FY 2024-25.

#### **Additional Power Purchase Cost with respect to NTPC Stations**

414. GRIDCO has claimed an amount of Rs 872.74 Crore as additional power purchase cost in its proposed ARR for FY 2023-24 with respect to NTPC stations, the details of which are given here under:

a) **Differential Cost due to additional power purchase from FSTPS, KhSTPS, Barh STPS from Apr'22 to Sept'22:**

In the ARR for FY 2022-23, the Commission has not allowed any energy from FSTPS-I & II, FSTPS-III, KHTPS-I & KHTPS-II. But GRIDCO has drawn energy of 311.08 MU from these stations during first six months of the year. GRIDCO has also drawn energy of 4979.81 MU from the approved sources such

as TSTPS-I, TSTPS-II, DSTPS-I against the approved drawl of energy of 4120.74 MU for the period Apr'22 to Sept'22. Further, after Commercial operation of Barh-I, GRIDCO has drawn a small quantum of power from Barh-I during April'22. Accordingly, GRIDCO has drawn a total energy of 4983.35 MU against the approved quantum of 4120.74 MU for the period Apr'22 to Sept'22. The excess drawl has been made by GRIDCO owing to the exigency situation of the State due to unexpected rise in demand, outage of the approved source like Darlipali for a long period and high market rate in the power exchanges etc. Accordingly, GRIDCO made actual payment of Rs 1552.12 Crores against approved cost of Rs 1204.01 Crores for the period from Apr'22 to Sept'22 in respect of NTPC Stations. Therefore, GRIDCO has claimed the differential amount of Rs.348.11 Crore for the aforesaid period of Apr'22 to Sept'22, as pass through in its ARR for the FY 2023-24.

**b) Payment made by GRIDCO to KBUNL under One Time Settlement:**

The Commission, vide its Order dtd. 04.10.2021 in Case No. 27 of 2018 has disapproved the PPA executed between GRIDCO and M/s. KBUNL and directed GRIDCO to take steps for de-allocation of State share from M/s. KBUNL in coordination with the State Government. But during a meeting held on 01.11.2021, the Secretary Power, MoP, GoI, clarified that till the re-allocation made, original beneficiary is liable to pay fixed charges. Govt. of Odisha presented that, the State is willing to liquidate the outstanding dues and requested NTPC to extend some waiver of dues, interest/ rebate etc. Further, during a meeting between Chief Secretary, Govt. of Odisha and CMD, NTPC held on 01.12.2021, NTPC suggested that, decision on settlement of disputed amount of KBUNL could be taken up after reallocation of Odisha share to other willing beneficiaries. The MoP, GoI vide Notification Dated 28.03.2022 re-allocated the State share of power from KBUNL to Tamil Nadu for a period of 5 years w.e.f. 30.03.2022. KBUNL has also filed a Petition bearing No. 116/MP/2019 before CERC seeking direction to the beneficiaries towards recovery of Capacity Charges for their allocated capacities. In the above background, an out of court settlement talk was held between KBUNL and GRIDCO and an amount of Rs.295 Crore has been reached as one time settlement between the parties as per MoM dtd. 22.05.2022 without reopening any further claims/ counter claims by KBUNL/ GRIDCO.

The year wise fixed cost, variable cost and other cost claimed by KBUNL from FY2016-17 to FY 2022-23 (Apr'22) amounts to Rs.415.43 Crore which includes principal amount of Rs.309.08 Crore and LPS of Rs.106.35 Crore. Besides complete waiver of LPS, KBUNL offered relaxation towards principal amount by Rs.14.08 Crore. As per the MoM, first 50% of the settled amount to be paid by GRIDCO by 30th June'22 and the rest 50% amount to be paid by GRIDCO in six equal interest free monthly instalments latest by 30th of every month starting from July'22. However, all the amount including penal interest if any shall be paid latest by 31.03.2023. GRIDCO has submitted that they are making payment as per the MoM and by January, 2023 all the settled amount shall be paid. In view of the above, GRIDCO has requested to pass through the above OTS amount of Rs 295 Crore in its ARR for FY 2023-24.

**c) Ash Transportation Charges Claimed by NTPC as per CERC Order dated 28.10.2022:**

CERC, vide order dtd. 28.10.2022 in Case No 205/MP/2021, in exercise of power under section 79(1)(a) of the Act, hold that the additional expenditure incurred by the NTPC towards fly ash transportation cost for the period 2019-24, is admissible as additional O&M expenses as per the MOEF&CC notifications dated 25.1.2016 and 31.12.2021. The fly ash transportation expenditure of each generating station allowed to NTPC for the period 2019-22, shall be recovered from the beneficiaries of the respective generating stations in six equal monthly instalments. As per the aforesaid order, CERC permits the provisional billing at 90% of the fly ash transportation charges incurred by NTPC in respect of its generating stations and on a monthly basis for the balance period (i.e. 2022-24), based on self-certification, and the beneficiaries shall pay the same accordingly.

CERC further permits recovery of these charges along with carrying cost, at the rate of interest as specified, in terms of Regulation 10 (7) of the CERC Generation Tariff Regulations, 2019. Accordingly, NTPC vide invoice dated 05.11.2022, has raised its claim on GRIDCO towards Ash Transportation Charges along with interest charges in respect of TSTPS-I & II, KHSTPS-I&II, FSTPS-I,II&III, TTPS and DSTPS-I during the month of October -2022 amounting to Rs. 229.63 Crore (Principal Rs. 193.69 Cr. + interest Rs. 35.94 Cr.). GRIDCO has stated that they are in process of appealing the matter before higher court of law. However, in the

absence of any stay order for the aforesaid claim made by NTPC, GRIDCO has to make such payment under protest in order to avoid any action by MoP, GoI in case of non-payment of the dues to the generators. In view of above, GRIDCO has requested to allow pass through of the amount of Rs 229.63 Crore as additional power purchase cost in its ARR for the FY 2023-24.

- d) The above claims made by GRIDCO on account of additional power purchase cost of NTPC Stations are summarised below:

**Table-52**

<b>Sl. No.</b>	<b>Description</b>	<b>Amount (Rs. Cr.)</b>
1	Differential Amount of the cost incurred during Apr'22 to Sep'22	348.11
2	Payment made/to be made by GRIDCO to KBUNL as per One Time Settlement (OTS) reached between GRIDCO & KBUNL on 21.05.2022	295.00
3	Ash Transportation Charges to be made by GRIDCO as per CERC Order dated.28.10.2022	229.63
	<b>Total</b>	<b>872.74</b>

415. The Commission scrutinised the above proposal of GRIDCO and observed that GRIDCO has claimed an amount of Rs.348.11 Crore towards differential power purchase cost of the Central Thermal Power Stations for the period from April, 2022 to September, 2022. Since the above claim of GRIDCO is for a part period of the year 2022-23, the Commission do not consider the same as pass through in the ARR of GRIDCO for the FY 2023-24. After completion of the year, the differential power purchase cost will be considered while truing up the accounts for that year.

The Commission further observed that GRIDCO has claimed an amount of Rs.295.00 Crore as pass through in its ARR for FY 2023-24, which has been paid/ to be paid by GRIDCO towards power purchase cost of M/s. KBUNL based on the one-time settlement reached between GRIDCO and M/s. KBUNL/NTPC on 21.05.2022. Since, the Commission has not approved the PPA executed between GRIDCO and M/s. KBUNL for purchase of power by GRIDCO from M/s. KBUNL for State consumption, the Commission does not allow the said claim of GRIDCO as pass through in its ARR for FY 2023-24. GRIDCO may adjust the said amount from the revenue earned from trading of surplus power available to it.

The Commission further observed that GRIDCO has claimed an amount of Rs.229.63 Crore as pass through in its ARR for FY 2023-24, which is to be paid by GRIDCO towards Ash Transportation Charges claimed by NTPC in respect of its thermal generating stations. As per CERC order dated 28.12.2022, the additional expenditure incurred by NTPC towards fly ash transportation cost for the period 2019-24 is admissible as additional O&M expenses in terms of the MOEF&CC notifications dated 25.01.2016 and 31.12.2021. As per the submission of GRIDCO, such payments have to be made under protest in order to avoid any action by MoP, GoI in case of non-payment of dues to the generators. In view of the above, in order to avoid power regulation to GRIDCO by the Central Government, the Commission allows Rs.229.63 Crore as pass through in the ARR of GRIDCO for the FY 2023-24 towards payment of ash transportation charges claimed by NTPC. However, GRIDCO is directed to pursue the State Government to take up the matter with the Central Government as such Ash Transportation Charges are too high and has a substantial burden on tariff.

416. GRIDCO has claimed additional power purchase cost of Rs.37.96 Crores as pass through towards payment of the solar power generators as given hereunder:

a) **Additional Payment towards payment of STU Charges / Scheduling Charges towards Solar Power procurement from the outside States:**

GRIDCO has submitted that they are bearing the cost of STU transmission charges of the respective states & RLDC charges/scheduling charges towards procurement of 75 MW solar power (15 MW from Rajasthan under NVVN Bundling Scheme, 5 MW from NTPC-Dadri, 5 MW from NTPC-Faridabad, 10 MW from Rajasthan and 40 MW from Gujarat through SECI under VGF Scheme Batch-I), on re-imburement basis for each financial year. During FY 2021-22, GRIDCO has paid total amount of Rs.10,15,96,245/-, on re-imburement basis towards STU charges / Scheduling charges as demanded by the utilities.

b) **Additional Payment towards payment on Safeguard Duty Claims of M/s Azure Power Pvt. Ltd. under Change in Law event:**

As directed by the Central Commission in the order dated 20.08.2021, the methodology for payment of the SGD claims shall be on annuity basis and the discount rate of annuity payments shall be 10.41 % for a tenure of 13 years. SECI has reconciled the SGD Claims of total Rs.101,61,78,110/- for provisional payment with regard to Safeguard Duty claims submitted by M/s Azure Power

Forty Three Pvt. Ltd., the SPD, for its 300 MW solar project. Accordingly, in the ARR of GRIDCO for FY 2022-23, the Commission has approved Rs.11.66 Crore towards Safeguard Duty claims of M/s Azure Power Pvt. Ltd. under Change in Law provision for FY 2021-22. Considering the monthly annuity payment against the SGD claim of Rs.1,15,51,757/-. GRIDCO will be paying around Rs.13,86,21,084/- towards reimbursement of SGD claim of M/s Azure Power Forty-Three Pvt. Ltd. for FY 2022-23. Out of which GRIDCO has already paid an amount of Rs.9,24,14,056/- up to November'2022. Further, for FY 2023-24, GRIDCO estimates to make payment of Rs.13,86,21,084/- towards reimbursement of SGD claim of M/s Azure Power Forty Three Pvt. Ltd. with monthly annuity payment of Rs.1,15,51,757/- till 13 years from the CoD of the Project. Therefore, GRIDCO had requested to allow Rs.13.86 crore for FY 2022-23 and another Rs.13.86 crore for the FY 2023-24, as pass through in the ARR of the GRIDCO for FY 2023-24.

c) **Additional Cost incurred towards refund of excess rebate availed by GRIDCO towards procurement of 1 MW solar power from M/s Raajratna Energy Holdings Pvt. Ltd. as per OERC Order dated 18.10.2022 in Case No.20/2022:**

M/s Raajratna Energy Holdings Pvt. Ltd. (REHPL), vide Case No.20/2022 has registered an application in the matter of wrongful deduction of rebate in the monthly energy bills of M/s REHPL for supply of power from its 1 MW SPV plant in contravention of Order dated 29.10.2021 passed by the Hon'ble Commission in Case No.32/2021. The Commission, vide its Order dated 18.10.2022 passed in Case No.20/2022, has directed GRIDCO to make refund of the amount deducted towards excess rebate to M/s Raajratna Energy Holdings Pvt. Ltd. (REHPL) for the permissible period of three years downward along with simple interest of 6% per annum. In view of the above said Order, the final amount to be refunded to the M/s REHPL along with the interest rate of 6 % for the years is Rs.7,23,203/- .GRIDCO has requested to allow the same as pass through in its ARR for FY 2023-24.

d) The above claim of GRIDCO for pass through of Rs.37.96 Crore in its ARR towards payment additional power purchase cost to the solar generators are summarized below:

**Table-53**

<b>Sl. No.</b>	<b>Name of Station</b>	<b>Reasons of Additional Power Purchase (PP) Cost</b>	<b>Year</b>	<b>OERC Approval for FY 2022-23</b>	<b>Cost claimed as Addl. PP Cost (Rs. Cr.)</b>	<b>Remarks</b>
1	Rajasthan and Gujarat through SECI	STU Charges and SLDC charges	FY 2021-22	0.00	10.154	Re-imbursalment of STU transmission charges of respective States and RLDC / scheduling charges towards procurement of solar power from outside State for RPO compliance.
2	Dadri & Faridabad Solar PV stations through NTPC	RLDC & SLDC charges	FY 2021-22	0.00	0.006	
3	ISTS Solar Projects Tranche-1 through SECI	Safeguard Duty claims under Change in Law provision of PSA dated 21.08.2018	FY 2022-23	0.00	13.862	Re-imbursalment towards SGD claims as per CERC Order dated 20.08.2021 in Petition No.536/MP/2020 & CERC Order dated 03.02.2020 In Petition No.51/MP/2019
4			FY 2023-24	0.00	13.862	
5	M/s Raajratna Energy Holdings Pvt. Ltd.	Refund of excess rebate availed by GRIDCO	FY 2019-20 to FY 2022-23	0.00	0.072	As per OERC Order dated 18.10.2022 in Case No.20/2022 limited to last 3 years
	<b>Total</b>			<b>0.00</b>	<b>37.956</b>	

417. The Commission scrutinized the above proposal of GRIDCO and observed that GRIDCO has already paid Rs.10.16 Crore on reimbursement basis towards STU charges/Scheduling charges in respect of solar power availed from Rajasthan and Gujarat through SECI and bundled solar power from Dadri and Faridabad through NTPC for the FY 2021-22. Hence, the Commission allows Rs.10.16 Crore in the ARR of GRIDCO for the FY 2023-24. Further, the Commission allows Rs.13.86 Crore as claimed by GRIDCO towards safeguard duty claim of ISTS Solar Projects for the FY

2022-23 out of which GRIDCO has already paid Rs.9.24 Crore and the balance amount is to be paid by the end of the current financial year. But the Commission does not allow another Rs.13.86 Crore claimed by GRIDCO towards safeguard duty of ISTS Solar Projects for the FY 2023-24. Since it is on reimbursement basis, the same shall be considered after the payment made by GRIDCO. Further, the Commission allows the claim of GRIDCO amounting to Rs.0.072 Crore towards refund of excess rebate availed by it from M/s. Rajratna Energy Holding (P) Ltd. for the period from FY 2019-20 to 2022-23 as truing up of GRIDCO's account has already been made upto the FY 2021-22.

**Additional power purchase cost in respect of TEESTA-V power station of NHPC:**

418. NHPC had filed a petition before CERC for recovery of wage revision of the employees of Kendriya Vidyalaya and Indian Reserve Battalion (IRBN) at Teesta-V Power Station during 01.01.2016 to 31.03.2019 which was registered as Petition No.231/MP/2019. The CERC, vide its Order dtd.10.11.2022, had approved the wage revision impact amounting to Rs.43.27 Crore in respect of Teesta-V Power Station. In the said order CERC has directed the beneficiaries to pay Rs.43.27 Crore in proportion to their share allocation in twelve equal monthly instalments starting from Nov'2022. GRIDCO has a share allocation of 20.59% from Teesta-V Power Station. NHPC has raised invoices to GRIDCO on 18.11.2022 in line with the said CERC Order amounting to Rs.10,12,40,328. In view of above, GRIDCO prays the Commission to allow this amount as pass through in its ARR for FY 2023-24.
419. After scrutiny of the above proposal of GRIDCO, the Commission allows Rs.10.12 Crore as pass through in the ARR of GRIDCO for FY 2023-24 towards payment to NHPC in respect of Teesta-V Hydro Power Station.
420. GRIDCO has claimed the following power procurement costs of small hydro projects as pass through in its ARR for FY 2023-24:
- a) **Reimbursement of Water Charge and SLDC Charge in respect of 20 MW Samal Barrage SHEP of M/s OPCL for the FY 2021-22 paid in FY 2022-23:**  
As per the Commission's Order dated 19.05.2011 in Case No. 17/2011, GRIDCO has reimbursed Rs 15,89,956/- to M/s OPCL towards Water Charges and SLDC Charges for the FY 2021-22 in respect of 20 MW Samal Barrage SHEP.
- b) **Reimbursement of SLDC Charges in respect of 24 MW Lower Baitarani SHEP of M/s BPPPL for the period from November, 2021 to March, 2022:**

As per the terms of the PPA dated 18.12.2015, GRIDCO has reimbursed Rs. 93,566/- to M/s BPPPL towards SLDC charges for the period of November, 2021 to March, 2022 in respect of 24 MW Lower Baitarani SHEP.

**c) Procurement of power from 650 kW Biribati MHP and 500 kW Kendupatana MHP of OPGC during the FY 2019-20:**

OERC, vide Order dated 05.01.2019 in Case No. 35/2018, have approved a tariff of Rs. 3.91/kWh for supply of power from 650 kW Biribati MHP and 500 kW Kendupatana MHP. Further, the Commission, vide Order dated 12.08.2021 in Case No. 25/2021, have directed GRIDCO to pay the dues of these MHPs prior to 01.01.2020 (i.e. from FY 2007-08 to 31.03.2020) which will be passed in the ARR of GRIDCO. Accordingly, as per the invoice raised by OPGC, GRIDCO has paid the dues for the FY 2007-08 to FY 2018-19 and claimed the same in the ARR of FY 2022-23. For the FY 2019-20, OPGC, vide invoice dated 14.02.2022, has claimed Rs. 2,02,131/- towards supply of 51,696 kWh energy from Biribati MHP and vide invoice dated 16.12.2021, it has claimed Rs. 4,70,576/- for supply of 1,20,352 kWh energy from Kendupatana MHP. GRIDCO has already paid the amount to OPGC and the same may be allowed in the ARR for FY 2023-24.

**d) Differential Claim of M/s Sri Avnatika Power Projects Pvt. Ltd. (SAPPPL) in respect of 18 MW Saptadhara SHEP due to revision of Tariff as per Commission's Order dated 07.05.2022 in Case No. 100/2021:**

M/s SAPPPL has declared the COD of its 18 MW (3x6 MW) Saptadhara SHEP (Unit-2 on 06.10.2021, Unit-3 on 13.10.2021 and Unit-1 on 03.11.2021). GRIDCO had provisionally made payment at a tariff of Rs. 4.26/kWh till the approval of a tariff by the Commission. OERC, vide Order dated 07.05.2022 in Case No. 100/2021, has approved a tariff of Rs. 5.06/kWh towards procurement of power from 18 MW Saptadhara SHEP applicable from the date of COD. Due to the revision of tariff, M/s SAPPPL has claimed Rs. 54,11,025/- as the differential amount for supply of 67,63,781 kWh energy from COD to April, 2022 and the same has already been paid by GRIDCO. Therefore, GRIDCO has requested to allow this amount as pass through in its ARR for FY 2023-24.

**e) Applicability of tariff of Rs. 5.71/kWh with effect from COD 24 MW Lower Baitarani SHEP as per the judgement of Hon'ble APTEL vide Order dated 17.10.2022 and 21.10.2022 in Appeal Nos. 73/2022 and 392/2022:**

The Commission, vide Order dated 15.01.2022 in Case No. 88/2020, has approved a tariff of Rs. 5.71/kWh applicable with effect from 01.02.2022 towards supply of power from 24 MW Lower Baitarani SHEP. GRIDCO had paid a tariff of Rs. 5.07/kWh to M/s BPPPL for supply of power from its SHEP with effect from the COD (i.e. 20.08.2020 for Units- 1 & 2 and 29.08.2020 for Unit- 3) till 31.01.2022. The APTEL, vide order dated 17.10.2022 and revised Order dated 21.10.2022 in Appeal Nos. 73/2022 and 392/2022, have directed that the tariff of Rs. 5.71/kWh to be provisionally applicable with effect from the COD of the SHEP till the determination of a tariff by the Commission afresh. M/s BPPPL, vide invoice dated 27.10.2022, has claimed the differential amount of Rs. 9,51,13,016/- towards revision of tariff with effect from COD to 31.01.2022. After verification, GRIDCO has released Rs. 9,50,78,235/- in compliance of the Judgement of the APTEL. GRIDCO has requested to allow this amount as pass through in its ARR for FY 2023-24.

421. The Commission scrutinized the above proposal of GRIDCO and allows Rs.0.16 Crore towards Water charges and SLDC charges of M/s. OPCL for FY 2021-22, Rs.0.01 Crore towards SLDC charges of M/s. BPPPL for the period from November, 2021 to March, 2022, Rs.0.07 Crore towards power purchase dues of Mini Hydel Projects of OPGC, Rs.0.54 Crore towards differential power purchase dues of M/s. SAPPPL from its COD to April, 2022. Accordingly, the Commission allows total of Rs.0.78 Crore as pass through in the ARR of GRIDCO for the FY 2023-24. However, the Commission does not allow Rs.9.51 Crore as claimed by GRIDCO towards differential power purchase cost of Lower Baitarani SHEP of M/s. BPPPL, because the Commission, vide its order dated 06.01.2023 in Case No.88 of 2020, has redetermined the tariff of this SHEP has Rs.5.03/kWh and the said order is now sub-judice before the APTEL.
422. Considering the generation figures for the 1st six month of FY 2022-23 in respect of the following Non-Solar RE generators, GRIDCO has estimated that the generation from these sources will be more than that approved in the ARR of GRIDCO for FY 2022-23. Therefore, GRIDOC has claimed the additional power purchase cost estimated by it towards procurement of excess power from the following Non-Solar RE generators.

**a) 24 MW Lower Baitarani SHEP of M/s BPPPL:**

In the first six month of FY 2022-23, GRIDCO has procured 56.22 MU energy from 24 MW Lower Baitarani SHEP and estimated to receive 90.46 MU during FY 2022-

23against approval of 85 MU @ Rs.5.71/kWh. GRIDCO estimates that it will incur **Rs. 3.12** Crore for the additional generation expected during FY 2022-23 and requests to approve the same in its ARR for the FY 2023-24.

**b) 20 MW Samal Barrage SHEP by M/s OPCL:**

In the first six month of FY 2022-23, GRIDCO has procured 49.93 MU energy from 20 MW Samal Barrage SHEP and estimated to receive 98.52 MU during FY 2022-23 against approval of 80 MU @ Rs.3.71/kWh. GRIDCO estimates that it will incur **Rs. 6.87** Crore for the additional generation expected during FY 2022-23 and requests to approve the same in its ARR for the FY 2023-24.

**c) ISTS-Connected Wind Power under Tranche-I from PTC:**

During the first six month of FY 2022-23, GRIDCO has procured 90.04 MU energy from the Wind Project of M/s Ostro Kutch Wind Pvt. Ltd. through PTC under ISTS-Connected Scheme Tranche-I and estimated to receive 149.37 MU during FY 2022-23 against approval of 141.91 MU @ Rs.3.53/kWh. GRIDCO estimates that it will incur **Rs. 2.63** Crore for the additional generation expected during FY 2022-23 and requests to approve the same in its ARR for the FY 2023-24.

**d) ISTS-Connected Wind Power under Tranche-II from SECI:**

During the first six month of FY 2022-23, GRIDCO has procured 180.41 MU energy from the Wind Project of M/s Green Infra Wind Energy Ltd. through SECI under ISTS-Connected Scheme Tranche-II and estimated to receive 285.98 MU during FY 2022-23 against approval of 273.57MU @ Rs.2.72/kWh. GRIDCO estimates that it will incur **Rs. 3.38Crore** for the additional generation expected during FY 2022-23 and requests to approve the same in its ARR for the FY 2023-24.

**e) ISTS-Connected Wind Power under Tranche-VI from SECI:**

During the first six month of FY 2022-23, GRIDCO has procured 112.97 MU energy from the Wind Project of M/s Adani Wind Energy Kutch Three Ltd. through SECI under ISTS-Connected Scheme Tranche-VI and estimated to receive 175.64 MU during FY 2022-23 against approval of 126.23 MU @ Rs.2.89/kWh. GRIDCO estimates that it will incur **Rs. 14.28Crore** for the additional generation expected during FY 2022-23 and requests to approve the same in its ARR for the FY 2023-24.

**f) Revision in Tariff and Estimated Generation more than the approval for FY 2022-23 in respect of Bargarh Head Regulator SHEP:**

GRIDCO has stated that M/s Kakatiya Industries Pvt. Ltd. (KIPL) has declared COD of the Units of its 09 MW (2x4.5 MW) Bargarh Head Regulator SHEP on 30.04.2022 (Unit-1) and 12.05.2022 (Unit-2). The Commission, in the ARR of GRIDCO for FY 2022-23, has approved for procurement of 11 MU energy @ Rs. 4.26/kWh from the Bargarh Head Regulator SHEP. However, as per the terms of the PPA dated 02.12.2015 between GRIDCO and M/s KIPL, GRIDCO is provisionally paying @ Rs.5.06/kWh. Further, GRIDCO has estimated to receive 26.13 MU from this SHEP during FY 2022-23. Accordingly, GRIDCO estimates that it will incur additional amount of Rs.8.54 Crore during FY 2022-23 towards procurement of power from the Bargarh Head Regulator SHEP and requests to approve the same in its ARR for the FY 2023-24.

423. The Commission scrutinized the above proposal of GRIDCO and observed that GRIDCO has claimed Rs.38.82 Crore towards additional power purchase cost from the aforesaid non-solar sources for the current FY 2022-23 by projecting the quantum of power for the year basing on the actual drawal of 1<sup>st</sup> six months of the year. Since the year not yet been completed and drawal of 1<sup>st</sup> six months has only considered by GRIDCO. Further, GRIDCO has not considered the revenue earned in the FY 2022-23 by selling such additional power drawn by it. Hence, there is no sanctity in the amount claimed by GRIDCO in this regard and therefore, the Commission does not allow the claim of GRIDCO to pass through the amount in its ARR for the FY 2023-24.

424. In its additional submission, GRIDCO has submitted for pass through of additional power purchase cost in its ARR for FY 2023-24. The details are discussed in following paragraphs.

**Additional Power Purchase Cost for Teesta-V power station of NHPC:**

425. GRIDCO has submitted that the Govt. of Sikkim, vide Gazette Notification No.284 dated.18.07.2022 has notified “*Sikkim Payment for Ecosystem Services Rules, 2022*” w.e.f 18.07.2022. As per the Rules, the user agency/Industries including Hydropower Stations/Projects are required to pay fees for Ecosystem Services for the consumptive or non-consumptive usage of any water source for commercial purpose. The Forest & Environment Department, Govt. of Sikkim has raised bill amounting to Rs.44,61,06,681/- towards water usage charges for commercial purposes by NHPC for a

period from 18.07.2022 to 30.09.2022. As per CERC Tariff Regulations, the generating company shall recover the statutory charges imposed by the State and Central Government. Accordingly, NHPC on 24.11.2022 have raised invoices amounting to Rs.9,18,53,366/- to GRIDCO based on the share allocation of 20.59% from Teesta-V Power Station. In view of above, GRIDCO prays the Commission to allow the already paid amount of Rs.9,18,53,366/- for July'22 to Sep'22 along with an amount of Rs.18 Crore (approximately) for the period from Oct'22 to March'23 and Rs. 36 Crore for FY 2023-24 as additional power purchase cost in the GRIDCO's ARR for FY-2023-24. After scrutiny of the above proposal of GRIDCO, the Commission allows only Rs.9.19 Crore as pass through in the ARR of GRIDCO as the said amount has already been paid by GRIDCO.

**Additional Power Purchase Cost of M/s. GKEL**

426. GRIDCO has submitted that in compliance to CERC Order dated 04.02.2020 in Petition No.115/MP/2019 and subsequent Order dated 04.04.2022 in Petition No.498/MP/2020, an amount towards differential fixed charges for FY 2015-16 and FY 2016-17 as per revised PAFM%/PAFY% issued by SLDC on 03.03.2020 and 02.08.2022, was computed to be Rs.107.16 Crores (excluding Late Payment Surcharges). GRIDCO has challenged the aforesaid CERC Orders before Hon'ble APTEL vide Appeal No.254 of 2021 and Appeal No.207 of 2022 and matters are sub-judice. However, as per APTEL's Interim Order dated 27.05.2022 in Appeal No. 207 of 2022, an interim payment of Rs.100 Crore has been made by GRIDCO on 03.06.2022 and 02.07.2022 respectively. Therefore, GRIDCO has requested the Commission to allow the aforementioned amount of Rs.100 Crore as pass through in its ARR for FY 2023-24. After scrutiny of the above proposal of GRIDCO, the Commission allows Rs.100 Crore as pass through in the ARR of GRIDCO as the said amount has already been paid by GRIDCO.

**Additional Power Purchase Cost of M/s. Vedanta Ltd**

427. GRIDCO has submitted that as per the OERC's Order dated 22.06.2020 in Case No. 68 of 2018, GRIDCO was directed to reconcile the arrear amount against power supplied by M/s Vedanta Ltd. for the period from FY 2010-11 to FY 2020-21. Accordingly, GRIDCO has worked out an amount of Rs. 140.19 Crore (provisional) payable by GRIDCO Ltd. to M/s Vedanta Ltd. (net of recast cost of power supplied to GRIDCO less compensation payable by M/s. Vedanta Limited towards non/short supply of

power). The payment of aforementioned amount to M/s Vedanta Ltd. will be made after signing of joint reconciliation statement by both the parties. GRIDCO has prayed the Commission to allow Rs. 140.19 Crore as pass through in the ARR of GRIDCO for FY 2023-24. After scrutiny of the above proposal of GRIDCO, the Commission does not allow the said amount as pass through in the ARR of GRIDCO, since the reconciliation statement has not yet been signed by both the parties and GRIDCO also has not paid the same amount to M/s. Vedanta Ltd.

#### **Additional Power Purchase Cost of M/s. JITPL**

428. GRIDCO has submitted that M/s. JITPL has challenged the MoU with Government of Odisha and PPA with GRIDCO before the Hon'ble High Court of Orissa in W. P. (C). No. 18150/2018. As per the interim stay Order dated 16.05.2019 of Hon'ble High Court, M/s. JITPL was not supplying power to the State since 22.05.2019. Based on the proposal of GRIDCO, the Commission has not considered any drawal by GRIDCO from M/s. JITPL during the FY 2022-23. However, as per interim Order dated 29.04.2022 of Hon'ble High Court of Orissa, JITPL has started supplying power to GRIDCO @ Rs.3.36 paise per unit along with 50% of the ISTS transmission cost (subject to the cap of Rs.5 crore). Accordingly, GRIDCO has paid Rs.88.27 Crore towards energy charges and Rs.5 Crore towards transmission charges for the power purchased from by M/s JITPL for the period from April,2022 to October,2022. GRIDCO has requested the Commission to consider the same as pass through in its ARR for FY 2023-24. After scrutiny of the above proposal of GRIDCO, the Commission does not allow the said amount as pass through in the ARR of GRIDCO for FY 2023-24 as the matter is still sub-judice and the same shall be considered by the Commission after issuance of final judgment by the Hon'ble Court.

#### **Additional Power Purchase Cost of OPGC (Unit 3&4) due to Revision of Tariff:**

429. GRIDCO has submitted that the OERC, vide its Order dated 07.01.2023 in Case No.96/2021, has determined the tariff of Units-III&IV (2x660MW) of OPGC from the COD of the generating units upto FY 2023-24. In the said order the Commission has stipulated that the tariff of OPGC, so determined is valid from 03.07.2019 i.e. the COD of Unit-III to 31.03.2024 and OPGC will submit the revised bills as per GRIDCO's share of fixed cost month-wise basing on the approved Annual Fixed Charges and the month-wise Energy Charge as per formula given in the OERC Generation Tariff Regulations. Accordingly, GRIDCO has provisionally computed the differential amount

Rs.598.98 Crore upto the month of March, 2023. GRIDCO has prayed the Commission to allow the same as pass through in its ARR for the FY 2023-24. After scrutiny of the above proposal of GRIDCO, the Commission observed that OPGC, vide invoice dated 14.03.2023, raised the arrear bills amounting to Rs.445.03 Crore towards differential amount pertaining to the period from the COD of the Unit-III upto the month of February, 2023 which is to be paid by GRIDCO. Therefore, the Commission allows the amount of Rs.445.03 Crore towards arrear payment of OPGC on account of tariff revision, as pass through in the ARR of GRIDCO for the FY 2023-24.

**Reimbursement to OPGC during FY 2023-24 as pass through**

430. In its application GRIDCO has considered Year-end Charges of Rs. 25.76 Crore in the tariff of OPGC Stage-I (Units-I&II) for the FY 2023-24 considering the actual Year-end Charges paid during 1<sup>st</sup> half of the FY 2022-23. The Commission, while passing the order on the ARR and Tariff application of OPGC Stage-I (Units-I&II) for the FY 2023-24 in Case No.75 of 2022, has allowed an amount of Rs. 25.05 Crore provisionally towards Year-end charges to be reimbursed by GRIDCO during the FY 2023-24. The Commission approves the same as pass through in the ARR of GRIDCO for the FY 2023-24 and details are given in Table below.

**Table-54**

Sl.No.	Particulars	OERC Approval for FY 2023-24 (Rs. in Crore)
1	Electricity Duty	14.57
2	Water Cess and Water Charges	9.22
3	Energy Compensation Charges	0.00
4	Tax and Cess on Land	0.25
5	SOC and MOC for SLDC	0.39
6	ERPC Charges	0.16
7	Annual Inspection Fees	0.16
8	Income Tax	0.00
9	ARR and Tariff Petition Fees	0.30
10	Water Conservation Fund	0.00
	<b>Total</b>	<b>25.05</b>

431. Similarly, GRIDCO, in its application, has considered Year-end Charges of Rs. 39.65 Crore in the tariff of OPGC Stage-II (Units-III&IV) for the FY 2023-24 considering the actual Year-end Charges paid during 1<sup>st</sup> half of the FY 2022-23. After scrutiny, the Commission allows an amount of Rs. 35.30 Crore provisionally towards Year-end charges of OPGC Units-III&IV to be reimbursed by GRIDCO during the FY 2023-24,

which consists of Rs. 34.08 Crore towards Electricity Duty on Auxiliary Consumption and Rs.1.21 Crore towards SLDC Charges. The Commission approves the same as pass through in the ARR of GRIDCO for the FY 2023-24

**Reimbursement to OHPC during FY 2023-24 as pass through**

432. The Commission while passing the order in ARR and Tariff application of OHPC for the FY 2023-24 in Case No.74 of 2022 has allowed an amount of Rs.16.81 Crore provisionally for reimbursement by GRIDCO for the FY 2023-24. The Commission approves the same as pass through in the ARR of GRIDCO for the FY 2023-24 and details are given in the Table below.

**Table –55**

**(Rs. in Cr.)**

<b>Particulars</b>	<b>RHEP</b>	<b>UKHEP</b>	<b>BHEP</b>	<b>HHEP</b>	<b>CHEP</b>	<b>UIHE P</b>	<b>Total</b>
(a) License fee for use of water for generation of electricity	0.893	1.414	2.011	1.163	0.833	3.335	9.649
(b) ED on Aux. Consumption	0.289	0.458	0.651	0.376	0.270	1.079	3.122
(c) SLDC charges							1.547
(d) Application fees and publication expenses							0.270
(e) ERPC Charges							0.160
(f) Reimbursement of Income tax paid during FY 2021-22 minus excess Income tax reimbursed earlier							2.060
<b>Total</b>							<b>16.808</b>

433. After due scrutiny, the Commission has approved only Rs.896.00 Crore as pass through in the ARR of GRIDCO for FY 2023-24 against Rs.2068.04 Crore as proposed by GRIDCO. In this order the Commission had disallowed many costs proposed by GRIDCO as those are either too early to consider as pass through in the ARR of GRIDCO for FY 2023-24 or has already been trued up in the accounts upto FY 2021-22 or to be trued up in the accounts for the FY 2022-23. Accordingly, the pass-through expenses proposed by GRIDCO and approved by the Commission for FY 2023-24 is summarized in the table given below:

**Table-56**

**Pass Through Expenses approved for FY 2023-24**

**(Rs Cr.)**

<b>Particulars</b>	<b>Proposed by GRIDCO</b>	<b>Approved by the Commission</b>
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<b>Particulars</b>	<b>Proposed by GRIDCO</b>	<b>Approved by the Commission</b>
Additional power purchase cost of OPGC Stage-I (Units 1 &2) for FY 2022-23 (Apr-Sep'22)	11.56	0.00
Additional power purchase cost of OPGC Stage-II (Units 3 & 4) for FY 2022-23 (Apr-Sep'22)	14.82	0.00
Additional power purchase cost of OPGC Stage-I (Units 1 &2) for FY 2023-24	76.11	0.00
Differential power purchase cost of NTPC Stations for Apr' 22 to Sept'22	348.11	0.00
Payment made by GRIDCO to KBUNL as per the OTS reached between GRIDCO & KBUNL on 21.05.2022	295.00	0.00
Ash Transportation Charges Claimed by NTPC as per CERC Order dated 28.10.2022	229.63	229.63
Additional cost towards STU/Scheduling Charge, Safeguards Duty Claims of Solar generator (M/s. Azure Power) and Refund of Excess Rebate availed from M/s. Raajratna Energy Ltd.	37.96	24.09
Additional power purchase cost in respect of drawal of power from Non-Solar sources	49.10	0.78
Additional Cost for Teesta-V power station of NHPC (towards wage revision)	10.12	10.12
Additional Cost for Teesta-V power station of NHPC (water consumption charges)	63.19	9.19
Additional Power Purchase Cost of M/s. GKEL	100.00	100.00
Additional Power Purchase Cost of M/s. Vedanta Ltd.	140.19	0.00
Additional Power Purchase Cost of M/s. JITPL	93.27	0.00
Additional Power Purchase Cost of OPGC	598.98	445.03
<b>Sub-Total</b>	<b>2068.04</b>	<b>818.84</b>
Reimbursement of Year-end Charges to OPGC Stage-I (Units-I&II)	-	25.05
Reimbursement of Year-end Charges to OPGC Stage-II (Units-III&IV)	-	35.30
Reimbursement of Year-end Charges to OHPC	-	16.81
<b>Total</b>	<b>2068.04</b>	<b>896.00</b>

### **GRIDCO FINANCE**

#### **Employees cost**

434. The Annual Revenue Requirement for the Financial Year 2023-24 filed by GRIDCO includes Rs.23.52 crore towards employees cost, which is given in the table below:-

Table – 57

Rs. In Crore

Sl. No	Particulars	Previous Year (FY 2021-22) (Audited)	Current Year (FY 2022-23)	Ensuing Year (FY 2023-24)	Assumptions
<b>A</b>	<b>Salary &amp; Allowance</b>				
1	Basic Pay	6.38	7.99	10.81	on account of Annual Increment including pay of new recruitee
2	Grade Pay	-	-	-	
3	Dearness Allowance	1.50	2.49	4.86	45% on Basic Pay
4	House Rent Allowance	2.32	3.29	2.01	Ratio of FY 2022-23 excluding arrear
5	Other Allowance	0.14	0.12	0.13	5% annual growth
6	Over-time	-	-	-	
7	Bonus	-	-	-	
	<b>Sub-total (A)</b>	<b>10.34</b>	<b>13.90</b>	<b>17.82</b>	
<b>B</b>	<b>Additional Employee Cost</b>				
1	Wage/Salary revision if any	-	-	-	
2	Contractual Engagement	0.49	0.29	0.34	20% annual growth
3	Out Sources Engagement	0.48	0.88	1.06	20% annual growth
4	others if any	-	-	-	
	<b>Sub-total (B)</b>	<b>0.97</b>	<b>1.17</b>	<b>1.40</b>	
<b>C</b>	<b>Other Employee Cost</b>				
1	Medical Expenses (allowance and Reimbursement)	0.82	0.45	0.49	10% annual growth
2	Leave Travel Concession		0.018	0.60	
3	Interim Relief to Staff	-	-	-	
4	Encashment of Earned Leave	-	-	-	
5	Honorarium	0.06	0.07	0.06	
6	Ex-gratia	0.11	0.17	0.18	10% annual growth
7	Staff Welfare Expenses	-	0.0081	0.17	10% annual growth
8	Miscellaneous	-	0.157	0.31	10% annual growth
	<b>Sub-total (C)</b>	<b>0.99</b>	<b>0.87</b>	<b>1.82</b>	
<b>D</b>	<b>Terminal Benefits</b>				

Sl. No	Particulars	Previous Year (FY 2021-22) (Audited)	Current Year (FY 2022-23)	Ensuing Year (FY 2023-24)	Assumptions
1	Pension	0.80	0.72	0.76	5% annual growth
2	Gratuity	-	-		
3	Leave Salary	0.55	0.63	0.67	5% annual growth
4	Other (including contribution to NPS)	0.36	0.96	1.06	10% annual growth
	<b>Sub-total (D)</b>	<b>1.71</b>	<b>2.32</b>	<b>2.48</b>	
<b>E</b>	<b>Total Employees Cost (A+B+C+D)</b>	<b>14.01</b>	<b>18.25</b>	<b>23.52</b>	
<b>F</b>	Less: Employees Cost Capitalised	-	-	-	
<b>G</b>	<b>Net Employee Cost (E- F)</b>	<b>14.01</b>	<b>18.25</b>	<b>23.52</b>	

### Basic Pay + GP

435. GRIDCO in the reply to queries of the Commission submitted that the actual cash outflow on Basic Pay + GP from April 2022 to November 2022 (for a period of 8 month) was Rs.3.68 Crore. The Basic pay and GP for FY 2022-23 is extrapolated to arrive at Basic Pay of Rs. 8.99 cr which is approved for FY 2023-24. The calculation is shown in the following table:

**Table-58**

(Rs. Cr.)

Basic & GP From Apr 22 to Nov 22	5.82
Average per month	0.73
Prorated for 2022-23	8.73
Approved for 2023-24 (3% Annual Increment)	8.99

### Dearness Allowance:

436. The Govt of Odisha implemented the 7<sup>th</sup> Pay Commission report with effect from 01.01.2016. The DA was also changed as per the 7<sup>th</sup> pay recommendations and the following table shows the notified DA by Govt of Odisha and projected DA thereof for FY 2023-24.

**Table-59**

Effective Date	Rate	Status
01.01.2016	nil	Approved By GoO
01.07.2016	2%	Approved By GoO
01.01.2017	4%	Approved By GoO
01.07.2017	5%	Approved By GoO
01.01.2018	7%	Approved By GoO

<b>Effective Date</b>	<b>Rate</b>	<b>Status</b>
01.07.2018	9%	Approved By GoO
01.01.2019	12%	Approved By GoO
01.07.2019	17%	Approved By GoO
01.07.2021	31%	Approved By GoO
01.01.2022	34%	Approved By GoO
01.07.2022	38%	Approved By GoO
01.01.2023	42%	Projected
01.07.2023	45%	Projected
01.01.2024	48%	Projected

As per the above table the DA rate for FY 2023-24 is assumed to be 45%.

### **House Rent Allowance**

437. GRIDCO in the reply to queries of the Commission submitted that the actual cash outflow on HRA from April 2022 to November 2022 (for a period of 8 month) was Rs.2.91 Crore. It is observed that during the month of April 2022 Rs. 0.69 crore and during the month June 2022 Rs. 1.62 crore was paid as arrear due to implementation of HRA revision. Taking such aspect into account the commission calculate and approves the HRA in the following manner.

**Table-60**

	<b>Rs. in Crore</b>
HRA paid from Apr 22 to Nov 22	2.91
Less: Arrear	2.09
HRA from Apr 22 to Nov 22	0.82
Monthly average	0.10
Prorated for 2022-23	1.23
Approved for 2023-24 (3% Annual Increment)	1.27

### **Terminal Liability**

438. Terminal Liability has been allowed as per the actual cash outgo basis taking into account the actual payment to be made. GRIDCO has projected Rs. 2.48 crore on account of the payment of pension, Gratuity, Leave salary and Employer's contribution of the NPS scheme. The same is allowed to be passed on to the tariff for FY 2023-24.
439. Medical reimbursement and all other expenses items proposed under the Employee cost have been allowed.
440. With the above principle, the approved employees cost for FY 2023-24 is shown in table below:-

**Table – 61**

<b>Sl No</b>	<b>Particulars</b>	<b>Proposed</b>	<b>Approved</b>
<b>A</b>	<b>Salary &amp; Allowance</b>		
1	Basic Pay and Grade pay	10.81	8.99
2	Dearness Allowance	4.86	4.05
3	House Rent Allowance	2.01	1.27
4	Other Allowance	0.13	0.13
	<b>Sub-total (A)</b>	<b>17.82</b>	<b>14.44</b>
<b>B</b>	<b>Additional Employee Cost</b>		
1	Contractual Engagement	0.34	0.34
2	Out Sources Engagement	1.06	1.06
	<b>Sub-total (B)</b>	<b>1.40</b>	<b>1.40</b>
<b>C</b>	<b>Other Employee Cost</b>		
1	Medical Expenses (allowance+Reimbursement)	0.49	0.49
2	Leave Travel Concession	0.60	0.60
3	Honorarium	0.06	0.06
4	Ex-gratia	0.18	0.18
5	Staff Welfare Expenses	0.17	0.17
6	Miscellaneous	0.31	0.31
	<b>Sub-total (C)</b>	<b>1.82</b>	<b>1.82</b>
<b>D</b>	<b>Terminal Benefits</b>		
1	Pension	0.76	0.76
2	Gratuity		
3	Leave Salary	0.67	0.67
4	Other (including contribution to NPS)	1.06	1.06
	<b>Sub-total (D)</b>	<b>2.48</b>	<b>2.48</b>
<b>E</b>	<b>Total Employees Cost (A+B+C+D)</b>	<b>23.52</b>	<b>20.14</b>
<b>F</b>	Less: Employees Cost Capitalised	-	
<b>G</b>	<b>Net Employee Cost ( E- F)</b>	<b>23.52</b>	
	<b>TOTAL</b>	<b>23.52</b>	

441. The Commission approves an amount of Rs.20.14crore towards employees cost for FY 2023-24 as against proposed amount of Rs.23.52 crore.

### **Repair Maintenance**

442. During Financial Year 2023-24, GRIDCO have proposed an amount of Rs.0.81 crore towards repair & maintenance under the head AMC of computers, vehicles, furniture and office equipment. The Commission approves an amount of Rs.0.81 crore as a pass through in the ARR for FY 2023-24.

### **Administration & General Expenses**

443. During Financial Year 2023-24, GRIDCO has proposed an amount of Rs. 13.07 crore under the head Administrative and General Expenses, inclusive of an amount of Rs.1.90 crore towards license fee payable to OERC, Professional charges of Rs. 7.07crore,

communication expenses of Rs 0.05 crore, conveyance and travelling Rs.1.39 crore and Miscellaneous expenses of Rs. 2.54 crore. The Commission considers the approved cost of Rs.3.53 crore towards normal A&G last year and factoring in the expected annual inflation of (+) 5.0% for FY 2023-24, the amount works out to Rs.3.71 crore. Over and above the amount, the licence fee applicable for FY 2023-24 amounting to Rs.1.90 crore and ERPC membership fees/ Fund of Rs.0.18 crore are also allowed. The details of such is given in the following table:

**Table-62**  
**A&G Expenses for 2023-24**

Description	Rs. in Crore
Normal A&G approved for FY 2022-23	3.53
Annual Inflation for 2023-24@ 5%	0.18
Normal A&G approved for FY 2023-24	3.71
License Fees for 2023-24	1.90
ERPC membership fees/ Fund	0.18
Total A&G for 2023-24 (Approved)	5.79

444. Thus, the Commission approves an amount of Rs.5.79 crore towards Administration and General Expenses for FY 2023-24 with a rider that GRIDCO shall make all endeavours to reduce the A&G costs by prudent management of resources.

### **Depreciation**

445. Under this head GRIDCO has proposed Rs.1.31 crore towards the depreciation on fixed assets (vehicle, furniture and office equipment etc.) for the FY 2023-24. The Commission approves the same as pass through in the ARR of GRIDCO for the FY 2023-24.

### **Interest and Financial Charges**

446. The proposal of GRIDCO on Interest and Financial Charges as submitted in Format F-2 is shown in the following table:

**Table-63**

Sl No	Particulars	Rate of int. (%) 01-04-22	Ensuing Year (FY 2023-24)				
			Opening Balance	Interest		Closing Bal.	
			Principal	Due	To be Paid	Principal	Interest
A							
1	State Govt.(WCL)		-	-	-	-	-
2	St.Govt (OPGC Adj.)		-	-	-	-	-

Sl No	Particulars	Rate of int. (%) 01-04-22	Ensuing Year (FY 2023-24)				
			Opening Balance	Interest		Closing Bal.	
			Principal	Due	To be Paid	Principal	Interest
3	NTPC (Govt.Bonds)		-	-	-	-	-
	Sub-total		-	-	-	-	-
B	Availed During FY 2009-10						
4	Union Bank STL- V		-	-	-	-	-
	Sub-total		-	-	-	-	-
C	Availed During FY 2010-11						
5	IOB_I - 200_2010-11		-	-	-	-	-
	Sub-total		-	-	-	-	-
D	Availed During FY 2011-12						
7	Bond PF/2012-13 (140 cr)		-	-	-	-	-
	Sub-total		-	-	-	-	-
E	Availed During FY 2013-14						
8	GRIDCO Bond 2013-127.50cr	8.79%	31.87	1.16	1.98	-	-
9	Odisha Gramya Bank II 136cr	0.00%	-	-	-	-	-
10	Bank of India III 100 cr	0.00%	-	-	-	-	-
	Sub-total		31.87	1.16	1.98	-	-
F	Availed During FY 2014-15						
11	Bank of India IV 300 cr	7.25%	-	-	-	-	-
12	OHPC Loan 619 cr	4.60%	619.00	46.42	46.42	619.00	108.51
	Sub-total		619.00	46.42	46.42	619.00	108.51
G	Availed During FY 2015-16						
13	Canara V -100 2015-16	0.00%	-	-	-	-	-
14	OMC TL-II_ & III 1500cr_2014-16	5.10%	-	-	-	-	-
15	Bank of India V 500 cr	7.25%	203.70	13.75	13.75	141.18	-
16	Andhra IV - 200cr	0.00%	-	-	-	-	-
	Sub-total		203.70	13.75	13.75	141.18	-
H	Availed During FY 2016-17						
17	Union Bank- VIII 300 2016-17	7.20%	-	-	-	-	-
18	Union Bank- IX 500 2016-17	7.20%	114.77	5.80	5.80	14.81	-
19	Canara Bank VI 200 cr 2016-17	0.00%	-	-	-	-	-
20	Uco Bank 300 Cr 2016-17	7.30%	56.46	2.37	2.37	-	-
21	Andhra V - 200cr 2016-17	7.20%	60.59	3.55	3.55	20.63	-
22	Odisha GB III 25cr	7.20%	16.12	1.10	1.10	13.42	-
	Sub-total		247.94	12.82	12.82	48.86	-
I	Availed During FY 2017-18						
23	IOB II - 300 2017-18	7.45%	103.79	6.67	6.67	53.75	-
24	Odisha Gramya Bank IV 40 CR	7.20%	18.03	1.06	1.06	9.99	-
25	Andhra Bank VI 100CR	7.20%	30.76	1.78	1.78	10.72	-
26	Canara Bank VII 100 CR	0.00%	-	-	-	-	-
27	Allahabad Bank V-150 CR	7.30%	46.30	2.67	2.67	14.98	-
	Sub-total		198.88	12.18	12.18	89.44	-
J	Availed During FY 2018-19						
28	Bank of India VI 300 cr	7.35%	107.90	5.66	5.66	29.66	-
29	Odisha Gramya Bank V 35 CR	7.20%	19.70	1.22	1.22	12.62	-
30	Canara Bank VIII 200 CR	0.00%	-	-	-	-	-
31	Canara Bank IX 200 CR	0.00%	-	-	-	-	-
32	Andhra Bank VII 200CR	7.20%	65.46	3.96	3.96	25.50	-
	Sub-total		193.06	10.84	10.84	67.78	-
K	Availed During FY 2019-20						
33	Canara Bank X 200 CR	0.00%	-	-	-	-	-
34	Andhra Bank VIII 300CR	7.20%	220.60	15.94	15.94	160.60	-

Sl No	Particulars	Rate of int. (%) 01-04-22	Ensuing Year (FY 2023-24)					
			Opening Balance		Interest		Closing Bal.	
			Principal	Due	To be Paid	Principal	Interest	
35	Andhra Bank IX 400CR	7.25%	314.14	23.32	23.32	234.10	-	
36	Canara bank XI 200 cr	0.00%	-	-	-	-	-	
37	Bank of India VII 300 cr	7.25%	235.09	16.30	16.30	175.09	-	
38	Bank of India VIII 100 cr	7.25%	81.67	5.70	5.70	61.63	-	
	Sub-total		851.50	61.26	61.26	631.42	-	
L	Availed During FY 2020-21							
39	Union Bank of India X 500 CR	7.25%	474.87	36.05	36.05	374.91	-	
40	Allahabad Bank - VI 500CR	7.05%	475.00	35.20	35.20	375.04	-	
41	Canara Bank XII 500 CR	0.00%	-	-	-	-	-	
42	Bank of India IX 500 CR	7.25%	458.24	32.38	32.38	358.28	-	
43	Punjab National Bank 600 CR	6.95%	569.98	42.50	42.50	449.98	-	
	Sub-total		1,978.09	146.13	146.13	1,558.21	-	
M	Availed During FY 2021-22							
44	Bank of Baroda TL-1	6.90%	39.98	1.77	1.77	-	-	
45	Bank of Baroda TL-2	6.90%	70.24	4.25	4.25	30.04	-	
46	Bank of Baroda TL-3	6.90%	62.10	3.54	3.54	20.70	-	
47	Bank of Baroda TL-4	6.90%	62.10	3.54	3.54	20.70	-	
48	Bank of Baroda TL-5	6.90%	143.58	10.35	10.35	105.54	-	
49	Bank of Baroda TL-6	6.90%	169.94	12.43	12.43	129.86	-	
50	Bank of Baroda TL-7	6.90%	458.33	33.83	33.83	358.37	-	
	Sub-total		1,006.27	69.71	69.71	665.21	-	
N	Availed During FY 2022-23							
51	REC ST Loan	8.00%	83.33	0.59	0.59	-	-	
52	Soft Loan from GoO	5.00%	500.00	25.00	25.00	500.00	-	
	Sub-total		583.33	25.59	25.59	500.00	-	
O	Add: Proposed Loan for FY 22-23(Jan-Mar)	8.00%	500.00	40.00	40.00	500.00	-	
P	Add: Proposed Loan for FY 23-24(Aprl-Mar)	8.00%	-	64.00	64.00	1,600.00	-	
	Sub-total		500.00	104.00	104.00	2,100.00	-	
	<b>TOTAL (A+B+..+P)</b>		<b>6,413.64</b>	<b>503.86</b>	<b>504.68</b>	<b>6,421.10</b>	<b>108.51</b>	
Q	Add: Financial Charges (Inc Interest on SOD)		-	7.00	7.00	-	-	
R	Add: Guarantee Commission	0.50%		33.90	31.78		33.90	
	Grand Total (A to R)		6,413.64	544.76	543.46	6,421.10	142.41	
	Govt Guarantee Loan		5,211.31	431.85	432.67	5,302.10	-	
	Secured		5,794.64	457.44	458.26	5,802.10	-	
	Unsecured		619.00	46.42	46.42	619.00	108.51	
	Total		6,413.64	503.86	504.68	6,421.10	108.51	

447. In the tariff order for FY 2016-17 the Commission allowed interest on loans availed from 2008-09 to 2015-16 except interest on OHPC Bond. The Commission similarly allows the interest impact on loan availed for that period in subsequent ARR, based on the figure finalized as per the annual accounts.

448. The commission in earlier orders have observed that there is no need for GRIDCO to borrow further from banks, if it is able to collect the approved revenue from DISCOMs.

The inability of GRIDCO to collect such revenue has landed GRIDCO in a situation of borrowing from banks. The Commission in the tariff order 2017-18 observed that *GRIDCO in reality landed in deficit balance i.e. the revenue received from DISCOMs is not sufficient to discharge even power dues of the generators, which is quite alarming. If this situation persists, every year GRIDCO will resort to borrowing from Banks, the interest impact of which will be passed on to the consumer. Therefore, the Commission is not inclined to accept the interest liability on loan availed by GRIDCO for the year 2016-17, which is attributable to inability of GRIDCO to mobilize the internal resource by way of collection of BSP dues from DISCOMs. Hence, the interest impact on loan for the year 2016-17 has not been considered by Commission in determining the ARR for FY 2017-18. In this regard Para-279 of the ARR & BSP order for the FY 2016-17 may be referred. GRIDCO is advised to fill the gap from collection of arrears from the DISCOM Utilities.*

449. The commission observed that GRIDCO instead of collecting its dues from the erstwhile DISCOMs availed loan from the commercial institutions and the commission had taken a view not to allow interest on loan availed by GRIDCO after FY 2015-16. The commission in the current ARR is also continuing with the same approach of not allowing any interest on the loans availed by GRIDCO after FY 2015-16, for arriving at the interest cost to be passed on the in the ARR. The details of the interest on loan approved for FY 2023-24 is given in the following table:

**Table -64**

		<b>(Rs. Cr.)</b>
<b>Total Interest proposed for FY 2023-24</b>		<b>543.46</b>
Less disallowed:		
1	Interest on loan for the FY 2016-17	12.82
2	Interest on loan for the FY 2017-18	12.18
3	Interest on loan for the FY 2018-19	10.84
4	Interest on loan for the FY 2019-20	61.26
5	Interest on loan for the FY 2020-21	146.13
6	Interest on proposed loan for the FY 2021-22	69.71
7	Interest on proposed loan for the FY 2022-23	65.59
8	Interest on proposed loan for the FY 2023-24	64.00
9	Interest on OHPC loan	46.42
10	Financial charges and guarantee commission	38.78
Total Interest disallowed		527.73
<b>Total Interest allowed for FY 2023-24</b>		<b>15.73</b>

450. The Commission accordingly allows Rs. 15.73 crore towards interest and financial charges for FY 2023-24.

### **Return on Equity**

451. GRIDCO, in its application, has requested the Commission to allow Return on Equity (RoE) @16% pre-tax on its equity base of Rs. 2214.50 Crore, although RoE has not been considered while computing its ARR for the FY 2023-24.

452. The Commission observed that in past years Return on Equity is not being allowed in the ARR of GRIDCO. The Commission has explained the reasons for this at Para-425 to 427 of its ARR and BSP order for the FY 2009-10 dated 20.03.2009 passed in Case No. 62/2008, which is depicted below:

*“425. At the time of vesting of the transmission and distribution business with GRIDCO by the State Govt. on 01.04.1996, the Equity Share Capital was Rs.327.00 crore. During the subsequent years upto FY 2004-05, there were additional infusions of equity capital of Rs.165.98 crore by the State Govt. raising the total equity of GRIDCO to Rs.492.98 crore. At the time of de-merger of GRIDCO effective from 01.04.2005, the equity share capital of OPTCL was stated at Rs.60 crore, leaving the balance equity share capital with GRIDCO. The equity share capital issued to Govt. of Orissa was both in consideration of cash and other than cash. Therefore, the licensee claimed ROE @14% on the equity share capital of Rs.432.98 crore.*

*426. The Commission in earlier orders referred to the GoO Notification of 29.1.2003, wherein it has been stated that GRIDCO and OHPC should not be entitled to any return in equity till the sector becomes viable or FY 2005-06 whichever is earlier. Further, in partial modification of earlier notification, the Govt. of Orissa in its letter no. 5302 dtd. 6.5.2003 stated the following “GRIDCO and OHPC shall not be entitled to any Return on Equity (ROE) except in respect of the new projects commissioned after 01.04.2006 till the sector becomes viable or end of 2005-06 whichever is earlier.” The Commission would like to clarify that correspondence has been made with Govt. of Orissa to clarify the status of the notification dtd. 29.1.2003, as it has great impact on Tariff. Government while communicating their views/comment in their letter No.1704 dtd. 17.02.2009 in response to the Commission’s letter No.2807 dtd. 31.12.2008 have stated as under:*

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

*427. As regards infusion of capital for the new project, the Commission verified audited accounts of GRIDCO upto 2004-05. It is found that the addition of share capital shown in the balance sheet after 1996-97 includes only the grants received*

*from DFID towards R&M expenditure and rehabilitation assistance. As per Project Memorandum signed between Govt. of India and Govt of Orissa and DFID, the above amount has been shown under share deposit account pending allotment of shares for non-receipt of approval from Govt. of Orissa.”*

453. In view of the above, the Commission does not consider any RoE in the ARR of GRIDCO for the FY 2023-24.

#### **Other Income/ Miscellaneous Receipts**

454. GRIDCO has projected to earn an amount of Rs.51.94 Crore during the FY 2023-24 (at the existing approved rate of Rs.7.42/kWh) from the proposed sale of 70 MU to Long Term Customers like NALCO and IMFA for meeting their emergency & back-up power requirements as per the MOU signed with them. After scrutiny, the commission approves an amount of Rs.52.22 Crore as miscellaneous revenue of GRIDCO for the FY 2023-24 towards emergency power sale of 70 MU to the CGPs @ Rs.7.46/kWh.

#### **Carrying Cost on Regulatory Assets**

455. GRIDCO in its petition has prayed the Commission to allow the carrying cost on the Regulatory Gap left by the Commission. The Commission observed that after truing up of the accounts of GRIDCO for FY 2021-22, there is a net cumulative negative regulatory gap of Rs.1111.04 crore in the accounts of GRIDCO upto 31.03.2022. Considering the submission of GRIDCO, the Commission allows Rs.94.10 Crore as pass through in the ARR of GRIDCO for FY 2023-24 towards carrying cost on the regulatory gap of Rs.1111.04 crore considering the weighted average rate of interest of its existing loans as submitted by GRIDCO in its petition.

#### **BSP Surcharge on TPWODL**

456. The Commission has imposed a BSP surcharge on TPWODL @30 paise/kWh over and above the BSP on the total energy purchased by TPWODL from GRIDCO excluding the energy purchased towards sale to the industries above 80% load factor under tripartite agreement, which is payable to GRIDCO on quarterly basis. Accordingly, GRIDCO would earn an estimated revenue of Rs.386.58 crore during FY 2023-24 towards sale of projected energy of 12886 MU (13286 MU – 400 MU). The payment of this BSP surcharge shall not be treated similar to that of payment of BSP. It will not attract the provisions of rebate or DPS applicable for payment of normal BSP dues as mentioned in this order.

### **Revenue Earning from Sale of Power through Tripartite Agreement**

457. The Commission has allowed industry having CGP with CD above 20 MW willing to avail power from DISCOMs and operating at load factor more than 80% shall be allowed to draw power at the rate of Rs.5.00 per kVAh for all incremental energy drawal above 80% load factor. No overdrawal penalty shall be levied on them. For this purpose, the industry shall enter into a tripartite agreement with the concerned DISCOM and GRIDCO.
458. The Commission has estimated that a quantum of about 400 MU after consumption of power by the industries over 80% load factor in TPWODL area during FY 2023-24 under the above scheme. Out of the total revenue earning on account such sale to the industries through tripartite agreement, GRIDCO shall get 65 paise/kWh over and above the BSP and OPTCL will get transmission charges of 24 paise/kWh and balance amount shall remain with concerned DISCOM. Accordingly, it is estimated that GRIDCO will earn an incremental revenue of Rs.26.00 crore on this account. Other observation of the Commission in Case No. 25/2022 regarding this tripartite sale shall continue as such.

### **Receivables from DISCOMs**

459. GRIDCO in its petition submitted that it has outstanding dues to be received from DISCOMs towards securitized dues, NTPC Bond dues, Non-payment of BSP dues and Year End Adjustment Bills of DISCOMs. The Commission after undertaking the competitive bidding process for sale of Distribution Companies as envisaged under Section 20 of the Electricity Act, 2003 have now vested all the distribution utilities with new licensees such as TPCODL, TPNODL, TPWODL and TPSODL. The respective vesting orders for these companies deal with the segregation of the balance sheet as on the date of vesting by transfer of assets and liabilities to the new companies. Accordingly, all the outstanding dues of the GRIDCO will be dealt as per the provisions of the vesting orders.
460. The summary of the ARR of GRIDCO approved for the FY 2023-24 is given below:

**Table –65**  
**Revenue Requirement of GRIDCO for FY 2023-24**

**(Rs. in Cr.)**

	<b>Particulars</b>	<b>Approved for FY 2022-23</b>	<b>Proposed for FY 2023-24</b>	<b>Approved for FY 2023-24</b>
<b>A</b>	<b>Items of Expenses</b>			
	Cost of Power Purchase	9071.93	12593.78	11850.44
	Employee costs	13.25	23.52	20.14

	<b>Particulars</b>	<b>Approved for FY 2022-23</b>	<b>Proposed for FY 2023-24</b>	<b>Approved for FY 2023-24</b>
	Repair & Maintenance	0.85	0.81	0.81
	Administrative and General Expenses	5.59	13.07	5.79
	Depreciation	1.02	1.31	1.31
	Interest Chargeable to Revenue	39.53	543.46	15.73
	Carrying Cost on Regulatory Asset	-	-	94.10
	Return on Equity	0.00	0.00	0.00
	<b>Total Expenses</b>	<b>9132.17</b>	<b>13175.95</b>	<b>11988.32</b>
<b>B</b>	<b>Special Appropriation</b>			
	Amortization of Regulatory Assets	-	-	-
	Repayment of principal (Bank and Commercial Loans)	0	0	0
	Pass Through of Power Purchase Dues	147.46	2068.04	896.00
	<b>Total Special Appropriation</b>	<b>147.46</b>	<b>2068.04</b>	<b>896.00</b>
<b>C</b>	<b>Total Revenue Requirement (A+B)</b>	<b>9279.63</b>	<b>15243.99</b>	<b>12884.32</b>
<b>D</b>	Less: Miscellaneous Receipt	44.52	51.94	52.22
<b>E</b>	Less: Revenue from trading of surplus power	0	357.08	0
<b>F</b>	<b>Net Revenue Requirement</b>	<b>9235.11</b>	<b>14834.97</b>	<b>12832.10</b>
<b>G</b>	<b>Expected Revenue from DISCOMs</b>			
	(i) Through BSP	9213.95	11513.69	12163.00
	(ii) Surcharge from TPWODL @30 P/U	-	-	386.58
	(iii) Additional Revenue from TPWODL towards sale of power through TPA	-	-	26.00
<b>H</b>	<b>Total Expected Revenue</b>	<b>9213.95</b>	<b>11513.69</b>	<b>12575.58</b>
<b>I</b>	<b>GAP (+/-)</b>	<b>(-) 21.16</b>	<b>(-) 3321.28</b>	<b>(-) 256.52</b>

461. It is observed from above table that the Commission has estimated the net revenue requirement of GRIDCO to the tune of Rs.12832.10 Crore after adjustment of miscellaneous receipts of Rs. 52.22 Crore and GRIDCO would recover Rs.12575.58 Crore from the DISCOMs through Bulk Supply Price, BSP Surcharge and Sale of Power through Tripartite Agreement during the FY 2023-24 with a revenue deficit of Rs.256.52 Crore which will be factored in true up of GRIDCO.

#### **Truing up for FY 2021-22**

462. GRIDCO has filed the application for Truing Up of its accounts for FY 2021-22 in Case No.79 of 2022, which was heard along with its ARR & BSP application for the FY 2023-24. The Commission analyzed the said trueing up application along with the audited account of GRIDCO for FY 2021-22 and the observations of the Commission are given in the following paragraphs.

### **Power Purchase**

463. In the ARR & BSP order of GRIDCO for FY 2021-22, the Commission had approved 28791.96 MU of energy to be purchased by GRIDCO for State consumption, at an estimated procurement cost of Rs.8005.77 crore at the average rate of 278.06 P/U. The Commission had not considered drawal from some central thermal generating stations following the merit order despatch principle. The fixed costs of those power stations were also not considered in its ARR and the Commission had advised GRIDCO to take up the matter with Govt. of Odisha for payment of these fixed costs. It is understood that this could not be materialised and therefore, GRIDCO has paid the fixed costs of those power stations as per the PPA.
464. From the Truing up application of GRIDCO, it is observed that GRIDCO has drawn power from those power stations on the basis of real time operation due to various reasons such as non-availability of power from the approved sources due to forced outage/break down of units and/or forced injection of power from the thermal power stations to maintain technical minimum level of operation of generating units as per CEA/MoP (GoI) guidelines. In the said order, the Commission had also directed GRIDCO for trading of the available surplus power in the market following prudent commercial principles, after meeting the State requirement and to compensate its losses by earning of revenue through trading. Accordingly, GRIDCO has also purchased power from different tied up sources for trading purpose considering commercial viability.
465. It is observed from the submission of GRIDCO that it has procured total energy of 33641.44 MU during FY 2021-22 at the cost of Rs.10021.31 Crore (at an average rate of 297.88 P/U) and after meeting the State requirement, the surplus energy of 5036.19 MU was traded during FY 2021-22 at an average selling price of 408.81 P/U (against the average power procurement cost of 297.88 P/U). Accordingly, GRIDCO had gained an amount of about Rs.558.66 crore from trading of surplus power of 5036.19 MU. The revenue earned had helped GRIDCO to meet the fixed cost burden of central generating station, which were not allowed by the Commission in the ARR & BSP order for FY 2021-22 and after meeting the said fixed cost, the balance revenue earned by GRIDCO is to be accounted for reducing its regulatory assets.

466. In view of the above, the Commission considers the entire power procurement cost incurred by GRIDCO and revenue earned by it from trading during FY 2021-22 while truing up of its accounts.

#### **Other Costs**

467. The Commission analyzed the claim of interest on loan in the truing up petitions of GRIDCO for the FY 2021-22. The Commission in the tariff order for the FY 2015-16 had not allowed the interest on the loan from State Government. The Commission also observed that passing on Tariff burden to the consumers of the State on account of the interest on the loan availed by GRIDCO due to default of payment in BST and securitized dues of DISCOMs is unjustified. The Commission further observed that regarding the default of BSP dues by DISCOMs, GRIDCO and Govt. of Odisha could have played a proactive role in creating necessary climate of compliance by providing adequate administrative support. In view of these observations, the Commission allows Rs.75.2Cr. in this truing up petition towards interest on loan for the FY 2021-22 against Rs.741.11 Cr. as proposed by GRIDCO.

468. As regards the other elements such as employee cost(Rs.14.01 Cr.), R&M (Rs.0.64 Cr.) and depreciation (Rs.0.26 Cr.), the Commission allows the expenses as reflected in the audited accounts for the FY 2021-22 in the truing up petition. The Commission considers A&G expenses as a controllable cost and allows Rs.5.42 Cr. as approved in the ARR for the relevant year.

469. As regards to revenue from sale of power to DISCOMs, the Commission analyzed the audited accounts and now considers the revenue amounting to Rs.7922.97 Cr. from sale to DISCOMs as reflected in the audited accounts for the FY 2021-22 against the approved amount of Rs.8257.57 Cr. in ARR for FY 2021-22.

470. As regards to trading revenue, the earnings from UI/DSM and other income by GRIDCO, the Commission had not approved any amount in the ARR for FY 2021-22. The Commission analyzed the audited accounts and now considers the revenue from trading of Rs.2058.84 Cr, UI/DSM of Rs.45.18 Cr., CGP and other sales of Rs.134.47 Cr. and other Miscellaneous revenue of Rs.3.71 Cr. as reflected in the audited accounts for the FY 2021-22 totaling to Rs.10161.58 Cr. (after adjustment in P/L account of Rs.0.24 Cr.) in this truing up for the FY 2021-22.

471. Accordingly, the Commission now finalizes the truing up of accounts of GRIDCO for the FY 2021-22 as follows.

**Table -66**  
**Truing Up for FY 2021-22 (Rs. in crore)**

<b>Expenditure</b>	<b>OERC Approval (2021-22)</b>	<b>Actuals (Audited) (2021-22)</b>	<b>True Up Allowed (2021-22)</b>	<b>Difference (Approval-Actuals) (Rs. Cr.)</b>
Cost of Power Purchase	8,005.77	9,874.37	9,874.37	-1,868.60
Employee Costs	11.42	14.01	14.01	-2.59
Repair & Maintenance	0.7	0.64	0.64	0.06
Administrative & General Expenses	5.42	31.41	5.42	0.00
Interest chargeable to Revenue	75.2	741.11	75.20	0.00
Depreciation	1.33	0.26	0.26	1.07
Adj. in Statement of Profit & Loss towards Changes in Fair Value of Loans, Bonds & Debentures during FY(2020-21)	0	0		0.00
Bad Debts (FY 2021-22)	0		0	0.00
<b>Total Expenditure</b>	<b>8,099.84</b>	<b>10,661.80</b>	<b>9,969.90</b>	<b>-1,870.06</b>
Prior Period Adjustments	-	-		
Pass Through of Power Purchase Dues	190.15	-		
Previous Loss	-	-		
Return On Equity	-	-		
Repayment of Principal (Bank & Commercial Loans)	-	-		
<b>Total Cost</b>	<b>8,289.99</b>	<b>10,661.80</b>	<b>9,969.90</b>	<b>-1,679.91</b>
Revenue : Sale of Power to DISCOM	8,257.57	7,922.97	7,922.97	-334.60
Trading	0	2058.84	2058.84	2,058.84
UI/DSM	-	45.18	45.18	45.18
Other Income	44.52	3.71	3.71	-40.81
CGP & Other sales		134.47	134.47	
Adj. in Statement of Profit & Loss towards Changes in Fair Value of Bonds during FY (2021-22)	-	0.24	0.24	0.24
<b>Total Revenue</b>	<b>8,302.09</b>	<b>10,165.41</b>	<b>10,165.41</b>	<b>1,863.32</b>
<b>GAP allowed by OERC /Difference in Cost and Revenue (Loss as per Audited Annual Accounts) (B-C)</b>	<b>12.10</b>	<b>-496.39</b>	<b>195.51</b>	<b>183.41</b>
Less: Bad Debts	-			0
Less:Adj. in Statement of Profit & Loss towards Changes in Fair Value of Loans, Bonds & Debentures during FY 2019-20	-			
Add:Bad Debt written back	-			
<b>Add approved gap in ARR</b>	<b>-</b>	<b>-</b>		<b>12.10</b>
<b>True up on adjustment of approved gap in ARR</b>				<b>195.51</b>
<b>True up for the year</b>	<b>-</b>	<b>-</b>		<b>195.51</b>

<b>Expenditure</b>	<b>OERC Approval (2021-22)</b>	<b>Actuals (Audited) (2021-22)</b>	<b>True Up Allowed (2021-22)</b>	<b>Difference (Approval-Actuals) (Rs. Cr.)</b>
<b>Cumulative TRUE-UP GAP (up to 31.03.2021)</b>	-			<b>-1,306.55</b>
<b>Net Cumulative true up gap upto 31.03.2022</b>				<b>-1,111.04</b>

472. As can be seen from the above table that the cumulative gap as on 31.03.2022 after the truing up exercise is Rs.1111.04 crore. The Commission reiterates its earlier stand that in line with the previous BSP order, the Commission is not inclined to consider the amortization of regulatory assets of Rs.1111.04 crore as a pass through in the ARR. As stated in the previous BSP orders the amortized amount shall be funded from trading revenue, earnings from UI charges, other miscellaneous receipt and budgetary support from the Govt. of Odisha.

#### **Design for Bulk Supply Pricing**

473. The Commission has 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 Agreements (PPAs) 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 station 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 Agreements (BSAs) with GRIDCO. This is a past legacy. The allocation of power from a generator to a particular DISCOM shall be possible only when the PPAs would be executed between DISCOM(s) and the Generator(s), which is not the prevailing practice in the State. Therefore, the Commission has no alternative but to consider the pooled power purchase cost of GRIDCO while designing the BSP of DISCOMs.

474. OERC has been following a uniform retail tariff policy, which is in the overall interest of the consumers of the State. The retail tariff for each distribution licensee is based solely on its ARR and its expected revenue ought not to be considered in isolation. The Commission has taken into consideration the Annual Revenue Requirement and the expected source of revenue of the distribution utility in its area of operation safeguarding consumers' interest of the State and recovering the cost of electricity as

per 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 [Para 8.4(2)]. Only when distribution utilities show appreciable increase in operational efficiency by reducing AT & C losses, reward for efficiency of the distribution utility by a differential retail tariff may arise. This is not the case now. The benefit of differential Bulk Supply Price has been an accepted practice although the Intra-State transmission network along with ISTS forms backbone of power system of the State and serves the distribution network as a single system. Accordingly, the consumers of Odisha have been paying for the cost of this transmission system uniformly. Further, the industries are setup in the State depending upon the availability of raw materials, facility for transportation, ease of doing business and Govt. policies etc. However, one distribution utility would earn substantially higher revenue compared to other distribution utilities by virtue of concentration of industries in its area of operation. DISCOMs having higher percentage of LT consumers earns less revenue. Hence, it is just & fair/proper that Bulk Supply Price should be higher for the DISCOM(s) with higher concentration of HT/EHT industries than for those with lesser HT/EHT load. Therefore, with differential Bulk Supply Price across the distribution licensees, there could be uniform retail tariff in the State and at present there is no need to change the prevailing practice.

475. 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. Judicious, fair & transparent process is being exercised while determining the bulk supply price for distribution utilities, so that the revenue earned by the utilities are sufficient to meet all their expenses like the cost of power purchase (constitute a substantial part of their revenue requirement), the cost of employees, the interest burden and return on equity, etc.
476. The Commission has taken into consideration the amount of revenue that a distribution utility is likely to earn from sale of power to HT & EHT groups of consumers. Besides, the volume of sale to LT consumers is also an important criterion as the loss level is high at LT level and the expected revenue realisation is low. Thus, the Bulk Supply Price (BSP) is fixed in a manner that makes all the distribution utilities operationally stable and financially viable.

### **Determination of Bulk Supply Price (BSP)**

477. GRIDCO has proposed average BSP @ 380.64 P/U to be levied on the DISCOMs towards their purchase of power during FY 2023-24. The Commission has determined the BSP in such a way that the estimated revenue of DISCOMs shall be sufficient to pay the power purchase cost, the transmission charge including SLDC charges, meet the expenses towards establishment, maintenance and other allied expenses and also meet all statutory obligations.
478. The details of Bulk Supply Price as well as the energy requirement of each DISCOM as approved by the Commission are summarised in a table below:

**Table – 67**  
**Bulk Supply Price and Quantum of Energy for FY 2023-24**

<b>Name of the DISCOMs</b>	<b>Existing Bulk Supply Price approved for FY 2022-23 (P/U)</b>	<b>Quantum of Energy for sale during FY 2023-24 (MU)</b>	<b>Total Revenue for FY 2023-24 (Rs. Crore)</b>	<b>Bulk Supply Price approved for FY 2023-24 (P/U)</b>
TPCODL	300.00	11256.00	3433.08	305.00
TPNODL	321.00	7508.00	2515.18	335.00
TPWODL	360.00	13286.00	5181.54	390.00
TPSODL	227.00	4920.00	1033.20	210.00
<b>Total</b>	<b>312.34</b>	<b>36970.00</b>	<b>12163.00</b>	<b>329.00</b>

479. The above approved revenue is to be realized by GRIDCO from the DISCOMs. 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.

### **Demand Charges**

480. As usual in line with ARR of previous year, there shall not be any levy of separate maximum demand charges upto the permitted SMD in a month for the distribution licensee(s) for the FY 2023-24. 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 by the Distribution Licensee(s) @ Rs.250 per KVA per month, subject to the condition that the annual average SMD shall be limited to the SMD approved in the order. This is essential for proper planning of load and ensuring system stability. In case the annual average SMD is more than the approved SMD, then overdrawal quantum shall attract

the penalty @ Rs.250 per KVA per month, notwithstanding the fact that a licensee might have paid the SMD charges for exceeding the permitted SMD in any month.

### **Charges for Overdrawal of Energy**

481. In its application, GRIDCO has submitted that presently the over drawal of energy by DISCOMs is billed at the corresponding OERC approved applicable BSP rates in line with the judgment of Hon'ble APTEL dated 07.05.2018 passed in Appeal No. 55/2015 till the Regulations on Deviation Settlement Mechanism (DSM) is pronounced by OERC and implemented in the State of Odisha. However, GRIDCO has proposed that any excess drawl of energy during a month over and above the approved drawal by a Distribution Licensee and Retail Supply Utility would be payable at actual power purchase cost incurred for such excess drawal (including transmission charges, deviation charges & transmission loss etc.) or at approved BSP rate for each DISCOM whichever is higher on a monthly basis applicable to the respective DISCOMs.
482. The Commission observed that it has already framed guidelines/regulations for intra-state ABT and in the 1<sup>st</sup> phase introduced same for transaction between GRIDCO and DISCOMs. The issue of overdrawal / underdrawal of energy would be adjusted through un-scheduled interchange mechanism. Accordingly, the schedule energy shall be billed by GRIDCO and paid by DISCOMs as per the present Tariff Order of the Commission and any deviation from the scheduled energy shall be billed by SLDC and paid by DISCOMs as per the prevalent UI rate. However, the Commission further observed that being aggrieved by the order dated 05.04.2014 of the Commission in Case No. 40/2013 on the matter relating to settlement of dues between GRIDCO and DISCOMs in respect of payment towards over drawal energy by DISCOMs, GRIDCO had made an appeal before APTEL. The APTEL in their judgment dated 07.05.2018 in Appeal No. 55/2015 and IA No. 75/2015 have pronounced that in absence of any DSM Regulations for the State, the deviation energy may be settled amicably between GRIDCO, DISCOMs & SLDC and paid at BSP rate for the period from 17.02.2014 onwards till Intra-State DSM Regulations comes into effect. The SLDC will stop billing to DISCOMs on account of deviation of energy henceforth till DSM Regulations is pronounced by OERC and also SLDC is to withdraw the DSM bills so raised since 17.02.2014. The Intra-State DSM Regulations will be notified by the Commission shortly and till implementation of DSM Regulations in the State, the quantum of overdrawl of energy

by DISCOMs shall be billed by GRIDCO at the applicable BSP determined by the Commission.

### **Rebate**

483. After examining the proposal of GRIDCO for revision of rebate policy, the Commission decided the following rebate provisions on prompt payment of Bulk Supply dues by DISCOMs to GRIDCO. For payment of BSP bills by the DISCOMs to GRIDCO through Letter of Credit / RTGS / NEFT or by cash within a period of five (5) working days (excluding holidays under the N.I. Act., 1881), a rebate of 1.5% shall be allowed on current dues. If the payments are made after five working days, but within a period of thirty (30) days of presentation of bills, a rebate of 1% shall be allowed.

### **Delayed Payment Surcharge**

484. In case payment of bills by the distribution utilities is delayed beyond a period of thirty (30) days from the date of presentation of bill, a late payment surcharge at the rate of 1.25% per month shall be levied by GRIDCO Ltd. on the unpaid amount.

### **Duty and Taxes**

485. The Commission approves that statutory 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.
486. The Bulk Supply Price in respect of GRIDCO as indicated below will become effective from **1<sup>st</sup> April, 2023** and shall continue until further orders.

**Table -68**

<b>Name of the DISCOMs</b>	<b>Paise/ Kwh</b>
TPCODL	305.00
TPNODL	335.00
TPWODL	390.00
TPSODL	210.00

### **Action to be taken by GRIDCO**

487. GRIDCO, being the Single Buyer entity, has a major role to play in optimizing Power Purchase Cost which constitute about 70% of the Average Cost of Supply. Hence, GRIDCO is directed to provide details of the following issues to the Commission within a period of three months:

- a) GRIDCO, being the State designated entity/single buyer entity for procurement of power, is to submit the long term projection of power requirement and availability of power from various sources for a period of next 10-15 year time frame, considering the existing / likely to be executed PPAs for commissioned / likely to be commissioned power projects and also resource adequacy plan of CEA to meet the projected demand/load growth (peak demand & energy requirement) and further to meet RPO target of the State in line with the notification of Government of India (likely revision of relevant Regulations of OERC), in the prescribed formats annexed with this order.
- b) GRIDCO is to submit a report on its action plan and steps being taken to optimize Power Purchase Cost.
- c) GRIDCO is to furnish the revenue earned by it during FY 2022-23 from the incentive schemes approved for the industries with and without CGP including steel industries by selling of surplus power through tripartite agreement.
- d) GRIDCO is to submit a report on action taken/steps being taken for refinancing of the loan to reduce interest burden on ultimate consumer of the State.
- e) GRIDCO, being Nodal Agency for development and promotion of RE generation in the State (as per Odisha Renewable Energy Policy 2022), is to furnish a report on status and its action plan for intra-state development of RE generation (solar, wind, biomass etc.) and Energy Storage System (Battery Energy Storage System & Pumped Storage System), expected intra-state capacity addition from various RE sources and expected time frame for execution of such RE projects / Energy Storage Systems.
- f) GRIDCO is to submit its plan to meet Hydro Power Obligation (HPO), Wind Power Obligation (WPO) and Energy Storage Obligation (ESO) trajectory as per notification of Ministry of Power, Govt. of India.
- g) GRIDCO is to submit the RPO compliance status of the obligated entities in the State.
- h) GRIDCO is to submit the amount of outstanding dues and arrears of erstwhile DISCOMs recovered through four DISCOMs of Tata power (TPNODL, TPWODL, TPSODL & TPCODL) as per vesting order and the outstanding dues recovered through One Time Settlement (OTS) Scheme and paid to GRIDCO.
- i) GRIDCO has State's share of power from the IPPs operating in the State (M/s Vedanta, M/s GMR, M/s JITPL, M/s NBVL). As per the Commission's estimation, the State's share of power from these IPPs is higher than the projected drawal of

power for the FY 2023-24. GRIDCO can avail the entire quantum of State's share of power from above IPPs as and when required in case of unexpected scenarios due to outage of large size machines and can also sale/ trade the surplus power in the power exchanges to earn revenue which would be utilized to compensate the interest burden of the outstanding loans.

488. The application of GRIDCO in Case No.78 of 2022 and Case No.79 of 2022 are disposed of accordingly.

Sd/-  
**(S.K.Ray Mohapatra)**  
**Member**

Sd/-  
**(G. Mohapatra)**  
**Member**

**Format-I  
Long-term Projection of Demand and Availability**

	2023-24		2024-25	-----	2033-34		-----
Sources of Power	Based on executed/likely to be executed PPAs				Based on executed/likely to be executed PPAs		
	Energy Requirement (MU) and Peak Demand (MW)	Availability of power to meet Energy Requirement (MU) of the State			Energy Requirement (MU) and Peak Demand (MW)	Availability of power to meet Energy Requirement (MU) of the State	
Thermal							
Large Hydro							
Solar							
Wind							
Small Hydro							
Biomass							
ESS:							
(a) PSP							
(b) BESS							

**Format-II**

**Requirement and Availability of Different Sources of Renewable Energy**

	2023-24								-	2033-34							
Source of Power	RPO Requirement				Availability of RE power to meet RPO Requirement (in %)					RPO Requirement				Availability of RE power to meet RPO Requirement (in %)			
	HPO	WPO	ESO	OTHER	HPO	WPO	ESO	OTHER		HPO	WPO	ESO	OTHER	HPO	WPO	ESO	OTHER
S																	
W																	
SH																	
BM																	
ESS:																	
PSP																	
BESS																	

Note: S: Solar, W: Wind, BM: Biomass, SH: Small Hydro ESS: Energy Storage System, PSP: Pumped Storage Plant, BESS: Battery Energy Storage System