

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

Present: Shri U. N. Behera, Chairperson
Shri S. K. Parhi, Member

CASE No. 71 OF 2019

DATE OF HEARING : 05.02.2020

DATE OF ORDER : 22.04.2020

IN THE MATTER OF : **Application for approval of Aggregate Revenue Requirement (ARR) and determination of Bulk Supply Price (BSP) of GRIDCO Ltd. for the year 2020-21 under Section 86(1) (a) & (b) and other applicable provisions of the Electricity Act, 2003 read with OERC (Terms and Conditions for Determination of Tariff) Regulations, 2004 and OERC (Conduct of Business) Regulations, 2004.**

ORDER

Section 86(1) (b) of the Electricity Act, 2003 requires the Commission to determine the procurement price structure for Distribution Utilities operating in the State of Odisha. Under the existing Bulk Supply Agreements with GRIDCO Ltd. (in short GRIDCO), the Distribution Utilities 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 Utilities) but also the seller (GRIDCO Ltd.). No meaningful hearing of GRIDCO is possible unless GRIDCO files its Aggregate Revenue Requirement and expected revenue. GRIDCO Ltd. has done so. The Commission has taken the filing of GRIDCO Ltd. into consideration even though GRIDCO Ltd. as a deemed trading licensee under the 5th Proviso to Section 14 of the Electricity Act, 2003 (hereinafter referred to as “the Act”) as it is outside the purview of Section 62 of the said Act. The prices at which GRIDCO Ltd. supplies power to the Distribution Utilities has been regulated and made same as the procurement price fixed for the Distribution Utilities under Section 86(1) (b) of the Act. The Bulk Supply Price fixed for the Utilities would not be applicable for supply of surplus power by GRIDCO to any other person anywhere even after satisfying the requirements of the Distribution Utilities of Odisha. The price at which GRIDCO Ltd.

would supply power to Distribution Utilities of Odisha has to be determined with reference to the Aggregate Revenue Requirement (ARR) of GRIDCO Ltd. Hence GRIDCO Ltd. was called upon to file its Aggregate Revenue Requirement (ARR) for ensuing Financial Year i.e. for FY 2020-21.

PROCEDURAL HISTORY (Para- 2 to 7)

2. The Commission directed GRIDCO Ltd. to publish its Aggregate Revenue Requirement (ARR) and determination of Bulk Supply Price (BSP) application 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.orierc.org) in order to invite objections/suggestions from the intending objectors. The said public notice was published in the leading daily newspapers, Commission's website and GRIDCO Ltd.'s website. The Commission directed GRIDCO Ltd. to file its rejoinder to the objections filed by the various objectors before the Commission and to serve copy on them.
3. In response to the aforesaid public notice in respect to the Aggregate Revenue Requirement (ARR) and BSP application of GRIDCO Ltd. for FY 2020-21, the Commission received 12 nos. of objections/ suggestions from the following persons/ associations/ institutions/ licensees: -
 - (1) Shri M.V.Rao, M/s. Ferro Alloys Corporation Limited, (FACOR), GD-2/10, Chandrasekharpur, Bhubaneswar-751023, (2) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour & President Upobhokta Mahasangha, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012, (3) Shri A.K.Sahani, Electrical Inspector, Govt. of Odisha(Retd.), B/L-108, VSS Nagar, Bhubaneswar, (4) M/s. Utkal Chamber of Commerce & Industry Ltd., N-6,IRC Village, Nayapalli, Bhubaneswar-15, (5) Odisha Power Generation Corporation Ltd., Zone-A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023, (6) M/s. Confederation of Captive Power Plants of Odisha (CCPPO), Regd. Office at- IMFA Office, Bomikhal, Bhubaneswar-10, (7) M/s. Grinity Power Tech Pvt. Ltd., At-K-8/82,Kalinga Nagar, Ghatikia, Bhubaneswar-751029, (8) M/s. Visa Steel Limited, Kalinganagar Industrial Complex, At/Po-Jakhapura-755026, Dist-Jajpur, Odisha, (9) M/s. Vedanta Limited, At-Bhurkhamunda, Po-Kalimandir, Dist-Jharsuguda, Odisha-768202, (10) Shri R.P.Mahapatra, Retd. Chief Engineer & Member (Gen.), Plot No-775 (P), Lane-3,

Jayadev Vihar, Bhubaneswar-751013, (11) North Odisha Chamber of Commerce and Industry (NOCCI), Ganeswarpur Industrial Estate, Januganj, Balasore-756019, (12) Shri Alekha Chandra Mallick, S/o.Late Sri Harekrushna Mallick, Plot No.335, City Garden, Raghunathpur, Bhubaneswar-754005.

4. The applicant submitted its reply to the issues raised by the above objectors during hearing of the case. Further, in exercise of the power conferred under Section 94 (3) of the Electricity Act, 2003, in order to protect the interest of the consumers of Odisha, the Commission appointed to World Institute of Sustainable Energy (WISE), Pune, as Consumer Counsel for objective analysis of the licensee's Aggregate Revenue Requirement (ARR) and Bulk Supply Price proposal for FY 2020-21. The Consumer Counsel-WISE, Pune presented its views on the matter in the hearing.
5. The date for hearing was fixed on 05.02.2020 at 11.00 AM and it was duly notified in the leading newspapers mentioning the list of the objectors, time and place of hearing. The Commission had also issued individual notice to the objectors and the applicant for hearing of the above matter on 05.02.2020. The Commission also issued notice to the Department of Energy, Government of Odisha informing them about the date, time and place of hearing and requesting them to send their authorized representative to take part in the proceeding.
6. In its consultative process, the Commission conducted the public hearing at its premises on 05.02.2020 and heard the Applicant, Objectors, Consumer Counsel and the Representative of Department of Energy, Government of Odisha at length. The following persons participated in the hearing process.

(1) (1) Shri Sourav Garg, CMD, GRIDCO Ltd. (2) Shri M.V.Rao, Resident Manager & Power of Attorney Holder of M/s.Ferro Alloys Corporation LTD., (FACOR), GD-2/10, Chandrasekharpur, Bhubaneswar-751023, (3) Shri Ramesh Ch. Satpathy, Secretary, National Institute of Indian Labour & President Upobhokta Mahasangha, Plot No.302(B), Beherasahi, Nayapalli, Bhubaneswar-751012, (4) Shri A.K.Sahani, for self and on behalf of M/s. Utkal Chamber of Commerce & Industry Ltd., N-6, IRC Village, Nayapalli, Bhubaneswar-15, (5) Shri Rutwik Mishra, GM, Odisha Power Generation Corporation Ltd., Zone-A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023, (6) Shri Bibhu Charan Swain, the authorized representative of M/s. Confederation of Captive Power Plants of Odisha

(CCPPO), Regd. Office at- IMFA Office, Bomikhal, Bhubaneswar-10, M/s. Visa Steel Limited, Kalinganagar Industrial Complex, At/Po-Jakhapura-755026, Dist-Jajpur, Odisha, & North Odisha Chamber of Commerce and Industry (NOCCI), Ganeswarpur Industrial Estate, Januganj, Balasore-756019, (7) Shri Vikash Jain, Sr. V.P, M/s. Vedanta Limited, At-Bhurkhamunda, Po-Kalimandir, Dist-Jharsuguda, Odisha-768202, (8) Shri R.P.Mahapatra, Retd. Chief Engineer & Member (Gen.), Plot No-775 (P), Lane-3, Jayadev Vihar, Bhubaneswar-751013, (9) Shri Alekha Chandra Mallick, S/o. Late Sri Harekrushna Mallick, Plot No.335, City Garden, Raghunathpur, Bhubaneswar-754005, (10) Ms. Niharika Pattanayak, ALO, DoE,GoO. Nobody was present on behalf of M/s. Grinity Power Tech Pvt. Ltd., At-K-8/82, Kalinga Nagar, Ghatikia, Bhubaneswar-751029. The written notes of submissions filed by the objectors in the above case along with the views of Department of Energy, Government of Odisha were taken in to consideration by the Commission.

7. The Commission convened the State Advisory Committee (SAC) meeting on 26.02.2020 at 10.30 AM in the Conference Hall of the OERC on Bulk Supply Price proposal of the licensee for FY 2020-21. The Members of the SAC, Special Invitees, the Representative of Department of Energy, Government 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 2020-21 (Para- 8 to 32)

8. According to the applicant, GRIDCO Limited (hereinafter called as GRIDCO) is a Deemed Trading Licensee under the 5th Proviso to Section 14 of the Electricity Act, 2003 and carries out the business of Bulk Supply of electricity to the four Electricity Distribution & Supply Utilities (hereinafter called as 'DISCOMs') in the State of Odisha by utilizing the transmission network of OPTCL, the State Transmission Utility (STU) and others. Besides, being the successor organization to the erstwhile Odisha State Electricity Board (OSEB), GRIDCO 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 generators for supply the same to DISCOM Utilities. Under the existing Bulk Supply Agreements between the DISCOM Utilities and the GRIDCO, the DISCOM Utilities

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 DISCOM Utilities. This procurement price incidentally happens to be the Bulk Supply Price at which GRIDCO supplies power to the DISCOM Utilities. Moreover, GRIDCO also supplies emergency power to the Captive Generating Plants (CGPs) and trades the surplus power available, if any, from time to time. Thus, as a statutory requirement, as provided in the OERC (Conduct of Business) Regulations, 2004 and other related Regulations and as per Section 86 (1) (a) & (b) and other applicable provisions of the Electricity Act, 2003, GRIDCO is required to submit its Aggregate Revenue Requirement (ARR) before OERC for determination of the procurement price of the DISCOM Utilities. In this above backdrop, GRIDCO has filed an application for approval of its proposed Aggregate Revenue Requirement and revision of Bulk Supply Price for the FY 2020-21 to enable it to carry out its functions of bulk supply to DISCOM Utilities and emergency supply to CGPs.

Projection of Demand and Energy

9. The Simultaneous Maximum Demand (SMD) of DISCOM Utilities for the FY 2020-21 has been projected by GRIDCO at 5197 MVA per month. GRIDCO has stated that it is based on the projection of the DISCOM Utilities and shown on the higher side because of the enhanced load arising due to power supply to cover all households particularly under the Rural Electrification programme in the State. GRIDCO has projected the energy requirement of 28247.37 MU for the FY 2020-21, consisting of 28187.37 MU for sale to DISCOM Utilities and 60 MU for emergency power supply to the CGPs like NALCO and IMFA.

Quantum of Power Procurement

10. GRIDCO has projected to procure 29181.17 MU of energy during the FY 2020-21 considering the energy requirement of 28247.37 MU for DISCOM Utilities and CGPs and 933.80 MU towards transmission loss @ 3.20% in STU system.

**Table -1
Demand and Energy Projection of GRIDCO for FY 2020-21**

Particulars	Projection for FY 2020-21
SMD for DISCOM Utilities (MVA per month)	5197
Energy Demand of DISCOM Utilities (MU)	28187.37

Emergency Power to CGPs (MU)	60.00
Total Energy Demand (MU)	28247.37
Transmission Loss @ 3.20% (MU)	933.80
Energy Required to be purchased by GRIDCO to meet the power demand of DISCOM Utilities & CGPs (MU)	29181.17
Available Energy Limited to Requirement (MU)	29181.17

Power Purchase Cost Projected for FY 2020-21

11. The detailed cost of power purchase as furnished by GRIDCO for FY 2020-21 is reproduced hereunder in Table below.

Table -2
Summary of Proposed Power Procurement Cost during FY 2020-21

Stations	Availability (After Transformation Loss and Auxiliary Consumption) (MU)	Rate (P/U)	Total cost (Rs.Cr.)
HHEP	660.56	131.86	87.10
CHEP	485.10	76.03	36.88
Rengali	519.75	128.08	66.57
Upper Kolab	823.68	78.65	64.78
Balimela	1171.17	62.82	73.57
OHPC(Old)	3660.26	89.86	328.91
Indravati	1942.38	90.61	176.00
Sub-Total OHPC	5602.64	90.12	504.91
Machhkund	262.50	62.58	16.43
Total State Hydro	5865.14	88.89	521.34
OPGC (I & II)	2743.56	260.28	714.09
OPGC (III & IV)	6947.00	309.00	2146.62
TTPS	3254.22	339.02	1103.23
Small Hydro	385.00	381.43	146.85
Biomass Energy	80.00	578.00	46.24
Wind Energy	753.00	287.05	216.15
Solar Energy	1019.00	448.24	456.76
CGPs	0.00	0.00	0.00
Co-generation Plants	0.00	0.00	0.00
IPPs	2386.00	312.96	746.73
Total State	23432.92	260.23	6098.00
TSTPS Stg.-I	2186.40	313.92	686.35
TSTPS Stg.-II	1360.52	282.63	384.52
FSTPS-I & II	0.00	335.51	132.10
FSTPS-III	0.00	397.94	90.59
KhSTPS Stg.-I	761.28	343.44	261.45
KhSTPS Stg.-II	269.05	318.85	85.79
Total Central Thermal	4577.25	358.47	1640.81
Chukha	260.00	246.07	63.98
TALA	131.00	221.31	28.99
Teesta	510.00	238.69	121.73

Stations	Availability (After Transformation Loss and Auxiliary Consumption) (MU)	Rate (P/U)	Total cost (Rs.Cr.)
Mangdechhu	270.00	429.30	115.91
Total Central Hydro	1171.00	282.33	330.61
Total EREB	5748.25	342.96	1971.42
Total Power Purchase	29181.17	276.53	8069.42
PGCIL Tr. Charges			795.52
SOC & MOC Charges			1.45
GRAND TOTAL	29181.17	303.84	8866.39

Pass through of arrear dues paid / to be paid during FY 2020-21

12. GRIDCO has submitted to consider the claim of Rs.308.18 Crore (Rs 127.93 Crore towards guarantee commission and arrear payment to OPGC and Rs 180.25 Crore towards financial impact of costly power purchase during the period from April' 19 to Sept' 19) under Pass Through while approving the ARR & BSP for FY 2020-21.

Special Appropriation for Loan and Interest towards Past Power Purchase Liabilities

13. GRIDCO has proposed the special appropriation of Rs. 1111.74 Crore towards repayment of Banks Loans, Inter Corporate Loan from OMC Ltd. and Securitized dues of OHPC for recovery through the ARR and BSP for FY 2020-21 and deferment of the balance amount of Rs. 981.35 Crore relating to repayment of Govt. Loan and NTPC-GoO Bond dues along with interest dues of Rs. 1079.75 Crore thereon.

Interest, Financing and Other expenses

14. GRIDCO has proposed to incur expenses about Rs.502.89 Crore during the FY 2020-21 on account of Interest on Loans, Employees Cost, A&G Expenses, R&M and Depreciation etc. as shown in the table below.

Table -3

Interest, Financing & Other expenses for FY 2020-21 (Rs. Crore)

Particulars	GRIDCO proposal for FY 2020-21	
1. Interest & Financial Charges		477.63
2. Other Costs:		
a. Employee Cost	14.41	
b. A&G Cost	8.54	
c. Repair & Maintenance Cost	1.28	
Sub-Total		24.23
3. Depreciation		1.03
Total (1+2+3)		502.89

15. Out of the total Interest and Financial Charges of Rs. 583.68 Crore, GRIDCO has considered Rs.477.63 Crore as pass through in the ARR for FY 2020-21 after deferment of Rs.106.05 Crore of interest payable to the State Government in line with earlier approval of the Commission.
16. Proposed employees cost of Rs.14.41 Crore for FY 2020-21 includes the balance 60% arrear amounting to the tune of Rs.1.02 Crore on account of implementation of the 7th Pay Commission recommendation.

Other Income / Miscellaneous Receipts

17. GRIDCO expects to earn an amount of Rs. 41.70 Crore during FY 2020-21 from the proposed emergency power sale of 60 MU to long term customers like NALCO and IMFA at existing approved rate of 695 P/U.

Receivable from DISCOM Utilities and other parties

18. DISCOM Utilities have defaulted in payment of Rs.2117.45 Crore towards securitized dues (as on 31.03.2019), Rs.2817.50 Crore towards Year-end-Adjustment (YEA) Bills (FY 2007-08 to FY 2010-11) and BSP bills (upto November, 2019). Further, Rs.195.36 Crore is outstanding against three erstwhile R-Infra managed DISCOM Utilities as on 31.03.2019 towards the dues of Rs.400.00 Crore Bond.

Aggregate Revenue Requirement (ARR)

19. The proposal for Aggregate Revenue Requirement of GRIDCO for FY 2020-21 is summarized in the Table below.

**Table -4
Proposed Aggregate Revenue Requirement of GRIDCO for FY 2020-21 (Rs. Crore)**

Particulars		Proposed ARR for FY 2020-21
Power Purchase cost		8866.39
Interest & Financing Charges		477.63
Employees Cost		14.41
A&G Expenses		8.54
R & M Expenses		1.28
Depreciation		1.03
Sub Total		9369.28
Pass Through of Past Power Purchase Expenses		308.18
Special Appropriation		1111.74
State Govt. Loans & Interest (Rs.578.72 Crore) (Deferred)	-	
NTPC GoO Special Bonds & Interest (Rs.1482.38		

Particulars		Proposed ARR for FY 2020-21
Crore) (Deferred)		
OHPC Securitized Dues of Rs. 88.43 Crore (Deferred)	-	
Repayment of Bank / Commercial Loans	1111.74	
Gross Revenue Requirement		10789.20
Less: Miscellaneous Receipts from Emergency & Back-up Power Sale to NALCO & IMFA		41.70
Net Revenue Requirement to be recovered from DISCOM Utilities		10747.50

Proposed Revenue Earning at Existing BSP

20. GRIDCO estimates to earn revenue of Rs 7623.84 Crore during FY 2020-21 from the anticipated sale of 28187.37 MU to DISCOM Utilities at the existing average BSP of 270.47 P/U for 2019-20.

Excess / Deficit in the ARR for FY 2020-21

21. GRIDCO has proposed that it would suffer revenue deficit of Rs. 3123.66 Crore considering the net ARR of Rs. 10747.50 Crore and the revenue of Rs.7623.84 Crore to be earned from sale of the proposed energy of 28187.37 MU to DISCOM Utilities during FY 2020-21 at the existing BSP for FY 2019-20. The details are shown in the Table below:

Table -5
Excess / Deficit on Revenue Requirement for FY 2020-21
(Rs. Crore)

Particulars	Proposed Deficit
Total Revenue Requirement	10789.20
<i>Less:</i> Misc. Receipt from Emergency sale of Power to NALCO & IMFA	41.70
Net Revenue Requirement to be recovered from DISCOM Utilities	10747.50
Revenue Receipt from DISCOM Utilities at the existing BSP	7623.84
Gap i.e. Surplus / Deficit (-)	(3123.66)

Proposal for Revision of Bulk Supply Price

22. In its ARR & BSP Application, GRIDCO has submitted that with the present BSP for the FY 2019-20, it cannot meet its estimated revenue requirement for the FY 2020-21 as it results in revenue deficit of Rs. 3123.66 Crore as indicated in the above table. In order to meet this deficit, GRIDCO has prayed before the Commission for upward revision of average Bulk Supply Price to 381.29 P/U for the FY 2020-21.

Table - 6
Proposed Bulk Supply Price (BSP) for FY 2020-21

Particulars	Proposed BSP
Net ARR estimated to be recovered through BSP (Rs. Crore)	10747.50
Energy proposed for sale to DISCOMs Utilities (MU)	28187.37
Proposed Average BSP to recover the Net ARR through Energy Charges only (P/U)	381.29

Other Allied Submissions to Facilitate GRIDCO for Recovery of its Expenses

Demand Charges

23. GRIDCO proposes that the Demand Charges may be levied @ Rs.250/kVA/Month from DISCOM Utilities when the actual SMDs of DISCOMs in a month exceeds the permitted Monthly SMDs (110% of the approved SMD). The DISCOM Utilities will be billed by GRIDCO and DISCOMs shall pay on provisional basis towards the excess SMD to take care of monthly variations. However, such Charges will be adjusted at the end of the year if the actual Annual SMD remains within the Permitted Annual SMD i.e. 110% of the approved Annual SMD. If not, the Demand Charges for the excess SMDs may be levied at the above proposed rate

Over Drawl and Year End Charges

24. GRIDCO has submitted that at present GRIDCO bills the DISCOMs at the corresponding OERC approved applicable BSP Rate(s) in terms of the Hon'ble APTEL Judgement dated 07.05.2018 in Appeal No. 55 of 2015 till Deviation Settlement Mechanism (DSM) Regulation is pronounced by the Commission and implemented in the State of Odisha. GRIDCO has also proposed that any excess drawal of energy by a Distribution and Retail Supply Licensee (DISCOM Utilities) during a month over and above the approved energy quantum (Approved MU for FY 2020-21 X No. of days of the relevant month / 365 days) would be payable on provisional basis at the highest OERC approved Power Purchases Rate fixed for a Station for FY 2020-21 (which includes transmission charges and transmission loss) on a monthly basis instead of the normal differential BSP applicable to the respective DISCOMs subject to final Year End Adjustment (YEA) considering the highest Power Purchases rate/ cost including the rate/s of energy drawn through U.I. / Deviation Settlement of the month plus transmission charges and transmission loss.

Fuel Price Adjustment (FPA)

25. Any excess payment made by GRIDCO towards FPA for a particular / relevant month will be levied on DISCOMs in the succeeding month in proportion to their actual drawl during the preceding month along with the BSP bills if the Fuel Surcharge Price of the particular month paid by GRIDCO exceeds by more than 5% of the approved Average Bulk Supply Price subject to maximum of 25% of the approved Average Bulk Supply Price which will be passed on to consumers in the same month along with their normal energy bills served to the consumers at a rate which will be arrived at by considering their approved monthly sale quantum to the consumers (approved quantum for the financial year/12 months).

Rebate

26. GRIDCO has proposed that a rebate of 2% on monthly energy bill may be allowed in case of full payment of current month's BSP within two working days (except holidays under NI Act) of raising of BSP invoice. In case of payment of part current BSP dues within two working days and balance current BSP dues within 30 days of raising of BSP invoice, 2% rebate for payment of bill within two working days and 1% rebate for payment of balance current BSP beyond two working days and within thirty days may be allowed. For payment of full BSP dues beyond two days and within 30 days, 1% rebate may be allowed. However, no rebate be allowed, if full BSP is not paid within thirty days.

Delayed Payment Surcharge

27. GRIDCO has proposed that the monthly charges together with other charges and surcharge on account of delayed payments, if any, shall be payable within 30 days from the date of bill. If payment is not made within the said period of 30 days, delayed payment surcharge at the rate of 1.50% (One point five percent) per month shall be levied pro-rata for the period of delay from the due date, i.e. from the 31st day of the bill, on the amount remaining unpaid (excluding arrears on account of delayed payment surcharge).

Escrow Arrangement

28. DISCOMs are approaching GRIDCO to allow escrow relaxation towards employee cost and R&M expenses in each month. Since there is no specific direction in the ARR 2019-20 to allow escrow relaxation, GRIDCO is facing inconvenience. Keeping

in view the overall interest of the sector, the Commission may pass suitable direction as may be deemed necessary without affecting the interest of GRIDCO.

Carry Forward of Revenue Gap

29. GRIDCO has prayed that the proposed Aggregate Revenue Requirement & Bulk Supply Price be made applicable from 1st April 2020. However, in case of a gap between the approved revenue requirements for FY 2020-21 and the revenue realized, the Commission may kindly allow carry forward of the gap for adjustment during the future years.

Inclusion of Effect of Review Petition of GRIDCO in Case No. 51/2019 in the ARR & BSP for FY 2020-21

30. GRIDCO has filed a Review Petition before the Commission against Commission's ARR & BSP Order for FY 2019-20 which has been registered as Case No.51/2019. GRIDCO prays the Commission to pass through the effect of the Review Petition while approving the ARR & BSP for FY 2020-21.

Truing-up of GRIDCO's Expenses

31. GRIDCO has submitted that considering the truing up amount of Rs. 3,588.02 Crore as approved by the Commission till 31.03.2015 and GRIDCO's estimation of Truing up from FY 2015-16 to FY 2017-18 amounting to Rs. 824.33 Crore, the cumulative Truing up amount is Rs. 4,412.35 Crore till 31.03.2018. However, GRIDCO has not yet been compensated in monetary terms as per the approval by the Commission in subsequent Tariff Orders.

Summary of Tariff Filing for FY 2020-21

32. GRIDCO has prayed the Commission to approve the following for FY 2020-21:
- i) consider to allow all the genuine Costs as proposed in the Application and accordingly approve the ARR and Bulk Supply Price (BSP) for FY 2020-21 and make the same effective from 1st April 2020;
 - ii) allow carry forward of the additional costs, if any, for recovery in the future BSP or pass through of the same in the Truing-up Exercise;
 - iii) to pronounce the order on the Truing-up Petition of GRIDCO upto FY 2017-18, the hearing of which has been concluded and to allow all the genuine costs to GRIDCO for recovery in real terms;

- iv) to pass through the effect including the Financial Effect of the Review Petition in Case No 51/2019 while approving the ARR & BSP for FY 2020-21.
 - v) allow recovery of any cost/s due to the Electricity Duty/ Water Cess levied by the Government of Odisha and any other Statutory levy/ Duty/ Tax/ Cess / Toll etc. which shall be charged over and above the Bulk Supply Price.
33. 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 2020-21. World Institute of Sustainable Energy (WISE), Pune appointed as consumer counsel put up certain queries and objections regarding ARR and BSP filing of GRIDCO. The objectors also made observations and suggestions regarding the submission of the licensee. Based on the nature and type, their objections/suggestions have been categorized broadly as indicated here under.

VIEWS OF THE OBJECTORS AND CONSUMER COUNSEL ON THE BULKSUPPLY PRICE PROPOSAL FOR FY 2020-21 (Para 34 to 91)

Consumer Counsel

34. 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 for consideration of the Commission. WISE has requested to review the energy availability from all sources, specifically the low availability from IPPs along with the power purchase costs claimed by GRIDCO in respect of various power stations; not to consider the high cost power purchase from central thermal stations and finalise the procurement strictly based on merit order despatch principle; review the cost projected for OPGC unit # 3 & 4; to review the energy procurement from renewable energy projects for meeting the RPO target set by the Commission; to review the transmission loss and transmission charges in case of central sector projects; to suitably determine the power procurement rates for IPPs; to verify the proposed special appropriation and repayment of loans; to review the proposed pass through expenses especially the claim of high cost power purchase during FY 2019-20 should not be part of present BSP determination process; not to allow interest on proposed new loans and loans availed from FY 2016-17 onwards as per Commission's earlier orders; and to verify the actual employee cost, R&M cost, A&G cost and trading income of GRIDCO.

Views of Objectors

Legal Issues:

35. GRIDCO is not the successor organization as claimed, it can only be accepted as a “trading licensee” deemed under Electricity Act 2003.
36. GRIDCO is an Electricity Trader under Section 14(c) of EA, 2003 and is therefore entitled to ‘Trading Margin’. Therefore, determination of ARR and BSP is not in accordance with the provisions of the Statute.
37. The Commission may determine a trading margin for GRIDCO, without taking into account the past losses and interest liabilities.
38. As a trader, GRIDCO should be allowed a trading margin between 4 P/U to 7 P/U for the total energy handled by GRIDCO as its ARR. Any additional ARR beyond the trading margin should not be passed to the consumer.
39. Considering the trading margin, the ARR of GRIDCO excluding power purchase cost should be in the range of Rs 116.70 crore to Rs 204.26 crore. But GRIDCO has proposed in its ARR excluding power purchase cost at Rs 1614.63 crore for FY 2020-21. GRIDCO has all the liberty to make an expenditure of Rs 1614.63 crore by availing grant from State Government, but such additional ARR beyond Rs 204.26 crore should not be passed to the consumer. There is cost impact of 48 P/U allowing the existence of an entity called GRIDCO Ltd.
40. GRIDCO has to submit its license conditions and intimate the regulations based on which it has filed its ARR and BSP Application.

Availability of power

41. Actual energy drawal by DISCOMs during April’19 to Sept’19 was 13597.7 MU. Prorating the same for the entire year GRIDCO has projected the drawal of DISCOMs at 27186 MU for the FY 2019-20. But GRIDCO has proposed the same at 28247.37 MU for the FY 2020-21. Further, GRIDCO has considered transmission loss at the rate of 3.2% instead of 3% as approved for FY 2019-20. Hence, energy requirement to meet the demand of DISCOMs and CGPs would be much less than the proposal of GRIDCO.

42. The Commission may scrutinize the actual sale of Distribution Companies and the losses in the distribution and transmission system to decide the power requirement of GRIDCO.
43. Projections of GRIDCO on availability of power from various sources need to be properly scrutinized by the Commission. Power availability of OHPC may be considered based on actual performance of past years with additional capacities built up. The energy supply by OHPC need to be adopted as 6154.32 MU at the level of actual achievement during FY 2018-19 because of better reservoir levels in the current year instead of 5865.14 MU proposed for FY 2020-21.
44. GRIDCO had not sought the information from OPGC with respect to planned outage as well as unit-wise generation plan of OPGC Units- 1&2. For OPGC Unit 3 & 4, original PPA was for 50% generation and balance power was for merchandise use. Due to failure of OPGC to market the generation capacity, GRIDCO on pursuance of the State Government has entered into supplementary PPA to purchase the 100% of generation and filed the same before Commission for approval. Till date, there is no clarity on cost of power to be procured from OPGC expansion units. Moreover, the transmission cost of such power through CTU will further burden the consumers. Hence, estimation by GRIDCO for drawl of 75% of capacity is premature. Therefore, 6947 MU from OPGC Units- 3 & 4 need to be disallowed by Commission at this stage, unless generation cost is determined and found lowest. The power purchase from OPGC is to be limited to 50% with lowest generation cost. High fixed and variable cost of OPGC may be disallowed for procurement by GRIDCO.
45. As per CERC Tariff regulations, 2019, the auxiliary consumption of thermal generating stations having unit size of 660 MW with induced draft-cooling tower and steam driven boiler feed pump is 6.25% for the control period from FY 2019-20 onwards. The same should be considered for OPGC expansion Units 3&4.
46. GRIDCO may be advised to procure maximum power available from the captive power plants in the state and then avail the allocation of Central Power Stations in merit order to meet the power requirement of the State Consumer.
47. The Commission may scrutinize the projections given by GRIDCO regarding power availability from generating stations and also distribution losses considered by GRIDCO while projecting the power demand of the distribution companies.

48. GRIDCO has not proposed procurement of power from the 52 nos. of CGPs in the State, saying that it has availability of adequate power from central generating stations under long term PPA. The reason stated by GRIDCO is not proper. It will be always beneficial for GRIDCO to procure all available surplus power from the CGPs within our State, as the CGP power is not associated with any transmission loss, POC / STU transmission charges, POC losses and other associated cost and therefore cheaper than NTPC power. A specified quantum of power may be fixed by the Commission to be purchased from captive power plants in Odisha and the tariff of the same may be approved looking into the present cost of generation.
49. The procurement from Central Thermal Generation Stations may be allowed if only PPAs have been approved by Commission considering the demand and cost of generation. GRIDCO may please be directed to provide a list of present and future PPAs with Central Generating Stations, generation cost approved and date of approval by State Commission. Procurement of costlier energy from central sector stations should be avoided, as the average cost of supply to the consumers will increase by 60-70 paise per unit for all categories of consumers in view of the BSP proposed by GRIDCO.
50. GRIDCO may be directed to provide the list of PPAs with name, quantum of energy contracted, cost of procurement, and connectivity (CTU/STU) and date of approval by the Commission. The Commission may examine the same to allow only cheapest power for State consumers without unnecessary burden on account of fixed charges.
51. GRIDCO has proposed to procure only 544 MU from Vedanta, but as per approved PPA State share would be 5039.45 MU. GRIDCO has not given any substantial reason for depriving the State Consumers from such cheaper power and instead proposes for procurement of power from costly sources. The Commission may consider for delivery of entire quantum of power from Vedanta to the State consumers. The Commission may direct GRIDCO & M/s Vedanta to file affidavit what actions have been taken by them to comply with Commissions' order dated 27.01.2016. They need to inform Commission if any power has been diverted from Unit-2 for other purposes.

52. In case of GMR Kamalanga, GRIDCO may be directed to provide quantum of power generated at 80% PLF and the quantum of power it will procure with rate and the energy procured till date with rate.
53. GRIDCO has not stated what efforts and legal steps it has taken to obtain State entitlement power (12% of energy sent out) from M/s Jindal India Thermal Power Ltd., which would be available at variable cost only. M/s JITPL is being benefited at the cost of State consumers by selling such power outside state.
54. The Commission may direct GRIDCO to explore the followings in case of power procurement –
 - a. To purchase cheap power available from power exchange as far as possible instead of procuring costly power from central sector and follow merit order to meet the power requirement of the state.
 - b. To chalk out five-year plan, looking into the power availability from the IPPs and future load demand and explore the possibility to surrender the allocation of costly power, in order to avoid the payment of fixed charges in the event of non-drawl of the allocated quota.
 - c. GRIDCO has appointed consultants for carrying out feasibility study for projected power demand of the State for five years and the report of the same may be furnished by GRIDCO.
55. GRIDCO is only making submission regarding procurement of renewable power, but has consistently failed to procure the required quantity. The shortfall in RPO for the FY 2011-12 to FY 2019-20 has not been considered by GRIDCO in its ARR. GRIDCO should submit the year-wise RPO obligation and compliance status. GRIDCO is to clarify whether it has submitted any quarterly report and annual report to OREDA regarding its RPO compliance. Penalty, in accordance to RPO Regulations, may be levied on GRIDCO for non-compliance of RPO.
56. M/s Vedanta has submitted that GRIDCO already has surplus power since the total availability from all sources is 33707 MU (including OPGC Unit 3&4, Farakka- I, II &III share and excluding Vedanta share of Power) and the State demand is projected by GRIDCO 29181.37 MU considering transmission losses of 3.2%. Availability will further increase by 5070 MU on the commencement of NTPC Darlipalai station and total power availability for FY 2020-21 would be 38777 MU. Hence, GRIDCO is in

surplus power position in excess to the tune of 9595.63 MU exclusive of Vedanta share of power. GRIDCO has proposed to draw 4577.25 MU from NTPC-ER stations against availability of 6980 MU, proposing to draw zero power from FSTPS-I&II and FSTPS-III, but it shall be liable to pay the fixed cost to a tune of Rs 240 Crore. The existence of such surplus power would mean the payment of additional fixed costs by GRIDCO without drawing any power and ultimately prejudicing / burdening the end consumer of the State at large.

57. The Commission at para 35(d) of its order dated 27.01.2016 passed in Case No. 21/2015, had expressly clarified that the State entitlement has to be supplied by Vedanta using only linkage coal / captive mines allocated to it for state use. Therefore, supply of linkage coal by MCL to Vedanta is sine qua non for supplying the contracted quantum. MCL had suspended supply of linkage coal from 29.03.2018 on the basis of representation by GRIDCO on alleged apprehension of mis-utilization of linkage coal. But during this period, Vedanta has put all efforts to fulfil the power supply obligation to GRIDCO by sourcing power from alternative sources. Now, supply of linkage coal to Unit-II has been resumed from 30.12.2019.

Power Purchase Cost

58. Power procurement cost projected by GRIDCO from State generating stations is to be scrutinized and procurement from central sector projects should be allowed on merit order to meet the power requirement of the State. GRIDCO should negotiate with OHPC to reduce their ARR and OHPC should see that the mini hydro projects now available under OPGC should be transferred to OHPC.
59. The State Government should be advised to encourage developers to produce low cost solar power. GRIDCO should not be allowed to purchase solar energy at higher price than the rate of purchase from Solar Energy Corporation of India. In view of the reducing trend of wind and solar energy prices, the Commission may consider only approved PPAs for RE projects into consideration in the ARR of GRIDCO.
60. The Commission may examine if the PPA of Mangdechhu HEP has been approved by State Commission considering the high cost as proposed by GRIDCO.
61. The cost of generation of OPGC shall be based on PPA only. However, OPGC has approached Commission on Station Heat Rate (SHR) and calorific value of coal, dishonouring the PPA. This unfair practices need to be blocked by the Commission.

62. OPGC in its tariff filings for FY 2020-21 has proposed annual fixed cost as Rs.281.18crore; although GRIDCO considers annual fixed cost as Rs 240.96 crore. The proposal of OPGC to consider energy charges for FY 2020-21, based on the approved energy charge of last year, is not appropriate as the billing of energy charges is subject the norms of operation and the fuel prices and GCV as per approved amended PPA.
63. OPGC has stated that in its review petition (54 of 2019), it has prayed to allow the interim provisional tariff of Rs 3.61 per unit for units 3&4, which may be considered for finalization of the ARR of GRIDCO. OPGC has stated for reimbursement of other charges as proposed in its tariff filing for FY 2020-21 and to direct GRIDCO to reimburse other charges on actual basis in accordance with the provisions of the approved amended PPA.
64. Considering purchase of 7067 MU from M/s GKEL, M/s OPGC and central stations at higher cost, GRIDCO burdens the consumers with Rs 755.74 crore per annum due to insincere, imprudent, unethical transactions in power purchase. GRIDCO should not be allowed to purchase high cost power because the loan amount of such purchase will be the burden on the consumers in long run. GRIDCO should surrender its quota and should not buy costlier power from NTPC. The State Government has to agitate the matter at appropriate level. There should be minister level meeting to sort out these issues. To protect the consumers' interest, GRIDCO has not filed any appeal in ATE against CERC decision for fixing such unrealistic prices.
65. GRIDCO has proposed to buy power from NTPC at a higher tariff. However, GRIDCO is not buying from State based captive generating plants even at Rs 2.75 / unit. Further, GRIDCO is not taking any action to buy power from IEX through open access.
66. GRIDCO has proposed the fixed charges for Vedanta-IPP (Unit-II) at 94.85 P/U against 95.11 P/U as prescribed by the Commission in its order dated 29.06.2018. M/s Vedanta requested the Commission to allow the fixed charges at 95.11 P/U with the provisional variable charges based on actual coal and oil bills.

Employee cost

67. GRIDCO has to furnish details of their present staff and future employee projection for the next two years. GRIDCO has to justify abnormal increase in employee cost.

Employee cost proposed by GRIDCO may please be thoroughly examined if these claims are actually necessary and advantageous.

A&G, R&M and Depreciation

68. GRIDCO has to justify for incurring more A&G expenses than the approval without obtaining necessary consent from the Commission.
69. For FY 2020-21, R&M cost may be approved at Rs 0.25 Crore and depreciation cost may be approved at Rs 0.75 Crore.

Loan / Pass through expenses

70. GRIDCO has failed to collect the dues from DISCOMs due to its inefficiency and laxity and availed loan for bridging its cash gap. Payment of principal and interest for such loan should not be allowed, if GRIDCO has availed any loan without approval of the Commission. The Government of Odisha is the owner of GRIDCO and therefore, any loss incurred by GRIDCO has to be borne by the State Government and no burden should be passed on to the consumers of the State on account of the loan availed by GRIDCO to meet its losses.
71. GRIDCO has drawn costly power amounting to Rs 180.25 crore during the period from April, 2019 to September, 2019 without approval of the Commission and claimed the same for pass through in ARR, which should not be allowed.

Revenue gap and BSP

72. Any increase in BSP will have direct bearing on retail supply tariff and the burden of increase in BSP was loaded on EHT & HT consumers. The Commission may look into the increasing gap of RST & BSP every year.
73. GRIDCO is asking for substantial increase in average BSP at 381.29 P/U against the existing average BSP of 270.47 P/U with an increase of 110.82 P/U to bridge the revenue gap. This is in addition to the transmission tariff payable to OPTCL and SLDC charges. This will lead to increase of 120-130 P/U in RST. The Commission should look into the matter. It is necessary to rationalize the BSP to prevent undue burden on the consumer of the state.

Other issues

74. GRIDCO has to produce the details of month-wise per unit rate of power purchased since April'2019 to December'2019 from Central thermal and hydro power stations.
75. GRIDCO has to produce the list of IPPs/ Hydro / Mini Hydro power stations those are going to generate power during FY 2020-21.
76. GRIDCO should intimate that why some IPPs have not yet generated/supply power for State use and action taken by GRIDCO to avail power. GRIDCO should also produce status report of all the case matter pending in respect of IPPs in our State.
77. GRIDCO has to produce the amount outstanding against different DISCOMs till Dec'2019 and action taken by GRIDCO for recovery of the said amount.
78. GRIDCO should produce information about the steps taken by it to develop mini-hydro projects and solar power projects in the State.
79. GRIDCO has to produce the details of escrow relaxation given to different DISCOMs month-wise since 1st April 2015 to till December 2019 and how many days such practice will continue.
80. GRIDCO has to produce the details outstanding against different govt. consumers and private industries till 31st Dec 2019 along with action taken report.
81. GRIDCO should produce year-wise status report of power trading to outside State since 2008-09 till date Dec 2019.
82. GRIDCO has to produce a vision document about what action for awareness of consumers have been taken for energy conservation in the State of Odisha.
83. GRIDCO has shifted its role of protecting the consumers on the Commission, which may please be deeply looked into.
84. GRIDCO may please elaborate the actions taken by it to reduce the PGCIL charges on consumers.
85. Truing up is related to redetermination of tariff for past years; therefore, this should be considered separately along with audited report and may please be disallowed now.
86. The gap has been given in the ARR with the intention to improve efficiency of GRIDCO in absence of which the employee cost and A&G cost could be reviewed. GRIDCO should share its Business Plan, truing up exercise, performance review

related documents in ARR. The Commission should not allow carry forward of any gap since the ARR has been determined after prudence check.

87. GRIDCO was directed to submit their audited balance sheet, cash flow and audited account statement. GRIDCO, instead of furnishing the same, has enclosed the authenticated un-audited annual accounts. Without audited accounts the truing up exercise and determination of ARR and tariff will be an unnecessary exercise. Some objectors wanted to know whether the accounts of GRIDCO are being audited as per statutory provision.
88. Some objectors stated that GRIDCO is to submit a detailed list of inadvertent power injection by CGPs to grid and detailed energy bills served by CGPs and other renewable based power plant.
89. CGPs avail open access (OA) for sale of surplus power after obtaining necessary 'no objection' certificate from SLDC. But GRIDCO collects deviation charges + Rs 1 / kWh or BSP + Rs 1 / kWh, whichever is higher from CGPs. Some objectors submitted objection on collection of such additional revenue of Rs 1 / kWh beyond BSP / deviation charges collected by GRIDCO. GRIDCO should intimate whether such revenue is part of its ARR. How much amount GRIDCO has collected from CGPs till date. Whether GRIDCO has reflected such amount in the ARR. If not, the Commission should direct GRIDCO to consider the same as part of its ARR.
90. Vedanta has submitted that they have not received any payment on the differential bills raised by it for energy supplied during the period from FY 2010-14 and 2014-19. Also, Vedanta has not received any payment towards invoices raised for supply of power since July 2017. GRIDCO has not honoured its payment obligations under the PPA and the directions passed by the Commission. Since GRIDCO has illegally holding up the payments due to Vedanta, a delayed payment surcharge @1.25% shall be applicable and the additional cost towards late payment surcharge shall ultimately be borne by the customers of the State.
91. GRIDCO has failed to recover its dues from DISCOMs and has not taken any action to regulate power supply. Further, there is no penalty on the DISCOMs for non-payment of their dues to GRIDCO. The debt incurred by GRIDCO is being serviced by consumers. There is no provision in the Statute for GRIDCO, a deemed trader, to service the creditors of the DISCOMs.

GRIDCO's RESPONSE TO THE OBJECTORS (Para 92 to 167)

92. In response to the views of the objectors on its application, GRIDCO has filed its rejoinders as follows.

Legal issues

93. GRIDCO is a "Deemed Trading Licensee" under 5th Proviso to Section 14 of the Electricity Act, 2003. Further, GRIDCO is the "State Designated Entity" to source all forms of Power generated in the State including signing of PPAs with the concerned Developers. Being a Wholly State owned Undertaking, GRIDCO is engaged in the business of purchase of electricity in bulk from various generators located in & outside Odisha and the State share of power from the Central Generators for supply of the same in bulk to the four Electricity Distribution Utilities in the State of Odisha.
94. Besides, GRIDCO's legal existence and the nature of its business have also been upheld by the Commission in various previous ARR & BSP Orders. GRIDCO has stated that ARR & BSP Order for FY 2011-12 and FY 2012-13 of OERC has strongly recommended for continuance of GRIDCO as an essential entity in Odisha power sector as it fulfils the public interest of the State.
95. GRIDCO has stated that the issue of applicability of Trading Margin @ 4P/U to GRIDCO as an Electricity Trader, has long been settled by the Hon'ble Supreme Court of India in Appeal No. 5722 of 2006 (Gajendra Haldea vs. GRIDCO & Others). It is applicable to an "Inter-State Trader". It is not applicable to GRIDCO, as the power trading by GRIDCO is "Intra-State" in nature.
96. Besides, GRIDCO's Role in the Odisha Power Sector is not merely limited to a Power Trader. GRIDCO procures the State (Odisha) Share of Power from the Central Generating Stations on behalf of the State Government. GRIDCO holds 49% of Government Equity in the Four DISCOM Utilities and arranges to supply power to the State DISCOM Utilities to ensure that the State Consumers do not suffer on account of power crisis.

Availability of power

97. GRIDCO has considered the projected demand as forecasted by DISCOMs and Transmission Loss of the STU (OPTCL) to decide on the power purchase for DISCOM Utilities.

98. In respect the differential projection by GRIDCO & OPTCL, GRIDCO has clarified that OPTCL undertakes transmission of power transacted through open access in addition to power procured by GRIDCO.
99. Regarding the projected power procurement and surplus energy after meeting the State demand, GRIDCO appreciates the suggestions to source cheaper power by adhering to the Merit Order power procurement strategy and Chalking out a 5-year power procurement plan. GRIDCO follows the Merit Order Power Procurement Policy whereby the least cost power is allocated for consumption within the State.
100. Power Availability from OHPC during FY 2020-21 has been proposed by GRIDCO as per the Design Energy of respective Generating Stations of OHPC, on the basis of the approval made by Commission for the FY 2019-20.
101. For OPGC (Unit #1 and #2), the Normative PLF is 68.49% as per the subsisting PPA dated 13.08.1996 and 19.12.2012. However, with respect to the projected sale of 2743.56 MU as provided by OPGC, the corresponding PLF of 82.397% may be considered.
102. For Auxiliary Energy Consumption in respect of Unit #3 & #4 (600 MW each), the normative figure as per the provisions of the CERC (Terms and Conditions of Tariff) Regulations, 2019, has been considered subject to furnishing of required supporting documents in respect of the fact that the Stage-II of OPGC is having induced Draft Cooling Tower and Steam Driven Boiler Feed Pumps.
103. Regarding surrender of the Odisha Quota of Power in the NTPC Central Thermal Stations, GRIDCO stated that it is bound by various legal covenants (like Long Term PPAs) to purchase power from the entitled sources. GRIDCO is equally concerned about the high cost of power entering into the State Power Basket. GRIDCO has been relieved from procuring the committed 166 MW of costly power from the NTPC-Barh-II Station through de-allocation of State share with the initiative of the Govt. of Odisha and re allocation of the same in favour of the state of Bihar w.e.f. 19.02.2019. Also, persistent efforts by the State Government and GRIDCO resulted in de-allocation of Odisha share of 155 MW of costly thermal power from Nabi Nagar Thermal Power Station of NTPC and re-allocation of the same in favour of Uttar Pradesh w.e.f. 07.01.2016.

104. In respect of Odisha share of Power from NTPC Kanti-Bijlee, Muzzafarpur, Bihar and NTPC-Barh-I STPS, GRIDCO in close co-ordination with the Govt. of Odisha, has requested the Ministry of Power, Government of India to de-allocate the said State Share. Accordingly, Govt. of India in Ministry of Power has taken cognizance of the request and notified GRIDCO's proposal for Surrender of Odisha Share of Power.
105. GRIDCO has executed the PPA for drawal of Hydro Power from the Mangdechhu Hydro Station, Bhutan as per the allocation made by the Ministry of Power, Govt. of India. The Application for approval of PPA is under preparation and shall be filed for due approval by the Commission.
106. GRIDCO may resort to sourcing of 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. CGPs are infirm sources of power and hence, GRIDCO can't propose procurement of definite quantum of power from CGPs. Besides, GRIDCO is contractually obliged under the PPAs it has signed with the Central Generating Stations (CGSs) to procure the allotted State share failing which the Fixed Cost has to be paid. GRIDCO therefore is constrained to procure Power as per the Merit Order Procurement Policy from the CGSs with a view to ensure continuous power supply to the end-consumers.
107. The summation of the projected power procurement of about 29181.17 MU during FY 2020-21 from such firm Stations meets the required projected energy demand of the DISCOM Utilities for the consumption within the State and therefore, there is no room left for any procurement of energy from Infirm CGP Sources during the ensuing year. However, GRIDCO has also not completely ruled out sourcing of power from CGPs, rather willing to purchase power from any/all source(s) including the CGPs during emergency / force majeure conditions provided the economics of power procurement works in GRIDCO's favour.
108. GRIDCO is procuring the available power from the two IPPs which have come up in the State and is closely monitoring the progress of other IPPs. The IPPs like Ind-Barath Utkal Energy Ltd (IBUEL), Maa Durga Power Company Ltd. and LANCO have been referred to the NCLT and therefore, commissioning of these IPPs is being

delayed. GRIDCO expects that M/s. Maa Durga Power Company Ltd. to start its commercial operations during 2020-21.

109. With respect to availability from M/s Vedanta, GRIDCO submitted that the actual power supply by M/s. Vedanta Ltd was quite abysmal (About 272 MU) during the first six months of FY 2019-20. Though there are directions from the Commission to supply power from converted CGP Units during low or no generation from the IPP Unit, the IPP consistently kept on defaulting in supply of power to the State. As per the Generation Plan submitted by M/s. Vedant Ltd., 3053 MU of Power shall be supplied during FY 2020-21 subject to resumption of Coal Supply & Outcome of the Case in respect of conversion of the IPP Unit to CGP Unit. Such conditions were not acceptable to GRIDCO and therefore, the actual supply in first six months has been pro-rated and projected as 544 MU of total power to be procured from the IPP for a realistic estimation of total quantum of power available in GRIDCO's Pool / Power Basket.
110. By the time ARR & BSP Application, Coal Supply to the IPP by M/s. MCL (Mahanadi Coal Field Ltd.) had not been resumed which was suspended since 29th March, 2018. Subsequently, as intimated by the IPP and M/s. MCL on amicable resolution of dispute between them, Coal Supply has been resumed in the first week of January, 2020 and the IPP has intimated for supply of power in the first week of January, 2020. However, there is legal dispute with M/s. Vedanta Limited, which is sub-judice before the Commission in Case No. 68 of 2018 regarding payment of penalty for Non-Supply of Power to GRIDCO. However, in its interim order, the Commission has directed that pending earlier disputes, GRIDCO has to ensure Payment Security Mechanism forthwith for purchase of such power from M/s. Vedanta Ltd. M/s. Vedanta Ltd can supply 5039.45 MU from its IPP Unit i.e. Unit # 2 (600 MW), if it operates in full capacity at normative PLF % of 85%. If Unit #2 is not in operation or there is low generation from this Unit, M/s. Vedanta Ltd. has to supply State share of power from its converted CGP Units as per the Commission's Order dated 27.01.2016. Supply of power from alternate source(s) was neither up to the entitled quantum of power for the State nor was consistent. The cited reasons of non-supply of power have already been duly disputed and challenged by GRIDCO before the Commission in various cases.

111. In absence of such supply, GRIDCO has raised debit notes on M/s. Vedanta Ltd. towards Penalty for Non-Supply of Power to the State at the highest ISGS Rate as per Clause 12(iv) of the Minutes of Meeting (MoM) dated 01.11.2016 effective from 24.10.2016. Afterwards Ms. Vedant Ltd. disputed the penalty Clause which was agreed in the MoM dated 01.11.2016. Thus, GRIDCO has filed petition under Section 86 (1) (f) of Electricity Act, 2003 in Case No. 68 of 2018 before the Commission and the final order is awaited. GRIDCO submitted that M/s. Vedanta Ltd. has intentionally suppressed the fact that, in spite of being one of the cheapest source of power, it has consistently & intentionally defaulted in supplying power to the State and GRIDCO has no other option but to procure high cost power from FSTPS-I, II & FSTPS–III to meet the State demand.
112. By highlighting the Surplus Power Scenario in the State, M/s. Vedanta Ltd. has attempted to justify its prayer in application before the Commission in Case No. 34 of 2018 for conversion of the State dedicated IPP Unit (600 MW) to CGP. This is not acceptable to GRIDCO. Being the State designated entity and the aggregator; it is mandated responsibility of GRIDCO to manage the surplus power .
113. GRIDCO submitted that since commencement of power supply from FY 2012-13, the PLF of the power station, M/s GKEL, has never reached 80% or above. Therefore, there is no power procurement at variable cost only by GRIDCO from GKEL till date. The Year-wise data available with GRIDCO are given below.

Table - 7
PLF of M/s GKEL from FY 2012-13

Sl. No.	Financial Year	PLF(%) of the Station
1.	2012-13	Infirm power Supply
2.	2013-14	24.37
3.	2014-15	52.60
4.	2015-16	67.60
5.	2016-17	64.50
6.	2017-18	60.71
7.	2018-19	72.76

114. GRIDCO submitted that because of interim judgment dated 16.05.2019 of the Hon'ble High Court of Odisha in WP(C) No. 18150 of 2018 filed by M/s. JITPL, the IPP has stopped supply of power to the State since 23.05.2019. This has been opposed by GRIDCO. Further, prior to this, due to non-supply of state entitlement of power to GRIDCO, MCL has been duly informed for stopping supply of Linkage Coal to M/s. JITPL and GRIDCO had claimed Compensation for non-supply of power by M/s.

JITPL based on the Commission's Order dated 04.06.2019 in Case No. 1/2017 and 64 /2017. M/s. JITPL has not made any payment till date. Therefore, GRIDCO shall shortly file an application before the Commission under Section 142 of Electricity Act, 2003 for non-compliance of the Commission's Order.

115. GRIDCO is compelled to submit low projection of power from IPPs like M/s. Vedanta Ltd. and M/s. JITPL due to their consistent default in power supply in spite of deterrents imposed in terms of Penalty /Compensation through the Minutes of Meeting and OERC Orders. Therefore, stringent direction from the Commission to such IPPs is essential for compliance by them to supply of state entitlement of power to GRIDCO as per the PPA.
116. GRIDCO's non-compliance of RPO in respect of the shortfall for the FY 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19 and 2019-20, is not fully correct, since GRIDCO is procuring RE Power (Solar & Non-Solar) as available in the State & outside the State, thereby meeting the RPO target to a large extent. GRIDCO has been complying with the direction of OREDA with regard to periodic compliances on renewable energy. GRIDCO is doing its best to procure renewable power from available sources by following the necessary guidelines approved by the CERC and the OERC. GRIDCO has proposed to procure RE power to the tune of 2237 MU (1019 MU of Solar & 1218 MU of Non-Solar). Availability of adequate RE Power in Odisha has been one of the bottle-necks in this regard. However, GRIDCO is committed for procurement of RE Power as per the mandate to fulfil the RPO Target.
117. CTU Charges and Losses are nil for Solar & Wind Power Projects up to March, 2022 as per the Order of the Ministry of Power, Government of India dated 03.08.2017, if such Power is procured through Competitive Bidding Route & to be utilized towards RPO.
118. GRIDCO has been in the practice of procuring power through Power Exchanges on "as and when required" basis when such procurement works out to be commercially lucrative than the costly power from Central Sector Power Stations.

Power purchase cost

119. GRIDCO has estimated the availability of energy, the rates and the quantum & cost of power procurement during FY 2020-21 based on the approval of various relevant

Regulators, viz., OERC, CERC and the demand projections furnished by the DISCOMs etc. and in doing so, GRIDCO has prudently followed the “Merit Order Procurement Principle” so as to minimize the power purchase costs. Besides, the ARR & BSP application will also be subject to further scrutiny by OERC for approval and therefore, the apprehension that GRIDCO overcharges the rate of power procurement from different Stations / sources, is not correct since the Commission is going to approve the power quantum & related costs, only after due scrutiny and prudent check.

120. GRIDCO as the ‘State Designated Entity’ has executed PPAs with Central, State Power Generators and Private Generators (IPPs) for meeting the Long Term Demand of the State. GRIDCO procures power from generators as per the provisions of the PPA with the Price being determined by CERC and OERC and by adhering to the Orders of different adjudicating authorities. To optimize the cost of power, GRIDCO is always committed to adhere to Merit Order Scheduling by observing the directives of OERC.
121. The Generation Tariff in respect of various Generators from whom GRIDCO sources the power, has been approved by the Central or relevant State Commissions and also as per the corresponding PPAs. To keep the power purchase rate below the Solar energy rate of SECI may not be practically possible as tariff in respect of the power stations are determined based on the relevant regulatory principles and Regulations in force & is also influenced by the prices of raw materials like coal, lignite, biomass etc.
122. In order to minimize the fixed cost burden of surrendered power (if any), GRIDCO makes all-out effort to explore power trading opportunities i.e. either bilateral / collective trading so that the burden on State consumers can be avoided to the maximum possible extent. This has also been permitted by the Commission in various ARR & BSP Orders of GRIDCO.
123. OHPC has filed its ARR & Generation Tariff Application for FY 2020-21 before the Commission for approval, which is subject to the regulatory scrutiny and approval through a due process of public hearing. The Generation Tariff approved by the Commission for OHPC will be considered by GRIDCO to source hydro power from OHPC during FY 2020-21. GRIDCO will only pay to the OHPC at the OERC approved tariff for FY 2020-21.

124. GRIDCO has put its all-out effort for determination of OPGC Tariff based on the Regulation from the very inception of hearing of Tariff Application before the Commission in 2016 and continued to defend the OERC Tariff Order during hearing of the Appeal No. 126 of 2016 filed by OPGC before the Hon'ble APTEL. As a consequence, Hon'ble APTEL had also upheld the Tariff Order of OERC for FY 2016-17 based on the Regulations in effect. Further, GRIDCO has taken all possible safeguard measures to defend its stand before the Hon'ble Supreme Court and even filed review petition challenging the Judgement dated 19.04.2018. Therefore, the contentions of poor representation by GRIDCO are false and thus denied. GRIDCO submitted that there is no such case on SHR but only calorific value of coal utilized by the OPGC. GRIDCO has made provisional payment based on interim order of the Commission in Case No. 43 of 2017. The provisional payment made by GRIDCO shall be adjusted as per the final outcome of the Case.
125. In case of GRIDCO Share from OPGC # 3& #4 (new units), the State Govt. vide Notification dated 20.12.2018 has directed for procurement of 75% of Installed Capacity from OPGC Expansion Project i.e. Unit-# 3 & #4 (2X660 MW) and such power is being available at the STU network to the State. Moreover, such power from OPGC expansion project has two-fold benefits and is comparatively cheaper than the power from the CGS Stations, because of the fact that there is no liability of payment of POC charges and losses on drawal of such power and OPGC Expansion Project has been allocated coal blocks and supply of bridge coal by the MCL till coal blocks are developed.
126. OPGC has filed an application for determination of tariff for FY 2020-21 in Case No. 69/2019, which is subject to the regulatory scrutiny and approval carried out through public hearing. By the time GRIDCO filed its ARR application for FY 2020-21, the proposal of OPGC vide its Tariff application was not available with GRIDCO. The Submission of GRIDCO in its ARR application for FY 2020-21 are as per the stand of GRIDCO taken in Case No. 33 of 2018 and also in line with the direction of Hon'ble Supreme Court of India, provisions of subsisting PPA dated 13.08.1996 and amended PPA dated 19.12.2012 and the Commission's direction vide order dated 28.03.2019 in Case No. 33 of 2018. The ECR claimed vide half yearly Fuel Price Adjustment Bill for FY 2019-20 based on "as fired" GCV of Coal is not acceptable to GRIDCO as it is in contradiction to the provisions of PPA which clearly stipulates for "as received /as

delivered” GCV of coal and thus leads to gross disobedience of Hon’ble Supreme Court’s Order dated 19.04.2018 in C.A. No.9485 of 2017 and OERC Order dated 28.03.2019 in Case No. 33 of 2018. Such claim of OPGC has been disputed by GRIDCO vide letter dated 12.12.2019. Apart from GCV of coal, as per the Commission’s direction, the Specific Fuel Oil Consumption shall also be considered as per the actual monthly audited figures for determining the Energy Charge Rate (ECR). OPGC has selectively quoted Para 32 of the Order dated 28.03.2019 in Case No. 33 of 2018. The direction of OERC at Para 37 of said Order is equally applicable and important and therefore, has been followed by GRIDCO, duly honouring all the Court orders and PPA provisions. It is ironical that OPGC is once again selectively quoting the Ministry of Power Notification 1992 based on which PPA was executed in 1996 and ignoring other relevant provisions of the said Notification as quoted below:

Clause 1.1 the note on “Explanation” mentioned in the Gazette Notification dated 30.03.1992 by Ministry of Power, Government of India stipulates as follows:

“For removal of doubts, it is clarified that the norms laid down by the Authority are the ceiling norms only and this shall not preclude the Board and Generating Companies from agreeing to accept improved norms. For the purpose of calculating the tariff the operating parameters i.e. Station Heat Rate, Secondary Fuel Oil Consumption and Auxiliary Consumption shall be determined on the basis of actual or norms, whichever is lower.”

127. Therefore, such cherry picking action of OPGC ought to be curbed/stopped through appropriate direction by the Commission. OPGC has made it a practice to cite Hon’ble Supreme Court’s order dated 19.04.2018 in C.A. No. 9485 of 2017 to take advantage of relaxed norms of operational parameters frozen vide Government notification dated 21.06.2008 and also resorting to the Ministry of Power Notification to mislead the Commission in the matter of GCV of coal for consideration in Energy Charge Rate (ECR) determination. Since implementation of the PPA from 1996 time and again GRIDCO has objected to huge difference in GCV of linkage coal utilized for generation of power, for which OPGC filed Case No. 43 of 2017 before the Commission.
128. GRIDCO submitted that if at all any reference is made by the Commission to the Gazette Notification dated 30.03.1992 by Ministry of Power, Government of India, then the said Government Notification may be considered in its entirety to give the

consequential benefits of improved operational parameters achieved over the years in respect of Unit#1 and #2 to the consumers of the State. GRIDCO vide its letters dated 13.09.2019 and 21.10.2019 has already intimated OPGC to revise the Energy Charges with effect from April, 2007 (i.e. date from which Amended PPA dated 19.12.2012 as per the Government Notification dated 21.06.1996 became effective). Moreover, OPGC intends to avail benefit at the cost of interest of consumers of the State by being selective in considering the principles for adopting Operational Norms (as per the PPA) and GCV of coal (interpretation as per the MoP Notification of 1992) to get the escalated ECR. GRIDCO has prayed the Commission to consider interpreting the provisions of the PPA at Clause 7.0(d) and Clause 9 of Schedule II and the CERC Regulations in respect of “as received” / “as delivered” GCV of coal and taking a prudent decision in the greater interest of the consumers of the State. However, GRIDCO shall purchase power from OPGC at the approved tariff.

129. PGCIL Charges is the prerogative of CERC. GRIDCO has put forth its concern before the CERC / Central Govt. for revision of the same in the interest of the State of Odisha. The issue of construction of the Transmission System for evacuation of State share of Power from the NTPC-Darlipalli STPS falls within the domain of the STU i.e. OPTCL.
130. With respect to Statements / Bills in respect of power procurement from CGPs, GRIDCO has submitted that the power procurement from such sources, is almost non-existent during FY 2018-19 and FY 2019-20 (up to Nov'2019) and whatever little power is received through the system, has been only through inadvertent injections by the CGPs without any valid Scheduling / Contract. Therefore, GRIDCO has not considered such power and hence, it may not be possible on the part of GRIDCO to furnish any energy bills / documents to this effect. Apart from the above, Hon'ble APTEL in the past, has also ruled that inadvertent power injected by the CGPs without prior scheduling / valid contract should not be payable.
131. In the matter of availability of cheaper power from power exchanges through open access than the costly power from central sector, GRIDCO has submitted that it has bilateral agreement with the Central Generators for steady supply of power in the long run to meet the State demand. GRIDCO always follows merit order scheduling to optimize the power procurement cost.

132. Non-payment of dues by GRIDCO to M/s Vedanta Ltd. is a bilateral matter and extraneous to the ARR & BSP Application of GRIDCO for FY 2020-21. GRIDCO has also huge outstanding dues from M/s. Vedanta Ltd. towards penalty for non-supply of power to the State during FY 2017-18 and FY 2018-19 and afterwards. The matter is sub-judice before the Commission in Case No. 68 of 2018.
133. M/s. Vedanta Ltd. has not claimed PAFM% as issued by the SLDC except for the month of April-2019, as verified from monthly energy bills raised by the IPP on GRIDCO. Plant Availability Factor for the Month (PAFM) issued by the SLDC vis-à-vis the figures claimed by M/s. Vedanta Ltd. in its monthly energy bills are as summarized below:

Table - 8

Month	PAFM (%) issued by SLDC	PAFM (%) claimed by M/s. Vedanta Ltd.
April-2019	34.89	34.89
May-2019	17.37	25.99
June-2019	10.87	21.00
July-2019	3.25	16.49

134. GRIDCO, vide its letter dated 13.01.2020 has requested M/s Vedanta to come for reconciliation of cost and quantum of power for the period 2010-11 to 2018-19 and stated that the jointly reconciled cost of power based on OERC Tariff Orders dated 26.02.2018 and 29.06.2018 shall be adjusted against the compensation/penalty claimed by GRIDCO from M/s. Vedanta Ltd. towards non-supply of power to the State. There is no merit in claim of DPS when huge outstanding amount is pending against them for payment to GRIDCO.
135. GRIDCO appreciates the views with regard to adopting means like, pegging the Generation to PLF of 55% with a view to reduce the power purchase cost. GRIDCO also appreciates the views that power generation from imported coal is required to be avoided as it helps to reduce the cost of power purchase.

Loan / pass through expenses

136. For the poor performance of DISCOMs, GRIDCO's legitimate claim ought not to be denied. GRIDCO is availing loan to meet the working capital gap which arises due to inadequate tariff / reduced payment by DISCOMs as compared to the BSP dues. GRIDCO is availing loans for timely payment of power purchase obligations to the

Generators in order to avoid power regulation and to ensure uninterrupted supply of power to the State. This is being done for the overall benefit of the consumers of the State.

137. GRIDCO, a Deemed Trader to service the creditors of DISCOMs, has been mandated by the State of Odisha as the “State Designated Entity” to avail the State share of power from generators to meet the power demand of the State by supplying the power in bulk to the four DISCOM Utilities who in turn make retail supply of electricity to the end-consumers. Since the DISCOM Utilities are not fully clearing the dues of GRIDCO, effectively, GRIDCO is compelled to arrange term loan for payment of power purchase dues. It is known that restricting power supply to the DISCOMs’ because of non-payment would certainly result in “Power Regulation” to the State which GRIDCO as a responsible entity, has been avoiding over the years by managing the payment through its own finances including the borrowings. The views that Commercial Banks are refusing to give loan to GRIDCO in spite of guarantee from the State Government is not correct.
138. GRIDCO has drawn costly power amounting to Rs.180.25 Crore during the period from April’2019 to September’2019. The above cost was incurred by GRIDCO towards purchase power in order to ensure un-interrupted power supply in the State which was unavoidable and GRIDCO was compelled to draw peak power through power exchange and UI. The said procurement has been made at the most competitive price prevailing then in the power exchange.

Employee Cost, A&G Expenses, and Return on Equity

139. GRIDCO has prudently projected its employees cost and A&G expenses based on actual outgo during the FY 2019-20 (up to November-2019). Thus, the contention of issues raised is not maintainable.
140. Accounts of GRIDCO including the expenses towards employees cost are being audited as per the statutory provisions of the Companies Act. The details of projection of GRIDCO towards employees cost is in consideration of an indexing factor of 2.57 hike in the basic pay and grade pay as per the 7th Pay Commission Report which has already been implemented by the State Government. GRIDCO has been providing the details of the employees cost to the Commission.

141. With regard to the Administrative & General Expenses, GRIDCO submitted that such expenses (about Rs.8.54 Crore) includes Annual License fees of Rs.1.90 Crore, ERPC membership fees of Rs. 15 lakhs and another Rs.1 lakh towards ERPC Fund etc. Therefore, GRIDCO is of the opinion that its A&G expenses are minimum by any standards.
142. GRIDCO submitted that, it follows a transparent HR Policy which treats each employee as competent. GRIDCO does not prefer to make any observation on the cynical views on the employees since GRIDCO believes that employees are core to its operations as well as the sustenance.
143. GRIDCO has not claimed any RoE in its ARR & BSP Application for FY 2020-21 in line with the dis-allowance of the same by the Commission in previous years. However, GRIDCO submitted that it deserves to get Return on Equity @16% on its paid-up equity as per the relevant Regulations in place like any other power utilities in the State. Allowance of RoE will enable GRIDCO to service the huge loan liabilities in absence of any depreciation (as GRIDCO does not have any assets) which otherwise would help it to service the loan liabilities from the depreciation cost, which is a pseudo non-cash expenditure and such benefits are enjoyed by any other Utility / Licensee. Now, the regulated approved BSP being lower than that of the GRIDCO's required ARR almost year after year, GRIDCO's net worth has turned out to be negative and is Rs.4134.80 Crore as on 31.03.2019.

Revenue Gap and BSP

144. GRIDCO has always genuinely proposed for recovery of its legitimate costs through the proposed BSP in its ARR & BSP Application including the present Application for FY 2020-21. The approval of the ARR & BSP by the Commission is decided independently through a consultative as well as public hearing process where all the stakeholders are given opportunity to furnish their views. The components / parameters of ARR & BSP Application for the ensuing year are always determined on estimation basis which are scrutinized by the Commission before the approval of the same through Tariff Order.
145. To reduce power purchase cost and thereby the BSP, GRIDCO adopts the Merit Order Power Procurement Principle coupled with sourcing the low cost power. Besides, GRIDCO also undertakes trading of surplus power as available from time to time in

order to maximize surplus earning to help in reducing the burden on the consumers. However, due to depressed power market during recent times, the scope for earning any surplus revenue through power trading has been limited to a considerable extent. Nevertheless, GRIDCO is hopeful that with the State share of additional power flowing into GRIDCO's basket in the coming future, it can best hope that the Odisha Power Sector will turn around to have un-interrupted power supply at the most competitive price. The approved BSP for FY 2019-20 is 270.47 P/U which is lower than the BSP for earlier years when the power procurement cost is increasing day by day. The trend of BSP approved by OERC is shown below from which it becomes apparent that the BSP has been falling in over the 5 years, with an exception during FY 2017-18.

Table - 9
BSP Approved by OERC during last 5 Years (2015-16 to 2019-20)

YEAR	Proposed by GRIDCO	Approved by the OERC (In Paise /Unit)
2015-16	356.32	284.29
2016-17	362.32	273.14
2017-18	398.32	277.21
2018-19	353.26	276.66
2019-20	(With Principal Repayment) : 326.77 (Without Principal Repayment) : 290.39	270.47

146. GRIDCO may be allowed for recovery of its legitimate dues including Power procurement costs, servicing of past loans and dues. Moreover, GRIDCO has contractual obligations to serve the generators and financing agencies for supply of power and finances to GRIDCO. Further, GRIDCO is manned by a handful of employees where the entire expenses of Rs.25.26 Crore (excluding power purchase cost, loan & Interest expenses etc.) which is only a fraction i.e. 0.23% of its proposed ARR. The un-controllable proposed power purchase and allied costs and interest pay-out is about 90% of the proposed net ARR of Rs.10747.49 Crore for FY 2020-21, which should be allowed to GRIDCO.

Other issues

147. The matter of transferring of Mini Hydel projects to OHPC from OPGC is beyond the purview of GRIDCO and the objector may consider to approach the appropriate authority in this regard.

148. The issue of Business Plan of GRIDCO has been discussed in the past, but consciously could not be taken up further considering the fact that 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 all four DISCOM Utilities in Odisha. OERC has been approving the Business Plan of the DISCOM Utilities 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 DISCOM Utilities. Even though the estimated power requirement is approved by the Commission for four DISCOM Utilities 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 to protect the interest of the consumers. Thus, GRIDCO to have a separate Business Plan of its own will be self-defeating in nature.
149. Truing-Up Exercise up to 31st March, 2015 has already been completed by the Commission the ARR and BSP Order for FY 2016-17. Public Hearing has been completed by the Commission on the Truing-up applications of GRIDCO for FY 2015-16, FY 2016-17. In order to facilitate the Truing-Up exercise up to 31st Mar'2018, Annual Reports of GRIDCO for FY 2017-18 and Audited Accounts of FY 2015-16, FY 2016-17 & FY 2017-18 have already been submitted to the Commission for needful action. The matter is pending for disposal before the Commission.
150. GRIDCO has been submitting the information in respect of performance review as directed by the Commission from time to time. Data on Performance Review of GRIDCO for FY 2018-19 and FY 2019-20 (Apr'19 to Sep'19) have also been submitted before the Commission on 09.12.2019 and necessary review of performance has been done by the Commission.
151. Books of Accounts containing financial transactions including power purchase transactions of GRIDCO are being audited through statutory Audit & CAG Audit since GRIDCO is a State PSU. No additional separate Audit as proposed is required. Further, the observations of not allowing the Truing-up expenses in the ARR & BSP Order would severely affect the financials of GRIDCO.
152. GRIDCO has submitted that being a Bulk Purchaser / Bulk Trader (having no network of its own) of power from various generators within and outside the State and

at the same time being an intermediary Bulk Supplier of power to the four DISCOM Utilities in the State, there does not remain enough scope with GRIDCO to take steps for Energy Conservation. However, Energy Conservation as an effective tool can be best practised in the retail segment by the DISCOM Utilities and also within the domain of the Generators.

153. Complying to the objections of some objectors, GRIDCO has submitted the rate of power purchase for the month of Dec'19 in respect of Central Thermal and Central Hydro stations as given below:

Table - 10
Power Procurement from Central Thermal & Hydro Station during Dec.'19

Sl. No.	Name of Central Station	Quantum purchased during Dec'19 (MU)	Rate (Paisa/Kwh)	Cost of Purchase (Rs. Crore)
1	FSTPS-I&II	83.547	378.20	31.60
2	FSTPS-III	38.795	478.75	18.57
3	KhSTS-I	55.010	365.56	20.11
4	KhSTS-II	19.401	329.73	6.40
5	TSTPS-I	178.804	309.74	55.38
6	TSTPS-II	124.747	271.85	33.91
7	Chukha HPS	5.724	240.16	1.37
8	Tala HPS	0.711	216.00	0.15
9	Teesta-V	19.194	437.28	8.39
10	Mangdechhu	10.48	419.00	4.39

154. GRIDCO has submitted that at present it is procuring about 412 MW of power from Solar sources, out of which 337 MW are commissioned in the State and balance 75 MW are being availed from outside the State (Gujarat-40 MW, Rajasthan-25 MW, Uttar Pradesh – 5 MW & Haryana-5 MW). In conformity to “Odisha RE Policy-2016” dated 25.11.2016 and the OERC Gazette notification dated 10.09.2015, GRIDCO has planned Solar Capacity Addition Programmes for 1821 MW by the year 2022. In respect of arranging for generation of Solar power in the State, the following action plans are being undertaken/ proposed to be undertaken in order to meet the target plan of 1821 MW of Solar power.

Table- 11
Action Plan for Solar Energy Capacity Addition to Meet Future RPO Target

A. SOLAR PROJECTS IN THE PIPELINE:						
Sl. No.	Name of the Project / Scheme	Project Location	Installed Capacity / Contracted Capacity (MW)	PPA /PSA Date	Tariff (Rs./Kwh)	Date of Commissioning
1	ISTS-connected Solar Power Project Scheme under MNRE	Rajasthan	300	21.08.2018	2.572 (Including 0.07 Paise as Trading Margin)	October'2020
2	M/s Aditya Birla Renewables Pvt. Ltd. (Through e-bidding Reverse Auction Process of GRIDCO)	25 MW - Vil: Gandhigram, Raipur & Debgarh in Harbhanga Tehsil in Boudh 25 MW - in Budapali vil. Bijepur Tehsil in Bargarh 25 MW - Dumermunda & Ghunsar vil. , Sainitala Tehsil in Bolangir	75	28.12.2018	3.00 (including Safe guard Duty of 21 Paise)	1st Phase- Jan'2020 2nd Phase- Mar'2020 3rd Phase- Jul'2020
3	ISTS-connected Solar Power Project Scheme under MNRE	Yet to be Known	200	22.08.2019	2.68 (including 0.07 Paise as Trading Margin)	Aug'2021
	Sub-Total		575			
B. SOLAR PROJECTS UNDER CONSIDERATION:						
Sl. No.	Name of the Project / Scheme	Project Location	Installed / Contracted Capacity (MW)	Likely Year Commissioning		
1	1000 MW of Solar Park Project of GEDCOL under MNRE Scheme , Phase-I	Boudh & Sambalpur	275	FY 2021-22		
2	NHPC Ltd. under CPSU Scheme of MNRE, Phase-I	Jagannath Prasad, Ganjam	40	FY 2021-22		
3	Unutilized land of OPTCL by GEDCOL		8	FY 2021-22		
4	Rooftop solar project by GEDCOL	15 cities	19	FY 2021-22		
5	Rooftop solar Phase -II scheme inside state	Four Discoms	4	FY 2021-22		
6	CPSU Scheme Phase-II		500	FY 2021-22		
7	PM KUSUM Scheme		200	FY 2021-22		
8	Floating Solar through SECI		200	FY 2021-22		
	Sub-Total		1246	-		
	TOTAL SOLAR		1821	-		

155. GRIDCO has executed nine nos. of PPAs with different SHEP Developers, out of which six nos. of PPAs were executed in 2006 and the rest are from 2014 onwards to procure 119 MW power from the proposed SHEPs. The list is furnished below.

Table - 12
List of Small Hydro Projects having PPAs with GRIDCO

Sl. No.	Name of the Small Hydro	Installed Capacity (MW)	Name of the River/Canal/Dam-Toe	Name of the District	PPA Date
1.	Saptadhara SHEP by Sri Avantika Power Projects Pvt. Ltd.	18	Kolab	Malkanagiri	29.10.2014
2.	Indravati I & II SHEP by Indravati Power Pvt. Ltd.	2, 1.5	Indravati Canal	Mahipani & Tuteuruguda, Kalahandi	27.11.2015
3.	Bargarh Head Regulator SHEP by Kakatiya Chemicals Pvt. Ltd.	9	Baragarh Canal	Baragarh	02.12.2015
4.	Lower Baitarani SHEP by Baitarani Power Project Pvt. Ltd.	24	Baitarani	Dargarisila, Badajori, Keonjhar	18.12.2015
5.	Khargpur SHEP by Sidheswari Power Generation Pvt. Ltd.	16.5	Kolab	Kharagpur, Koraput	07.11.2016
6.	Outlet drop of Jeypore Main Canal SHEP by M/s Jeypore Hydro Power Projects pvt. Ltd.	6	Jeypore Main Canal	Koraput	24.11.2006
7.	Jalaput Dam Toe SHEP by Odisha Power Consortium Ltd.	18	Machhkund	Koraput	28.09.2006
8.	Dumajhori SHEP by M/s. Sharvani Energy Pvt. Ltd.	15	Kolab	Koraput	28.09.2006
9.	Salandi Dam Toe SHEP by M/s Salandi Hydro Power Projects Pvt. Ltd.	9	Salandi	Keonjhar	28.09.2006
Total Capacity = 119 MW					

156. Out of the above projects, GRIDCO is expected that only 24 MW Lower Baitarani SHEP by M/s Baitarani Power Project Pvt. Ltd shall be commissioned by March 2020. Another two SHEPs by M/s Sri Avantika Power Projects Pvt. Ltd. and M/s Kakatiya Chemicals Pvt. Ltd. have started the construction work. The progress of work of other SHEPs is quite minimal.
157. GRIDCO has submitted the status report of the case matters relating to IPPs to the Commission.
158. GRIDCO has stated that it makes procurement of power from different Generators only after the due vetting and approval of the concerned PPAs by the Commission.

The list of PPAs that GRIDCO has signed with generators has been submitted to the Commission.

159. GRIDCO always insists the DISCOMs to clear the outstanding BSP dues at the earliest. GRIDCO submitted that an amount of Rs.5963.21 Crore is receivable from the four DISCOM Utilities under different Head of Accounts. Taking into account the BSP billing up to Nov'2019 and payments up to 31.12.2019, the status is given in the table below.

Table- 13
Receivable from DISCOM Utilities

Particulars	(Rs. in Crore)				
	WESCO	NESCO	SOUTHCO	CESU	Total
BSP Dues up to 31.12.2019	817.14	673.54	727.35	1090.77	3308.80
Securitized dues up to 31.03.2019	226.69	207.67	227.96	750.78	1413.10
DPS Payable up to 31.03.2005	58.72	87.20	32.02	526.41	704.35
Rs.400 Cr NTPC Bond	--	48.91	146.45	--	195.36
Transfer Scheme receivable	12.10	6.74	29.91	118.85	167.60
Cash support	--	--	--	174.00	174.00
Total	1114.65	1024.06	1163.69	2660.81	5963.21

160. GRIDCO has stated that for recovery of dues from DISCOMs, their revenues are escrowed by GRIDCO, where Union Bank of India is acting as the Escrow Agent. As DISCOMs' performance is not satisfactory, sufficient funds are not flowing into the Escrow Account for realization of outstanding dues of GRIDCO. However, DISCOMs performance is being monitored at different levels to improve their operational and commercial efficiency and flow of funds.
161. CMD, GRIDCO is the Administrator of WESCO Utility, NESCO Utility & SOUTHCO Utility. The Govt. of Odisha, through implementation of schemes like, ODSSP, ODAF, SCRIPS and Elephant Corridor etc. along with IT intervention in the activities of Billing & Collection, has taken number of initiatives to improve the operational as well as commercial efficiency of DISCOM Utilities in the long run. Further, the Commission and the Government of Odisha have taken necessary framework for privatization of CESU utility by assigning the management of CESU to a reputed private organization in a bid to enhance operational & commercial viability of the Utility. GRIDCO expects that all such steps would go a long way in ensuring operational & commercial efficiency, reducing the AT & C loss and improving the quality of power supply of the DISCOM Utilities.

162. The statement on Escrow Relaxation allowed by GRIDCO to four DISCOM Utilities for the period from FY 2015-16 to 2018-19 and from April'2019 to Dec.'2019 have been furnished by GRIDCO. Because of huge outstanding dues payable by the DISCOMs to GRIDCO, the DISCOMs are not entitled to draw any amount towards their employee cost and R&M expenses from the Escrow Account. Further, DISCOMs are not in a position to manage their employee cost and R&M expenditure because of insufficient non-escrow revenue. However, in order to avoid labour unrest, which may arise due to non-payment of monthly salary & wages and disruption in power supply, GRIDCO is allowing escrow relaxation to the DISCOMs towards their employee cost and limited amount towards the R&M expenses. However, GRIDCO respectfully seeks specific directions from the Commission to this effect.
163. GRIDCO has submitted that it levies Delayed Payment Surcharge (DPS) as approved by the Commission in the respective years' ARR & BSP Orders for the outstanding dues. Distribution segment is the weakest link in the power sector value chain. The reduction of AT&C losses by the DISCOM Utilities has not been significant as compared to the bench-marks fixed by the Commission. With regard to the escalating the payment of BSP dues by DISCOM Utilities, GRIDCO is constantly following with them and is hopeful that the same would be settled with improvement of DISCOMs' finances. GRIDCO has been showing such receivables in its Books of Accounts and bills the DISCOM Utilities by levying DPS on the unpaid amount as per the relevant orders of the Commission.
164. GRIDCO has stated that its functioning is transparent and open to furnish any relevant information. M/s. OPGC, M/s. OHPC and M/s. GEDCOL have been assigned with the task of promoting mini hydel projects in the State. GRIDCO is committed to purchase power from such renewable energy sources.
165. GRIDCO has stated that the power trading by GRIDCO experiences uneven growth with an increasing trend during FY 2018-19 & the current FY 2019-20. Power trading by GRIDCO has increased in volume, but the margin of surplus revenue from trading has decreased substantially due to cut-throat competition as well as subdued power market in recent times. In order to minimize the loss, GRIDCO trades power at the rate which is never less than the variable cost of the high cost power stations from which GRIDCO sources power for the State. GRIDCO has a dedicated Power Trading Cell with trained manpower to carry out the power trading activities smoothly and

there is no reason to hand over the power trading baton to OHPC & DISCOM Utilities. GRIDCO has furnished the year-wise status of power trading undertaken by it from FY 2008-09 to FY 2019-20 (April'19 to Decemebr'19) as given in the table below.

Table - 14
Power Trading by GRIDCO from FY 2008-09 to FY 2019-20 (April-Dec.'19)
(Provisional)

Year ⇒	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (Apr-Dec)
Energy (MU)	34.88	0.90	64.20	40.33	810.68	1565.42	974.71	384.74	321.10	187.59	731.09	909.91
Power Trading (Rs. Crore)	24.43	0.79	32.05	15.82	414.59	664.60	448.107	155.11	89.33	44.57	379.21	362.82

166. M/s. Feedback Infra, the Consultant, has submitted the Report “Electricity Demand Forecasting and Development of Power Trading Strategy”, to GRIDCO which is under examination by GRIDCO. Based on the advice / recommendations in the said report, GRIDCO will initiate necessary action to maximize the benefits from power trading including minimization of associated risks as well as costs. However, the present power market (like the ‘Power Exchanges’) is extremely subdued where both low volumes and low prices are order of the day which leaves very little room for GRIDCO to earn any surplus revenue from power trading.
167. GRIDCO submitted that issues of losses of GRIDCO to be borne by the State Government and no burden to be passed on the consumers are beyond its purview to comment upon. OERC and the State Government may consider deciding upon such suggestions of the objectors.

OBSERVATIONS OF THE STATE ADVISORY COMMITTEE (Para- 168)

168. The State Advisory Committee (SAC) was convened on 26.02.2020 to discuss about the proposed ARR and Tariff Applications of different utilities in the state for FY 2020-21. 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) Due to non-implementation of DSM, GRIDCO is paying a heavy penalty. OPGC and the IPPs who are supplying to the system should be regulated under

DSM and should not only forecast their generation, but also inject power into the system in a steady manner.

- (b) GRIDCO is having much surplus power after commissioning of Darlipalli-STPS and OPGC and also can source more power from Vedanta. GRIDCO should make profit out of this surplus power. Analysis of the last 7-8 year forecast and achievement of the Utilities show a lower consumption for HT & EHT. GRIDCO should sell the surplus power to the industries by ToD tariff from 12 PM to 5 PM and at night time so that the benefit of surplus power can be passed on to the consumer instead of surrendering it.
- (c) The pool cost of GRIDCO power averaged to Rs.4/unit due to increased loans even though it is in a surplus situation.
- (d) The charges for Short Term Open Access (STOA) customers and Long Term Open Access (LTOA) customers should be equal instead of charging STOA customers at the rate of 25% of that for LTOA customers, since the latest transmission charge pricing methodology i.e. Point of Connection (PoC) charges has already been introduced by Ministry of Power, Government of India.
- (e) Currently 6000 MU is provided by CGPs but they are not adhering to renewable purchase obligations.
- (f) Former REL employees were being inducted in top posts in the GRIDCO & OPTCL.
- (g) The salary of the employees of SOUTHCO Utility is being released by GRIDCO in two parts as and when collection is done and deposited with GRIDCO. This system causes problems as contractual employees are unwilling to work and O&M as well as collection are affected. Neither R&M nor A&G cost are being released to utilities. The Chairperson took exception to this practice and directed the ED, DMU that OERC order on ESCROW relaxation for salary should be adhered to.

COMMISSION'S OBSERVATIONS & ANALYSIS OF GRIDCO's PROPOSAL (Para 169 to 359)

Legal Status of GRIDCO

169. The legal status of GRIDCO has been clarified by the Commission in its ARR and BSP order for FY 2011-12 and 2012-13 vide orders dtd.18.03.2011 and 23.03.2012 respectively. That GRIDCO is a valid legal entity has also been upheld by the Hon'ble Supreme Court of India in Civil Appeal No. 5722 of 2006 (Gajendra Haldia Vrs. GRIDCO and Others). GRIDCO, by acting as a Single Buyer State designated entity, has been ensuring supply of cheap and quality power to the DISCOM Utilities which ultimately protects the interest of the consumers. It acts as a shock absorber and protects DISCOM Utilities from possible Power Regulation by the Generator(s) due to any immediate cash-flow problem. Therefore, the Commission has appropriately recognized GRIDCO as a "Deemed Trading Licensee". Under such circumstances we view that trading margin is not applicable to GRIDCO which sells power to the DISCOM Utilities inside the State of Odisha by procuring power on payment of the power purchase cost to all the suppliers. The Commission notes the concerns of the objectors and exercises due prudence in allowing ARR to the entity.
170. On detailed scrutiny and examination of the Aggregate Revenue Requirement and Bulk Supply Price Application of GRIDCO for FY 2020-21 and subsequent rejoinders filed by them, the written and oral submissions of the objectors, the Commission now decides as follows.

Principle followed for approval of ARR for FY 2020-21

171. The Commission, for determination and approval of the ARR of GRIDCO for FY 2020-21, continues to follow the same principles as in the previous year along with the principles laid down in its terms and conditions for determination of tariff. 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.
172. Tariff determination involves adoption of various assumptions and principles to arrive at the individual ARR components for the next financial year and hence, is in the nature of reasonable and prudent estimation. The actual turn of events may be different and this will be considered in the truing-up exercise. The Commission, as in the previous years, has continued to determine the ARR for the FY 2020-21 using the following principles.

173. The cost of power purchase for GRIDCO, which constitutes about 98% of the total cost structure, has been considered on a merit-order basis, with state hydro generation as per design energy and state thermal generation being computed based on the generation plan submitted by OPGC and the cost being considered as per norms of OERC Regulations / PPA. Availability from the Eastern Region CGSs has been considered as per the allocation of shares in these stations and the applicable CERC tariff. The drawal from IPPs, CGPs, Cogeneration Plants and energy from renewable sources have been considered based on the proposal of GRIDCO, the requirement of the state and legal obligations.
174. All the liabilities of the DISCOM Utilities payable to GRIDCO are in a back-to-back arrangement with various lenders, financial institutions and GRIDCO continues to service these liabilities, even though the DISCOM Utilities have not been able to meet their payment obligations to GRIDCO in full and in time during the previous years. The servicing cost (corresponding interest charges on these liabilities) appropriately pruned in certain circumstances forms a part of the BSP and is being paid by GRIDCO.
175. Following the separation of the transmission business and given to OPTCL along with related assets, liabilities and personnel w.e.f. 01.04.2005, GRIDCO does not possess any asset on its books. It continues, however, to carry the burden of past liabilities, accumulated over a period of time to service the operational losses arising out of non-payment of dues by the DISCOM Utilities in time. GRIDCO also does not have the benefit of depreciation provisions to meet these debt obligations. Keeping in line with our earlier orders, to avoid a huge additional burden being passed on to the retail consumers, the Commission has provided for 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 DISCOM Utilities.
176. The Commission has scrutinised in detail the energy requirement proposed by the DISCOM Utilities for FY 2020-21. Based on the energy availability, the Commission is of the view that after drawal of power from all state-owned generating stations both Thermal and Hydro, the state's share from central generating stations, and drawal from IPPs, Renewable and captive co-generation sources, some surplus energy will be available after meeting the State demand for FY 2020-21, which has been calculated

on normative loss basis. The quantum of surplus energy may increase or reduce basing on hydrology and/or projected drawal from IPPs and central sector, though this has been estimated for the ensuing year on normative basis.

Quantum of Power Purchase

177. GRIDCO as a deemed trading licensee procures power from the generating stations inside and outside the State to meet the requirements of the consumers of the State. The power purchased by GRIDCO is transmitted through the OPTCL system and supplied to the DISCOM Utilities.
178. GRIDCO Ltd. as well as DISCOM Utilities have submitted their ARR applications for FY 2020-21 to the Commission for approval. In their applications, the Distribution Companies have furnished projections for drawal of power from GRIDCO during FY 2020-21 and GRIDCO has projected the total power purchase to be made 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 figures filed by GRIDCO and DISCOM Utilities in their ARR applications on quantum of energy drawl by DISCOM Utilities from GRIDCO are examined and estimated by the Commission basing on the quantum of present drawl of power and expected additional load growth during FY 2020-21.
179. The quantum of power to be purchased by the four Distribution Utilities during the FY 2020-21 has been assessed and approved by the Commission while determining their Revenue Requirement and Tariff in Case Nos. 70/2019 (CESU), 75/2019 (NESCO), 74/2019 (WESCO) and 76/2019 (SOUTHCO), following the provisions in the existing Regulations. The Commission has approved the quantum of power to be purchased for the FY 2020-21 relating to CESU, NESCO, WESCO and SOUTHCO Utilities as 9470 MU, 6570 MU, 8000 MU and 4050 MU respectively adding to 28090 MU for all the DISCOMs.
180. The Commission has approved 3% transmission loss in the OPTCL system for the FY 2020-21 and has provided the same in the OPTCL tariff order for the FY 2020-21 passed in Case No. 72 of 2019.
181. Having determined the quantum of power purchase for the DISCOM Utilities, the Commission has estimated the quantum of energy lost on account of transmission at EHT within the State for delivery to the DISCOM Utilities. The Commission has

taken into account the sale of emergency power to CGPs and approves the same at 60 MU for 2020-21 based on the submission of GRIDCO. The actual sale of 62.46 MU to the CGPs towards emergency power during FY 2018-19 and 31.90 MU during the first six months of the current FY 2019-20 has been taken into consideration. The details on the estimated requirement of power purchase for use within the State is indicated in the table below:

Table –15
Purchase of Power by GRIDCO for State Use for FY 2020-21
(In MU)

Name of the DISCOMs	Commission's Approval for FY 2019-20	GRIDCO's Proposal in ARR for FY 2020-21	Commission's Approval for FY 2020-21
CESU	9740.00	9550.33	9470.00
NESCO	6310.00	6567.04	6570.00
WESCO	7750.00	8000.00	8000.00
SOUTHCO	4040.00	4070.00	4050.00
TOTAL DISCOMs	27840.00	28187.37	28090.00
CGP	30.00	60.00	60.00
TOTAL SALE	27870.00	28247.37	28150.00
Transmission loss at EHT in MU (DISCOMs Purchase only)	861.03 (@ 3.00% Transmission loss)	933.80 (@ 3.20% Transmission loss)	868.76 (@ 3.00% Transmission loss)
Total Purchase	28731.03	29181.17	29081.76

182. The Commission has approved the energy drawal by the DISCOM Utilities for FY 2020-21 considering their present drawal pattern and the projections made by them for additional load growth. Hence there should not be variations from the approved drawal. The DISCOM Utilities need to plan their drawal in consultation with GRIDCO keeping in view the deviation settlement mechanism and actual reduction in losses.

Simultaneous Maximum Demand (SMD) in MVA

183. GRIDCO in its filing has submitted that the total estimated SMD for the FY 2020-21 is derived as 5197 MVA per month through summation of the SMD projected by the four DISCOM Utilities i.e. (CESU-1957 MVA/month, NESCO-1150 MVA/month, WESCO-1400 MVA/month & SOUTHCO- 690 MVA/month). The details of SMD approved by the Commission for FY 2019-20, highest actual SMD which has

occurred during first six months of FY 2019-20 and the projection for FY 2020-21 are given below:

Table – 16
DISCOM-WISE Projection of SMD for FY 2020-21

DISCOM Utility	OERC approval for FY 2019-20	Highest SMD recorded during FY 2019-20 (Apr.'19 to Sept'19)	DISCOMs Projection of SMD for FY 2020-21	(MVA/Month)
				GRIDCO's Projection of SMD of DISCOMs for FY 2020-21
CESU	1660.00	1559.77	1957	1957
NESCO	1060.00	1015.24	1150	1150
WESCO	1300.00	1238.98	1400	1400
SOUTHCO	660.00	613.87	690	690
TOTAL	4680.00	4427.86	5197	5197

184. However, GRIDCO has submitted that the SMDs projected for FY 2020-21 is shown on the higher side because of the enhanced load arising due to power supply to cover all Households particularly under Rural Electrification in the State.
185. 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 its ARR application, GRIDCO has considered the simultaneous maximum demand as furnished by DISCOM Utilities to GRIDCO. The Commission, from the RST application of DISCOM Utilities, observed their monthly demand for the period from April'19 to Dec'19 as given in the table below:

Table - 17
Demand in MVA during 2019-20 (Upto Dec' 19)

	CESU	NESCO	WESCO	SOUTHCO	ALL ODISHA
Apr-19	1555.00	896.03	1154.43	613.86	4219.33
May-19	1534.00	950.52	1238.94	613.41	4336.87
Jun-19	1560.00	938.18	1193.07	606.44	4297.69
Jul-19	1486.00	948.86	1143.53	580.81	4159.19
Aug-19	1414.00	1015.24	1166.12	553.09	4148.45
Sep-19	1387.00	870.27	1047.97	570.62	3875.86
Oct-19	1367.00	850.00	942.63	544.10	3703.73
Nov-19	1280.00	718.05	742.07	526.13	3266.25
Dec-19	1020.00	711.17	935.34	535.29	3201.79
Average (4/19 to 12/19)	1400.33	877.59	1062.68	571.53	3912.13

186. It is observed from the above table that the summation of demand has fluctuated from month to month and has reached a peak of 4336.87 MVA in the month of May, 2019. However, the sum of the maximum demand of each DISCOM Utilities comes to

4428.04 (CESU-1560.00+ NESCO-1015.24 + WESCO-1238.94 + SOUTHCO-613.86) during the period from April to December, 2019.

187. The Commission analyzed the demand pattern of DISCOM Utilities during the current FY 2019-20 (upto December, 2019) and observed that the Average SMD of the DISCOM Utilities has reduced from the approved SMD for the FY 2019-20. After recasting the estimated requirement of power, it is observed that due to Soubhagya Scheme and load growth, there is likely increase of additional requirement of about 2561.93 MU by the DISCOM Utilities during FY 2020-21 over the FY 2019-20 (prorating the actual upto December, 2019). Thus, the matching MVA requirement works out to be 324.95 MVA. So, the Commission has estimated the Demand of the DISCOM Utilities for FY 2020-21 taking the maximum demand during April, 2019 to December, 2019 plus the estimated demand on account of additional load growth during FY 2020-21. Accordingly, the total estimated demand is 4752.99 MVA for all the DISCOM Utilities combined. The details of estimation of SMD for the DISCOM Utilities are given in the table below:

Table - 18
Demand in MVA for FY 2020-21

DISCOMs	OERC Approval for 2019-20	Proposal by DISCOMs for 2020-21	Proposal by GRIDCO for 2020-21	Average SMD during 4/19 to 12/19	Maximum SMD during 4/19 to 12/19	Additional Load growth as estimate -ed for 2020-21 (MU)	Additional load growth converted to MVA at 0.9 power factor	Maximum SMD during 4/19 to 12/19 + Additional load growth in MVA	OERC Approval for 2020-21
CESU	1660.00	1957.00	1957.00	1400.33	1560.00	876.16	111.13	1671.13	1670.00
NESCO	1060.00	1150.00	1150.00	877.59	1015.24	907.59	115.12	1130.35	1130.00
WESCO	1300.00	1400.00	1400.00	1062.68	1238.94	289.60	36.73	1275.67	1300.00
SOUTHCO	660.00	690.00	690.00	571.53	613.86	488.58	61.97	675.83	680.00
All Odisha	4680.00	5197.00	5197.00	3912.13	4428.04	2561.93	324.95	4752.98	4780.00

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

188. Considering the SMD in different months of 2020-21 and the additional load projected by the DISCOM Utilities, the SMD for 2020-21 has been fixed at 4780 MVA, within which the DISCOM Utilities are likely to operate subject to an overdrawal of maximum 10% in a month.

Purchase of Power from Different Generating Stations

State Hydro

189. The details of energy available to GRIDCO from various power stations of OHPC have been dealt in Case No. 68/2019 while determining the tariff and revenue requirement of OHPC, where the Commission has considered the existing design energy of OHPC power stations for the purpose. GRIDCO's proposal and Commission's approval on drawal of energy from OHPC stations for the FY 2020-21 are given in the table below.

Table –19
Drawal from State Hydro Stations (in MU)

Source of Generation	FY 2019-20	FY 2020-21	
	Commission's Approval	GRIDCO's Proposal	Commission's Approval
OHPC (Old Stations)	3676.86	3660.26	3676.86
Upper Indravati	1942.38	1942.38	1942.38
Machhkund	262.50	262.50	262.50
Total Hydro	5881.74	5865.14	5881.74

190. The design energy of Machhkund Joint Venture H.E. Project is 525 MU. Considering Odisha share of 50% towards energy drawal from this station, the Commission has approved an availability of 262.50 MU from Machhkund. However, the Commission desires that the State should draw at least 50% of Machhkund generation every day in a planned and economical manner. GRIDCO/OPTCL and SOUTHCO should coordinate to maximise the drawal from Machhkund in consultation with Government of Odisha whenever necessary.

IB Thermal Power Station of OPGC

191. Orissa Power Generation Corporation (OPGC) owns IB Thermal Power Station at Banharpalli in Dist. Jharsuguda with an existing installed capacity of 2x210 MW (Unit-I & II) from which GRIDCO is entitled to draw 100% power. In its ARR application for FY 2020-21, GRIDCO has projected to procure the net energy of 2743.56 MU from the existing Units (I & II) of OPGC based on the generation plan submitted by OPGC. The Commission observed that net energy generation of OPGC comes to 2280.50 MU considering the normative auxiliary energy consumption of 9.50% and PLF of 68.49% as per PPA. However, OPGC in its generation plan for the FY 2020-21 has estimated the net energy availability to GRIDCO as 2743.56 MU from Unit-I & II of its IB Thermal Power Station. Accordingly, the Commission

approves the net drawal of 2743.56 MU from Unit-I & II of IB Thermal Power Station of OPGC for the FY 2020-21 for determination of ARR and BSP of GRIDCO as proposed by GRIDCO based on the generation plan of OPGC.

192. Further, GRIDCO has submitted that the trial run operation of the expansion project (Unit-III & IV) of OPGC having installed capacity of 1320 MW (2x660 MW) has been completed successfully and the Commercial Operation Date (COD) has been declared on 03.07.2019 and 20.08.2019 respectively by OPGC. The Department of Energy, Government of Odisha, vide its Notification No. 10485 dated 20.12.2018, have enhanced the contracted capacity of this expansion project 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, a supplementary PPA was executed between OPGC and GRIDCO on 24.01.2019 which is being filed before the Commission for approval. GRIDCO has already procured all infirm power of 211.08 MU from STU connected Unit-III of OPGC at DSM charges and the firm power amounting to 596.80 MU, totalling to 807.88 MU till September, 2019 at a provisional tariff of Rs. 2.75/KWh as per the approval of the Commission vide its order dated 16.08.2019 passed in Case No. 03/2019. It was decided to consider the projected generation of OPGC Unit#3 & Unit#4 at 85% PLF and Auxiliary Consumption 5.75%. Accordingly, the projection of generation in respect of OPGC Unit#3 & Unit#4 for FY 2020-21 was estimated to 9828.72 MU (Gross Energy) and 9263.57 MU of net energy sent out after factoring 565.15 MU of energy towards Auxiliary Consumption. Further, as per the Government Odisha Notification No.10485 dated 20.12.2018 and the Supplementary PPA dated 24.01.2019 signed with OPGC, GRIDCO is entitled to procure 75% of installed capacity of OPGC Expansion Project. Accordingly, GRIDCO has proposed to procure 6947 MU (75% of the estimated net energy sent out) of energy from the OPGC expansion project (Unit-III & IV) during the FY 2020-21.
193. The Commission observed that as per the approved PPA, the contracted capacity from the Units-III & IV expansion project of OPGC is 50% of the installed capacity of 1320 MW (2x660 MW). The Commission further observed that both the generating units of this expansion project has been commissioned and the net energy generation from these generating units on normative basis comes to 9263.56 MU at 85% PLF and 5.75% auxiliary consumption. Considering 50% share, the net energy available to

GRIDCO will be 4631.78 MU. Hence, the Commission considers the drawal of 4631.78 MU from the expansion project of OPGC (Units-III & IV) during the FY 2020-21 for determination of ARR and BSP of GRIDCO.

Talcher Thermal Power Station (TTPS)

194. Talcher Thermal Power Station having installed capacity of 460 MW is owned and operated by NTPC, but its generation is fully dedicated to the State. The net energy availability from TTPS has been projected at 3254.22 MU by GRIDCO considering PLF of 90.22% and Auxiliary Consumption of 10.50%. Based on the submission of GRIDCO, the Commission approves the net drawal of 3254.22 MU from TTPS for the FY 2020-21.

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

195. In its filing GRIDCO has proposed not to procure power from the CGPs and Co-generation Plants during the FY 2020-21 for State consumption. GRIDCO has submitted that with coming up of OPGC Unit # 3 & 4 (2x660 MW=1320 MW) and NTPC-Darlipalli (800 MW), there would not be any power requirement from CGP sources during the ensuing FY 2020-21 on regular basis. However, procurement of power from CGP sources may be resorted to depending upon the relative economics and/or under exigencies/force majeure conditions. Some of the objectors stated that there is adequate surplus capacity with the existing 52 nos. of CGPs of our state. The reasons submitted by GRIDCO not to procure power from the CGPs are not proper. It will be always beneficial for GRIDCO to procure the all available surplus power from CGPs as the CGP power is cheaper than NTPC power and not associated with any transmission loss, PoC / STU transmission charges, central losses and other cost. They have requested the Commission to specify certain quantum of CGP power in the ARR and BSP order of GRIDCO to be purchased from the CGPs for State consumption at the tariff decided by the Commission looking into the present cost of generation. In its reply, GRIDCO has stated that they have not completely ruled out sourcing of power from the CGPs, rather they are following merit order power procurement as a policy. Therefore, GRIDCO may resort to source power from CGPs provided the economics of power procurement works out in favour of GRIDCO and also depending on the power supply and demand situation of the State and also in exigency/force majeure conditions justifying such procurement. GRIDCO further stated that CGP power is not a firm source of power since the CGPs are essentially

meant for the captive consumption and hence, GRIDCO cannot propose procurement of a definite quantum of power from the CGPs. GRIDCO further submitted that drawal of firm power from the generators with whom they have 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 any energy drawal. The projected power procurement of 29181.17 MU of energy during FY 2020-21 from such firm stations meets the required projected energy demand of the DISCOM Utilities for the consumption within the State and therefore, there is no room left for any procurement of energy from infirm CGP Sources.

196. Considering the objections/suggestions of the objectors as well as the submission of GRIDCO, the Commission observe 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 excess state demand or shortfall in drawal from other sources as approved by Commission. While purchasing GRIDCO must ensure that the price of the CGP power is cheaper than variable component of firm power. Further, the Commission also directs 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.

**Renewable Energy
Small Hydro Sources:**

197. GRIDCO has proposed to procure 385 MU of renewable energy from small hydro sources that would be available to GRIDCO during FY 2020-21 as given in the table below.

**Table – 20
Proposed Drawal from Small Hydro Sources for FY 2020-21**

Sl. No.	Name of the SHEPs	Installed Capacity (MW)	Energy drawal during the 1st six months of 2019-20 (MU)	Proposed Energy procurement for FY 2020-21 (MU)
1.	Meenaskhi Small Hydro	37	120.68	220.00
2.	SAMAL Small Hydro	20	38.95	80.00
3.	Baitarani Power Projects Pvt. Ltd.	24	--	85.00
	Total	81	159.63	385

198. The Commission approves the above proposal of GRIDCO and allows GRIDCO to purchase 385 MU of renewable energy from aforesaid SHEPs for consumption in the state during FY 2020-21.

Bio-mass Energy:

199. GRIDCO in its ARR application has proposed to purchase only 80 MU of renewable energy from biomass sources during the FY 2020-21 i.e. from the 20 MW Bio-mass plant of M/s. Shalivahan Green Energy Ltd.
200. The Commission approves the above proposal of GRIDCO and allows GRIDCO to purchase 80 MU of renewable energy from said Bio-mass Plant for consumption in the state during FY 2020-21.

Wind Energy:

201. GRIDCO has submitted that they have executed an agreement with PTC on 20.07.2017 to avail 50 MW wind power allotted through M/s. Solar Energy Corporation of India Ltd. (SECI) under the “1000 MW ISTS connected wind power projects scheme, Phase-I” of MNRE, Govt. of India. Accordingly, 50 MW wind power has been allocated to GRIDCO from M/s. Ostro Kutch Wind Pvt. Ltd. located in Kutch District of Gujarat, from which GRIDCO is availing power w.e.f. 30.03.2019 through PTC. GRIDCO has also signed an agreement with M/s. SECI on dated 24.11.2017 for availing 100 MW Wind power under the “ISTS connected wind power projects scheme, Phase-II” of the MNRE, Govt. of India, from which GRIDCO is now availing 72 MW power w.e.f. 06.11.2019. GRIDCO has also executed agreement with SECI on dated 23.03.2018 to avail another 50 MW Wind Power under the “ISTS Connected Wind Power Projects Scheme, Phase-III” of MNRE, Govt. of India, which is expected to be available from April 2020. In its additional submission GRIDCO has stated that as per the supplementary agreement dated 20.07.2017 with PTC India Limited, procurement of 50 MW Wind Power from M/s. Ostro Kutch Wind Private Limited shall be at 120% of the revised CUF is 36%. Accordingly, GRIDCO has proposed to avail 753 MU of wind power from the allocated 200 MW wind capacity at 120% of the revised CUF of 36%. The Commission allows GRIDCO to procure 752.80 MU of wind energy during the FY 2020-21.

Solar Energy

202. In its submission, GRIDCO has proposed to procure 1013 MU of Solar Energy from the following sources during the FY 2020-21.
- (i) 13 MU from 8 Nos. of Solar PV Projects of 1 MW capacity each commissioned in the State under 'Rooftop PV and Small Solar Power Generation Programme' (RPSSGP) guidelines of MNRE, GoI.
 - (ii) 34 MU from 20 MW Solar capacity as per the Power Sale Agreement (PSA) executed with NTPC Vidyut Vyapar Nigam Limited (NVVNL) on 12th January 2011 under 'New Projects Scheme' under Phase-1 of Jawaharlal Nehru National Solar Mission (JNNSM) where Solar capacity bundled with equal quantum of thermal capacity from the unallocated quota of the NTPC Coal Based Stations 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. and another 5 MW from Faridabad Solar PV Project in Haryana.
 - (iv) 8 MU 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 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) 116 MU from 70 MW Solar Capacity allocated to GRIDCO through SECI under Viability Gap Funding (VGF) Scheme under JNNSM Phase-II, Batch-1.
 - (vii) 450 MU 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) 125 MU 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) 208 MU during the period from October 2020 to March 2021 (5 months) from the 300 MW Solar power being procured through SECI under ISTS-connected Solar Power Projects Scheme.

203. GRIDCO has further submitted that it will avail 6 MU solar energy during FY 2020-21 from the 4 MW Rooftop Solar PV Project implemented by GEDCOL on 177 nos. of non-residential Govt. buildings in twin-city of Cuttack and Bhubaneswar under net-metering Regulations, which will be deemed procurement by GRIDCO through CESU and considered for meeting the RPO by GRIDCO.
204. The proposal of GRIDCO for procuring solar energy during the FY 2020-21 is summarised in the Table below :

Table – 21
Drawal of Solar Power during FY 2020-21

Sl. No.	Solar RE Sources	Energy for procurement during FY 2020-21 (MU)
1.	8 Nos. of Solar PV projects of 1 MW each under RPSSGP	13.00
2.	20 MW Bundled Power from NVVN through 'New Projects scheme' under JNNSM, Phase-I	34.00
3.	10 MW through NTPC from Solar PV projects at Dadri & Faridabad of 5 MW each	17.00
4.	5 MW from M/s Alex Green Energy Ltd. under OREDA State Scheme , Batch-I	8.00
5.	25 MW from M/s ACME Odisha Solar Power Pvt. Ltd. under OREDA State Scheme Batch-II	42.00
6.	70 MW through Solar Energy Corporation of India (SECI) under VGF Scheme under JNNSM, Phase –II, Batch-I	116.00
7	270 MW through SECI under VGF Scheme under JNNSM, Phase –II, Batch-IV	450.00
8	75 MW from M/s Aditya Birla Renewables Ltd. procured through GRIDCO e-bidding process	125.00
9	300 MW Solar power through SECI under ISTS-Connected Solar Power projects scheme	208.00
	Sub Total (for procurement by GRIDCO)	1013.00
8	4 MW Rooftop Solar PV Project implemented by GEDCOL on the non-residential Govt. buildings in Bhubaneswar and Cuttack	6.00
	Total (for the purpose of meeting RPO by GRIDCO)	1019.00

205. The Commission approves the above proposal of GRIDCO to procure 1013 MU from Solar RE Sources. Thus, the total procurement of Renewable Energy during FY 2020-21 from Solar, Bio-mass, wind and Small Hydro Sources comes to 2231.00 MU, which is approved by the Commission for State use. However, considering the solar energy of 6 MU from 4 MW Rooftop Solar PV Project implemented by GEDCOL on the non-residential Govt. buildings in Bhubaneswar and Cuttack, the total energy from solar sources shall be 1019.00 MU for the purpose of meeting RPO by GRIDCO. Thus the total renewable energy for the purpose of meeting RPO shall be

2237.00 MU. The source-wise power procurement from Renewable Energy sources are indicated in the Table below:

Table – 22
Drawal from Renewable Energy Sources during FY 2020-21

Sl. No.	RE Sources	Renewable Energy approved for drawal during FY 2020-21 (MU)	Percentage w.r.t. the total estimated drawal of DISCOMs (%)	RPO fixed in the Regulation for FY 2019-20 (%)
A.	Non-Solar			
(i)	Small Hydro Electric Project (SHEP)	385.00	1.37	
(ii)	Bio-mass Energy	80.00	0.28	
(iii)	Wind Energy	752.80	2.68	
	Sub-Total (Non-Solar)	1217.80	4.33	5.50
B.	Solar	1019.00	3.62	5.50
C.	Total (Solar & Non-Solar)	2236.80	7.95	11.00

(*) *Sale of power to DISCOMs including emergency power supply to CGPs has been estimated at 28150 MU.*

206. The Commission observed that the estimated sale of power to DISCOMs including emergency power supply to CGPs is 28150 MU for state consumption and the estimated quantum of energy available to GRIDCO from Renewable Sources in total is 2236.80 MU. With procurement of renewable energy of this magnitude GRIDCO will not be able to meet the Renewable Purchase Obligation (RPO) fixed by the Commission. In its reply to the Commission's queries, GRIDCO has stated that they have also executed Power Sale Agreement (PSA) with SECI on 22.08.2019 for another 200 MW Solar Capacity under the ISTS-Connected Solar Power Project Scheme, Tranche-VI, which is expected to be available in FY 2020 -21. Further, the matter of 275 MW GEDCOL Solar Park Project is in the final Scrutiny Stage and the Tender is expected to be called by M/s. GEDCOL within next two months. After award of the 275 MW GEDCOL Solar Park Project, it is expected to be completed within 24 months time period. Another 40 MW Solar Project by NHPC at Jagannathprasad, Ganjam is at the tendering stage and the PPA is going to be executed with NHPC after the price discovery. GRIDCO will receive additional 69.36 MW from Phase-II & III of ISTS-connected Wind Power Project Schemes. Another 177 MW of Non- Solar Capacity (SHEP – 27 MW, Wind – 150 MW) are under pipeline which is expected to be made available to the State within the next two years' time. GRIDCO has submitted that it is trying its best to explore the possibility to

procure more solar power for the state in order to increase the share of renewable energy in the overall energy basket of the state. GRIDCO has submitted that they will explore to buy additional Renewable Power through the traders and hopeful to fulfil its RPO as specified by the Commission in near future.

207. The Commission observed that in past GRIDCO has also submitted to purchase renewable energy from different new sources to fulfil the RPO and some of them has not yet been materialized. Therefore, the Commission directs GRIDCO to be proactive so that the proposed renewable energy projects are commissioned in scheduled time. GRIDCO should explore all possibilities to purchase renewable power from some other sources to meet the RPO fixed by the Commission. GRIDCO should also make efforts to encourage renewable power producers and facilitate them for setting up of renewable power plants, sources of which are available in our State, in order to reduce the burden on the consumers of the State on account of purchase of RECs as per RPO Regulations.

Independent Power Plants (IPPs)

208. In its application GRIDCO has submitted that presently GRIDCO is procuring power from 3 nos. of IPPs (namely, M/s. Vedanta Ltd., M/s. GKEL & M/s. JITPL) as per the provisions of subsisting Power Purchase Agreements and orders of the appropriate Commissions from time to time. GRIDCO has restricted its proposed quantum of procurement of power only from these IPPs for the FY 2020-21. Procurement of power from other two nos. IPPs (namely, M/s. Ind-Barath Energy (Utkal) Limited and M/s. NBVL) is less likely to commence in view of various problems/difficulties associated with evacuation system, declaration of NPA etc. and therefore, energy drawal from these two IPPs has not been considered in the present ARR & BSP application for FY 2020-21. Based on the above proposal of GRIDCO, the Commission does not consider any procurement of power from the IPPs of M/s. Ind-Barath Energy (Utkal) Ltd and M/s. NBVL during the FY 2020-21 for State consumption. However, the Commission direct that when these IPPs will be in operation, GRIDCO should avail State share power from them at variable cost for State consumption by reducing the schedule of high cost power.

M/s. Vedanta Ltd.

209. In its submission, GRIDCO has stated that the quantum of power to be procured from M/s. Vedanta Ltd-IPP shall be as per Para 35 (c) of the Commission's Order dated 27.01.2016 passed in Case No.21 of 2015 i.e. 25% +5% (instead of 7% due to de-allocation of coal blocks). But M/s. Vedanta Ltd-IPP is not complying to the said order of the Commission. The total quantum of power supplied by M/s. Vedanta-IPP during the first half of the FY 2019-20 is 272 MU only which is quite abysmal vis-a-vis the approved quantum of 5039.45 MU (4199.54 MU @ both FC & VC and 839.91 only VC) in the ARR for FY 2019-20. GRIDCO has filed the petition before the Commission under Section 142 of the Electricity Act, 2003 for non-compliance of aforesaid order of the Commission. As per the generation plan submitted by M/s. Vedanta Limited, it will supply 3053 MU of power from Unit-II (600 MW) during FY 2020-21 subject to resumption of coal supply by M/s. MCL and the outcome of the judgment in Case No. 34/2018 filed by M/s. Vedanta Limited before OERC in the matter conversion of Unit-II (600 MW) from IPP to CGP. Such conditional generation plan proposal is not acceptable to GRIDCO against the legitimate entitlement of 5040 MU as per the aforesaid order of the Commission. The normative generation from the IPP- Unit#2 of M/s. Vedanta Ltd. at 85% PLF and after 6% auxiliary energy consumption is 4199.54 MU ($600 \times 0.94 \times 0.85 \times 8.76$), which is to be supplied at full tariff. Besides, 5% of total normative Energy Sent Out from the thermal plant (i.e. three converted CGPs unit and one IPP Unit) is to be supplied at Energy Charge Rate (ECR) in line with the consolidated PPA dated 19.12.2012. Considering normative PLF of 85% and auxiliary energy consumption of 6%, the energy towards 5% of the normative energy sent out comes to 840 MU i.e. 5% of ($2400 \times 0.94 \times 0.85 \times 8.76$). Accordingly, the total normative quantum of power towards State entitlement from M/s. Vedanta Limited works out to be about 5039.54 MU.
210. GRIDCO has further submitted that though the total normative quantum of power towards State entitlement from the M/s. Vedanta Ltd. works out to 5039.54 MU, M/s. Vedanta Ltd. has grossly failed to supply the State share of power. The actual supply of power from M/s. Vedanta Ltd.-IPP during the 1st six months of FY 2019-20 (April'19 to Sept.'19) is only 272 MU and prorating the same for the whole year the total quantum expected to be supplied during of FY 2019-20 would be 544 MU only. Because of non-supply of power by M/s. Vedanta Ltd., GRIDCO is facing difficulty

to manage the State demand and compelled to procure high cost power/over draw and pay penalty under DSM mechanism. Considering very low supply of power by M/s. Vedanta Ltd. during the current FY 2019-20, GRIDCO has proposed the energy drawal of 544 MU from this IPP based on the drawal of first six months of the current FY 2019-20 and prorating the same for the entire year.

211. 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 the 4x600 MW power plant of M/s. Vedanta Ltd. will continue to remain as IPP and must remain connected to STU 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 or total ex-bus generation from Unit-II whichever is higher plus 7%/5% of the total energy sent out from the power station. Such quantum of power supply should not be disturbed at any point of time. M/s Vedanta Ltd. had given assurance that in case of low or no generation in Unit-II, it shall meet its commitment in the PPA from the converted CGP units and its pricing shall be as per the relevant IPP Regulations of the Commission. GRIDCO should secure compliance of orders in State interest. The Commission further observed that considering PLF of 85% and auxiliary consumption of 6%, the energy availability from the State dedicated Unit-II (IPP) of the thermal power plant of M/s. Vedanta Limited comes to be 5039.45 MU.
212. The Commission observed that M/s. Vedanta Limited is an objector to the present case. In its submission M/s. Vedanta Limited has stated that short supply of contracted quantum of power by them under PPA was on account of certain events which were beyond their control and could not have been reasonable foreseen. Due to breach to ash pond-2 and direction of Odisha State Pollution Control Board to stop the discharge of ash pond-2 and stoppage of 3 nos. of old CGP units, one converted CGP units and IPP unit-2, resulted in disruption of power generation of the power plant from 29.08.2017 to 08.01.2018 which was communicated to GRIDCO on 29.03.2018. Further, the Commission, at Para-35 (d) of its order dated 27.01.2016 in Case No.

21/2015 had observed that the coal to be used for supplying power to GRIDCO shall be linkage coal. Therefore, supplying of linkage coal by MCL to M/s. Vedanta Limited is sine qua non for supplying the contracted quantum of power to GRIDCO under PPA. M/s. Vedanta Limited was unable to supply the contracted power to GRIDCO due to suspension of supply of linkage coal by M/s. MCL from 29.03.2018 on the representation made by GRIDCO on 22.03.2018 with the alleged apprehension of mis-utilization of linkage coal, despite the units were ready to generate and supply power to GRIDCO. But now, the supply of linkage coal has been resumed from 30.12.2019.

213. In view of the above, the Commission observed that M/s. Vedanta Limited has committed to supply State entitlement of power even when there is low or no generation from the IPP Unit-2, which has been indicated in the Commission's order dated 27.01.2016 passed in Case No. 21/2015. However, short supply of power by M/s. Vedanta Limited is still continuing even after availability of linkage coal from M/s. MCL. Further, GRIDCO has submitted that M/s. Vedanta Limited in its generation plan has intimated GRIDCO to supply 3053 MU during the FY 2020-21 to the extent of supply of linkage coal at present. In view of the above submissions of GRIDCO and M/s. Vedanta Limited, the Commission considers only 3053 MU to be purchased by GRIDCO from the IPP of M/s. Vedanta Limited during FY 2020-21 for State consumption. However, GRIDCO must have to purchase power from the IPP of M/s. Vedanta Limited to the extent of generation from the available linkage coal.

M/s. GMR Kamalanga Energy Ltd.

214. GRIDCO has submitted that based on the terms and conditions of the PPA dated 04.01.2011 executed with M/s. GMR Kamalanga Energy Ltd. (M/s. GKEL), GRIDCO is entitled for 25% of the energy sent out from the 4x350 MW Thermal Power Plant (IPP) at the tariff to be determined by the CERC. Further, the power generated in excess of 80% PLF shall be made available to the State at variable cost (energy charge rate). Only three nos. of generating units of this power plant have been commissioned till date. Now, GRIDCO is procuring power from the STU connected Unit #3(350 MW) IPP through the dedicated 400kV DC GMR-Meramundali transmission line. After supplying the State share of power, the IPP is selling the balance power generated from its Unit #3 through Short Term Open Access. As per the provisions of the aforementioned PPA, GRIDCO has requisitioned for

procurement of contracted power during the block period March-2019 to April-2024 from M/s. GKEL. M/s. GKEL has submitted its generation plan of 7650 MU during FY 2020-21. CERC while determining the tariff of M/s. GKEL has considered normative quantum of power at 85% PLF and 5.75% auxiliary consumption. Considering 25% State entitlement, PLF of 85% and auxiliary consumption of 5.75%, GRIDCO has proposed to procure 1802.53 MU from M/s. GKEL during FY 2020-21.

215. The Commission observed that as per the PPA with M/s. GKEL the State share is 25% of the energy sent out from the station plus power generated in excess of 80% PLF which 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. The Commission further observed that the present installed capacity of the IPP is 1050 MW (3x350 MW) and considering normative plant availability of 85% and auxiliary consumption at 5.75% as per CERC norms, the net generation comes to 7368.75 MU. Further, considering plant availability of 80% and auxiliary consumption of 5.75%, net generation comes to 6935.29 MU. As per the PPA, energy available to GRIDCO is 25% of energy sent out at 80% PLF i.e. 1733.82 MU (25% of 6935.29 MU) plus excess power generated beyond 80% PLF i.e. 433.46 MU (7368.75 MU – 6935.29 MU). Thus, total energy available to GRIDCO comes to 2167.28 MU (1733.82 MU + 433.46 MU). Hence, the Commission approves 2167.28 MU to be procured by GRIDCO from this IPP during the FY 2020-21 for State consumption.

M/s Jindal India Thermal Power Ltd.

GRIDCO has submitted that the IPP of M/s Jindal India Thermal Power Limited (M/s. JITPL) is of the capacity of 3x600 MW, out of which two units have been commercially operated. 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. M/s. JITPL which is connected with the Talcher-Anugul CTU Line through 400 kV DC Line as an interim arrangement has been supplying power to GRIDCO at CTU bus as per the supplementary agreement dated 23.07.2013. M/s. JITPL is having linkage coal supply for Unit#1 only against contracted capacity of GRIDCO. Prior to the Interim Order dated 16.05.2019 of Hon'ble High Court in the Writ Petition No. 18150 of 2018, M/s JITPL was supplying only around 10 MW to GRIDCO, which was much less than the State entitlement. But, now taking plea of the said Interim Order, M/s. JITPL unilaterally stopped

supplying from 23.05.2019. GRIDCO has requested M/s. JITPL to resume supply of State's entitlement of power to GRIDCO without any delay. But, till date M/s. JITPL has not resumed the power supply to GRIDCO. Further, different cases pertaining to PPA and determination of tariff of M/s. JITPL are now sub-judice before the Hon'ble CERC and Hon'ble APTEL & Hon'ble Odisha High Court. Therefore, GRIDCO has not considered any drawl from M/s. JITPL in the present ARR & BSP Application of GRIDCO for FY 2020-21.

216. The Commission advises GRIDCO to take up the matter with State Government and pursue the cases related to M/s. JITPL at different judicial forum and make endeavour to purchase full quantum of energy towards State share from this IPP during FY 2020-21 as this energy will be available at the variable cost only. The Commission observed that out of the 1200 MW (2X600 MW) of M/s JITPL, considering the State share of 12%, PLF of 85% and auxiliary consumption of 5.75%, energy availability to the State from this IPP would be 1010.57 MU. Therefore, the Commission approves the same for procurement by GRIDCO from the IPP of M/s. JITPL during FY 2020-21.
217. The Commission has estimated the total availability of 8217.30 MU towards State share of energy from the IPPs within the State. Considering those who are presently supplying power to GRIDCO the Commission approves 6230.85 as stated above to be purchased by GRIDCO during the FY 2020-21 for consumption in the State. The Commission observed that the quantum of energy drawal from the IPPs as proposed by GRIDCO is much less than the State entitlements as some IPPs are not supplying the State share of power unilaterally. The Commission direct GRIDCO to pursue the matter with the State Government and secure compliance of law through all the available options. In fact, GRIDCO should draw the full quantum of State's share of power from the IPPs as per the PPA for State use and also to have export earnings after meeting the State's requirement, if commercially viable. However, depending on the requirement, cost and availability, GRIDCO may purchase more quantum of energy from the IPPs in the event of non-availability of energy from other sources and/or increase in state demand than the present approval. The proposal of GRIDCO and approval of the Commission in respect of purchase of power from the IPPs during the FY 2020-21 is as indicated in the table below.

Table - 23
Power Procurement from the IPPs during FY 2020-21

IPPs	Proposal of GRIDCO (MU)	Availability estimated by the Commission (MU)	Approval of the Commission (MU)
Vedanta Limited	544.00	5039.45	3053.00
GMR Kamalanga Energy Ltd.	1842.00	2167.28	2167.28
Jindal India Thermal Power Ltd.	0.00	1010.57	1010.57
Total	2386.00	8217.30	6230.85

Power Purchase from Central Generating Stations

218. Odisha has been allocated shares in the NTPC 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/MoP from time to time. The energy accounting from these stations is done on a monthly basis as per the ABT based Regional Energy Accounts (REA) prepared by the Eastern Regional Power Committee.

Central Transmission Loss:

219. The constituents of power utilities of the Eastern Region share the losses occurring in the Central Transmission System as per the Point of Connection (PoC) Methodology. As per the Inter-state transmission charges sharing Regulations (POC Regulations), total transmission loss of the CTU is to be divided equally among the injectors (Generators) and Drawees (Beneficiaries). The loss component attributable to Generators is regarded as the “Injection Loss”. In the instant case, since the Generators are different, their injection losses are different based on the load flow study conducted by NLDC. These losses are determined on weekly basis and published in NLDC site. Similarly, GRIDCO being a beneficiary has to bear the “withdrawal loss” towards its drawal from the central sector generating stations. This is also determined by NLDC based on load flow study for the withdrawal zone of Odisha on weekly basis and published in their website. Therefore, GRIDCO is bearing the injection losses of these stations in addition to its withdrawal losses. In its ARR filing for 2020-21, GRIDCO has arrived at the station-wise transmission loss percentages of different Central Generating Stations in the Eastern Region Power System considering the average of injection loss and withdrawal loss data of those

stations from the month of April, 2019 to September, 2019 as available from the NLDC Website. The Central Transmission Losses considered by GRIDCO for drawal of power from individual central generating stations are given in the table below:

Table - 24
Percentage of System Loss considered for Central Stations

Name of Power Stations	Central Transmission Loss proposed by GRIDCO for FY 2020-21 (%)
TSTPS -I	2.33
TSTPS -II	2.55
FSTPS- I & II	2.10
FSTPS- III	2.10
KHSTPS - I	1.95
KHSTPS - II	1.95
Chukha	2.40
Tala	2.40
Mangdechhu	2.40
Teesta-V	2.55

220. The Commission scrutinized the proposal of GRIDCO on Central Transmission Losses with reference to the figures published in NLDC site and it is observed that the scheduled PoC loss in the eastern regional system varies from week to week for Odisha injection and Odisha withdrawal. After scrutiny, the Commission considered the transmission loss for drawal of power from individual central generating stations as proposed by GRIDCO for estimation of power purchase for the FY 2020-21.

Central Hydro Generating Stations

221. **Chukha:** Odisha has been assigned a share of 15.19% from ER allocation of 270 MW. GRIDCO has projected the drawl of 265.86 MU from 336 MW (4x84 MW) of Chukha Hydro Electric Project of Bhutan for FY 2020-21 considering the average drawal of last 6 years i.e. from FY 2013-14 to 2018-19. Deducting central sector loss of 2.40%, the net availability to GRIDCO is projected at 260.00 MU for the FY 2020-21.
222. The Commission scrutinized the above proposal of GRIDCO and observed that the drawal of GRIDCO from Chukha during the period from FY 2013-14 to 2018-19 were 275.41 MU, 247.41 MU, 272.39 MU, 312.17 MU, 263.90 MU & 223.86 MU respectively, which varies from 223.86 MU during FY 2018-19 to 312.17 MU during the FY 2016-17. With the above variations, the Commission approves the drawl from Chukha hydro station at 265.86 MU for FY 2020-21 considering the average drawal of last 6 years i.e. from FY 2013-14 to 2018-19. After deducting the Central

Transmission Loss @ 2.40%, the net drawal of GRIDCO comes to 259.48 MU for FY 2020-21.

223. **TALA:** GRIDCO has an allocated share of 4.25% i.e 43.35 MW from Tala HEP, Bhutan having installed capacity of 1020 MW (6X170 MW). GRIDCO has proposed to draw 134.02 MU of energy from Tala HEP during FY 2020-21 by averaging previous 6 years drawal i.e. from FY 2013-14 to 2018-19. After deducting Central Sector Loss of 2.40%, the net availability to GRIDCO is projected as 131.00 MU for FY 2020-21.
224. After scrutiny, the Commission observed that the drawal of GRIDCO from Tala Hydro Power Station during the period from FY 2013-14 to 2018-19 were 153.82 MU, 139.33 MU, 139.61 MU, 140.57 MU, 122.81 MU & 107.96 MU respectively, which varies from 107.96 MU during FY 2018-19 to 153.82 MU during the FY 2013-14. With the above variations, the Commission approves the drawl from Tala Hydro Power Station at 134.02 MU for FY 2020-21 considering the average drawal of last 6 years i.e. from FY 2013-14 to 2018-19. After deducting the Central Transmission Loss @ 2.40%, the net drawal of GRIDCO from Tala Hydro Power Station comes to 130.80 MU for FY 2020-21.

Mangdechhu HEP (Bhutan):

225. GRIDCO has submitted that the Ministry of Power, Govt. of India Vide letter No. 5-11/7/2017-BBMB (MoP) dated 07.03.2019 have allocated 612 MW (85% of the Installed Capacity of 720 MW) from Mangdechhu Hydro Electric Project in Bhutan to Assam, Bihar, Odisha & West Bengal. Ministry of Power, Govt. of India have also decided to allocate the 108 MW unallocated power (balance 15% of the Installed Capacity) from Mangdechhu HEP which is to be added to the allocated Shares in the same proportion as the allocated shares. Accordingly, the total allocation to Odisha from Mangdechhu HEP has been fixed at 79.01 MW in the letter dated 28.08.2019 of the Ministry of Power, Govt. of India as given in the Table below:

Table- 25
Share Allocation from Mangdechhu HEP

Sl. No.	State	Firm (MW)	Unallocated (MW)	Total (MW)
1.	Assam	122.50	21.61	144.11
2.	Bihar	225.64	39.82	265.46
3.	Odisha	67.15	11.86	79.01
4.	West Bengal	196.71	34.71	231.42
5.	Total	612	108	720

226. GRIDCO has stated that at present, Odisha has a share of 10.97% from Mangdechhu HEP which is equivalent to allocation of 79.01 MW and GRIDCO has started availing power from the said station from 01.09.2019. During Sep'19 & Oct'19 GRIDCO has availed 36 MU & 27 MU respectively from this HEP. However, GRIDCO has estimated the energy availability of 276.85 MU from Mangdechhu HEP considering 40% Plant Load Factor (PLF) since most Hydro Plants are operating at about 40% PLF. Further, considering Central Transmission Loss @ 2.40%, GRIDCO has proposed to draw 270.00 MU from Mangdechhu HEP during FY 2020-21 which is considered by the Commission.
227. **TEESTA:** 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 23.40% 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 & 1.20% of Auxiliary Consumption, the annual saleable energy of the project is 2236.78 MU. Considering Odisha share of 23.40% of the saleable energy and deducting the Central Sector loss of 2.55% GRIDCO has proposed to procure net energy of 510.00 MU from Teesta-V HEP during FY 2020-21.
228. The Commission scrutinized the proposal of GRIDCO with reference to Regional Energy Account (REA) prepared by ERPC. It is observed that the GRIDCO is entitled to get a share of 20.59% on the total generation less auxiliary consumption. So the Commission estimates a drawal of 523.36 MU considering the share of 20.59% from annual saleable energy of 2541.83 MU i.e. the design energy less auxiliary consumption @ 1.20%. Considering the central sector transmission loss of 2.55%, the Commission approves the net drawl of 510.00 MU from Teesta-V HEP during FY 2020-21.
229. The Commission approves the total energy drawal of 1171.00 MU from the Central Hydro Generating Stations during the FY 2020-21 against 843 MU as proposed by GRIDCO. The proposal of GRIDCO and approval of the Commission are summarised in the Table below:

Table – 26
Drawal from Central Hydro Stations during FY 2020-21

Central Hydro Stations	Installed Capacity (MW)	GRIDCO Share (%)	GRIDCO Share of installed capacity (MW)	Proposed drawal for FY 2020-21 after C.S. loss (MU)	Energy drawal approved by the Commission for FY 2020-21 after C.S. loss (MU)
Chukha	336 (4*84) (ER Allocation =270)	15.19	41.01	260.00	259.48
Tala	1020 (6*170)	4.25	43.35	131.00	130.80
Mang-dechhu	720 (4*180)	10.97	79.01	270.00	270.00
Teesta-V	510 (3*170)	20.59	105.01	510.00	510.00
TOTAL			268.38	1171.00	1170.28

Central Thermal Generating Stations

230. GRIDCO has submitted that CERC vide Notification dated 07.03.2019 has published the CERC (Determination of Terms & Conditions of Tariff) Regulations, 2019 (in short, CERC Tariff Regulations, 2019) effective from 01.04.2019 to 31.03.2024. As per the CERC Terms and Conditions of Tariff, 2019-24, the Norms of Operation for Normative Annual Plant Availability Factor (NAPAF) for Thermal Generating Station as mentioned at Clause 49 (A) of the CERC Tariff Regulations, 2019 are followed which is read as under:

“(a) For all Thermal Generating Stations, except those covered under clauses (b), (c), (d), & (e) - 85%

X x x x x x x x x x.”

231. GRIDCO has stated that for FY 2019-20, the Cumulative Availability of CGS such as FSTPS- I & II, KHSTPS St-I, KHSTPS St-II are more than 85% for 1st six months (April’19 to Sept.’19). However, due to coal shortage because of ongoing strike at MCL, the cumulative availability of TSTPS-I & II Power Stations have achieved less than 85% availability. Similarly, due to forced outage of FSTPS-III, the Plant Availability has also become less than 85% in these six months. However, since the problems have already been resolved, GRIDCO expects that these plants would be able to achieve its target availability in next six months. Accordingly, GRIDCO has considered the cumulative availability for 2020-21 at 85% for all the Central Generating Stations and factored for recovery of full fixed cost in the application as per the provisions in clause 42 (7) of the CERC Tariff Regulations, 2019.

Table-27
Cumulative Availability of CGSs for the 1st six-months of FY 2019-20 &
Proposed Cumulative Availability for FY 2020-21

Stations	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Cumulative Availability (%)	Cumulative Availability (NAPAF) proposed by GRIDCO for FY 2020-21 (%)
TSTPS-I	86.23	82.96	80.00	83.26	45.81	46.75	70.83	85
TSTPS-II	94.96	87.21	80.92	70.14	46.77	47.15	71.14	85
FSTPS-I&II	93.45	96.44	87.34	99.84	97.43	86.44	93.56	85
FSTPS-III	82.16	92.19	18.47	0.00	41.15	102.66	55.91	85
KhSTPS-I	94.50	92.70	94.35	74.04	81.29	89.34	87.62	85
KhSTPS-II	74.97	68.02	88.94	92.53	94.05	90.85	84.89	85

232. GRIDCO has estimated the energy availability for FY 2020-21 from Central Thermal Generating Stations by considering the relevant allocated share of GRIDCO, Plant Availability Factor at 85%, Auxiliary Consumption as per the CERC Tariff Regulations, 2019 and the Central Sector Transmission Loss specific to each of the Power Stations as per the Point of Connection (PoC) Methodology. GRIDCO has stated that the present share allocation from NTPC Stations in favour of Odisha as derived from the Regional Energy Account (REA) of Eastern Regional Power Committee (ERPC) for the month of September, 2019 has been considered while estimating the energy availability from Central Thermal Stations. GRIDCO has submitted that due to availability of additional power from within the State mainly from OPGC Unit-3 & 4 having installed capacity of 1320 MW (2x660 MW) from where 6947 MU of additional power is likely to be available for the State during FY 2020-21 and following the Merit Order Principle to factor the low cost power for State Consumption, GRIDCO has not considered any drawal from FSTPS-I&II and FSTPS-III power stations and considered part drawal of 761.28 MU only from KhSTPS-I power station. Accordingly, the proposed drawal from NTPC-ER Stations has been scaled down to 4577.25 MU to meet the power requirement of the State instead of considering the normative availability of 6824.45 MU. However, other relevant costs have been proposed by GRIDCO in the ARR & BSP for FY 2020-21.
233. GRIDCO has submitted that energy deficit arising in the State in the current year due to significant low generation by the IPPs, such as, M/s. Vedanta Ltd. & M/s. JITPL, has forced GRIDCO to purchase power from high cost Thermal Stations like FSTPS-I

& II and FSTPS-III as a matter of necessity although drawal from such high Cost Stations was not allowed by the Commission during the approval of ARR of 2019-20. Therefore, GRIDCO has prayed the Commission that in the eventuality of power requirement, drawal of such costly power may be considered by the Commission for inclusion / pass through in the ARR & BSP of GRIDCO.

234. Considering the above parameters, GRIDCO has proposed the energy drawal of 4577.25 MU from Central Thermal Generating Stations of Eastern Region for FY 2020-21 as given in the Table below:

Table - 28
Availability of Power from Central Generating NTPC Stations FY-2020-21

Central Thermal Stations	Installed Capacity (MW)	Aux. Cons (%)	Based on NAPAF% as per Para 36 (A) of CERC Regn.,2014	Net Availability (ESO) (MU)	GRIDCO Share (%)	Ex-bus Availability to GRIDCO (MU)	Central Trans. Loss (%)	GRIDCO share after the applicable C.S. Trans. Loss (MU)	Energy drawal proposed for FY 2020-21
TSTPS Stg.-I	1000	7.05	85	6921.06	32.34	2238.56	2.33	2186.40	2186.40
TSTPS Stg.-II	2000	6.25	85	13961.25	10.00	1396.13	2.55	1360.52	1360.52
FSTPS-I&II	1600	6.78	85	11105.71	14.18	1575.19	2.10	1542.11	0.00
FSTPS-III	500	6.25	85	3490.31	17.15	598.58	2.10	586.01	0.00
KhSTPSStg-I	840	9.00	85	5691.72	15.77	897.86	1.95	880.36	761.28
KhSTPSStg-II	1500	6.25	85	10470.94	2.62	274.40	1.95	269.05	269.05
TOTAL				51640.99		6980.72		6824.45	4577.25

235. The Commission examined the submissions of GRIDCO and observed that CERC has notified the new Tariff Regulations, 2019 on 07.03.2019, which shall remain force for period of 5 years i.e. from 01.04.2019 to 31.03.2024. Therefore, the Commission accepts the proposal of GRIDCO and provisionally considers the norms of the new CERC Tariff Regulations, 2019 for the purpose of computation of availability of power from these power stations during the FY 2020-21.

236. The Commission further observed that GRIDCO is purchasing bundled solar power which includes thermal power from the unallocated quota of the NTPC stations. Hence, the share of thermal power purchase by GRIDCO from NTPC stations increases accordingly. The state share of power from ER-NTPC stations inclusive of the said bundle thermal power has been considered by the Commission based on the REA for the month of January, 2020. Considering the NAPAF of 85% and Central Sector transmission loss as stated earlier, the availability of power from Central

Thermal Stations estimated for the FY 2020-21 and GRIDCO's drawal as per the requirement are given in the table below:

Table - 29
Drawal From Central Thermal Generating Stations for FY 2020-21

Central Thermal Stations	Installed Capacity (MW)	Aux. Cons. (%)	Availability considering 85% PLF & Auxiliary Consum. (MU)	GRIDCO Share (%)	GRIDCO Share (MU)	Central Trans. Loss (%)	Estimated Share after Central Sector Transmission Loss (MU)	OERC Approval for Purchase (MU)
TSTPS –I	1000	7.05	6921.06	32.344	2238.56	2.33	2186.40	1509.01
TSTPS –II	2000	6.25	13961.25	10.000	1396.13	2.55	1360.52	1360.52
FSTPS-I& II	1600	6.78	11105.86	14.183	1575.19	2.10	1542.11	-
FSTPS-III	500	6.25	3490.31	17.150	598.58	2.10	586.01	-
KhSTPS –I	840	9.00	5691.72	15.775	897.86	1.95	880.36	-
KhSTPS–II	1500	6.25	10470.94	2.621	274.40	1.95	269.05	-
TOTAL	7440		51641.14		6980.72		6824.45	2869.53

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

237. As mentioned above, the total estimated availability of power from different sources comes to 34960.34 MU, whereas total power requirement of GRIDCO is estimated at 29018.76 MU. Since, the least cost power is available, costly power from certain Central Thermal Generating Stations has not been considered in the ARR of GRIDCO for consumption inside the State. However, GRIDCO may trade this power if commercially viable and earn some revenue to bridge the past gap. Hence, taking the least cost power procurement from different generating stations for the State consumption, the Commission approves the quantum of purchase for FY 2020-21 as given in the table below:

Table – 30
Quantum of Power Purchase from Various Sources for FY 2020-21

(Figures in MU)

Sources of Purchase	Commission's Approval for State Drawl for 2019-20	GRIDCO's Proposal for 2020-21	Estimated Availability for 2020-21	Commission's Approval for State Drawl for 2020-21
HYDRO (OLD)	3676.86	3660.26	3676.86	3676.86
Indravati	1942.38	1942.38	1942.38	1942.38
Machakund	262.50	262.50	262.50	262.50
Total Hydro	5881.74	5865.14	5881.74	5881.74
OPGC (I & II)	2792.78	2743.56	2743.56	2743.56
OPGC (III & IV)	726.93	6947.00	4631.78	4631.78
TTPS (NTPC)	3336.04	3254.22	3254.22	3254.22
IPPs	8217.30	2386.00	8217.30	6230.85
CGPs	-	-	-	-

Sources of Purchase	Commission's Approval for State Drawl for 2019-20	GRIDCO's Proposal for 2020-21	Estimated Availability for 2020-21	Commission's Approval for State Drawl for 2020-21
Co-Generation Plants	-	-	-	-
Small Hydro	417.00	385.00	385.00	385.00
Biomass Energy	80.00	80.00	80.00	80.00
Wind Energy	290.00	753.00	752.80	752.80
Solar Energy	680.00	1019.00	1019.00	1019.00
TOTAL STATE	22421.79	23432.92	26965.40	24978.95
CHUKHA HPS	267.54	260.00	259.48	259.48
Tala HPS	135.76	131.00	130.80	130.80
Mangdechhu	-	270.00	270.00	270.00
Teesta-V HPS	508.97	510.00	510.00	510.00
Total Central Hydro	912.27	1171.00	1170.28	1170.28
TSTPS-I	2215.16	2186.40	2186.40	1509.01
TSTPS-II	1363.57	1360.52	1360.52	1360.52
FSTPS-I & II	1549.02	-	1542.11	-
FSTPS-III	-	-	586.01	-
KhTPS-I	-	761.28	880.36	-
KhTPS-II	269.22	269.05	269.05	-
Total Central Thermal	5396.97	4577.25	6824.45	2869.53
Total Central Sector	6309.24	5748.25	7994.73	4039.81
TOTAL GRIDCO	28731.03	29181.17	34960.13	29018.76

Power Procurement Cost

238. The cost of power is the highest component in the revenue requirement of GRIDCO. The Commission, for determination of the cost of power purchase, has exercised due diligence in arriving at the cost in respect of each of the power stations based on the relevant rules, regulations and documents available.

OHPC Stations

239. OHPC has submitted the application for approval of its Annual Revenue Requirement and Tariff of its individual power stations separately for the FY 2020-21 in terms of Section 62, 64 and 86 of the Electricity Act, 2003 which has been registered as Case No.68/2019. The tariff approved for OHPC Stations in the said case will be considered for determination of the power procurement cost of GRIDCO in respect of all stations of OHPC.
240. Accordingly, the cost of power purchase by GRIDCO from each of the power stations of OHPC is given in the table below:

Table – 31
Cost of Power Purchase from OHPC Stations for FY 2020-21

Name of the Power Station	Quantum of Power Purchase for 2020-21 (MU)	Approved Average Tariff for 2020-21 (P/U)	Cost of Power Purchase for FY 2020-21 (Rs. Cr.)
Burla	677.16	129.36	87.595
Chipilima	485.10	74.69	36.234
Balimela	1171.17	65.95	77.241
Rengali	519.75	129.34	67.227
Upper Kolab	823.68	80.49	66.296
Upper Indravati	1942.38	92.14	178.975
Sub-Total	5619.24	91.39	513.568
Machhkund	262.50	62.58	16.427
Total	5881.74	90.11	529.995

241. While determining the ARR of GRIDCO, the Annual Fixed Charge (AFC) of OHPC power stations has been considered for the entire FY 2020-21 i.e. from April, 2020 to March, 2021. Since, the tariff determined in this order is applicable w.e.f. 1st May, 2020 due to COVID-19 situation therefore AFC of OHPC power stations for the month of April, 2020 is likely to be billed by OHPC as per the previous tariff order. As a result, OHPC will not be able to recover its fixed cost for the complete financial year. In that event, the differential fixed cost for the month of April, 2020 as per revised tariff order for FY 2020-21 shall be paid by GRIDCO to OHPC during the year when such bill is raised by OHPC.

Ib Thermal Power Station of OPGC

242. OPGC has also filed its ARR & Tariff application before OERC for determination of Generation Tariff of its existing Units-I & II (2x210 MW) Ib Thermal Power Station for the year 2020-21, which has been registered as Case No.69 of 2019. The Commission in its order passed in Case No.69 of 2019 has determined the annual capacity charges to the tune of Rs. 248.97 Crore and energy charge @ 153.91 P/U for the said power station of OPGC. Hence the procurement cost for the approved drawal of 2743.56 MU from the existing Units-I & II of OPGC comes to Rs.671.23 Crore at an average rate of 244.66 P/U.

243. While determining the ARR of GRIDCO, the annual capacity charges (fixed cost) of OPGC Units-I & II has been considered for the entire FY 2020-21. Since, the tariff

determined in this order is applicable w.e.f. 1st May, 2020 due to COVID-19 situation the capacity charge of OPGC Unit-I & II for the month of April, 2020 is likely to be billed as per the previous tariff order. As a result, OPGC will not be able to recover full capacity charges for the entire financial year. Therefore, the differential capacity charges for the month of April, 2020 as per revised tariff for that month when billed by OPGC during the year shall be paid by GRIDCO.

244. Further, GRIDCO has submitted that as per the supplementary PPA dated 24.01.2019, the power is to be procured from Units-III & IV Expansion Project of OPGC at tariff to be determined as per CERC Tariff Regulations from time to time in line with PPA dated 04.01.2011. OPGC has not submitted any tentative tariff in respect of its Units-III and IV for FY 2020-21. However, OPGC vide Case No.03 of 2019, had filed a petition before this Commission for provisional Tariff in respect of its expansion Units-III & IV and the Commission vide their Order dated 16.08.2019 have fixed the provisional tariff @ 275 Paise/kWh in respect of these units for procurement of 50% contracted capacity by GRIDCO as per PPA dated 04.01.2011, as the supplementary PPA dated 24.01.2019 was not filed before the Commission at that time. OPGC has further filed a Review Petition No. 54 of 2019 challenging the said order dated 16.08.2019, wherein GRIDCO is enlisted as a respondent. In replying to the said review petition of OPGC, GRIDCO has filed its submission in which pending determination of tariff, GRIDCO has proposed to procure net quantum of 6947 MU of power from OPGC expansion project at a tentative tariff of Rs.3.09/kWh, which has been derived by considering 85% of Fixed Cost as per normative calculation for factoring the component of Fixed Cost in tariff. In view of the above, GRIDCO has proposed to procure 6947 MU of energy @ 309 P/U from the expansion Units-III & IV of OPGC with the power procurement cost of Rs. 2146.62 Crore during the FY 2020-21.
245. The Commission observed that a quantum of 4631.78 MU has been considered for drawal from the expansion project of OPGC (Units-III & IV) during the FY 2020-21 for determination of ARR and BSP of GRIDCO. The tariff for this expansion project of OPGC has not yet been determined by the appropriate Commission, though this Commission vide its order dated 16.08.2019 have fixed a provisional tariff @ 275 Paise/kWh in respect of this expansion project for procurement of 50% contracted capacity by GRIDCO as per the PPA dated 04.01.2011. Considering the submission

of GRIDCO, the Commission observed that the tariff for this expansion of project (Units-III & IV) of OPGC would be more than the provisional tariff of 275 P/U fixed by the Commission in its order dated 16.08.2019. Therefore, the Commission considers the proposal of GRIDCO and approves a provisional tariff of 309 P/U for procurement of power from Units-III & IV expansion projects of OPGC for the purpose of computation of ARR of GRIDCO for the FY 2020-21. GRIDCO shall pay the same to OPGC till tariff is fixed for this expansion project. Accordingly, the cost of power procurement by GRIDCO from the subject OPGC expansion project during FY 2020-21 has been estimated at Rs.1431.22 Crore towards purchase of the approved quantum of 4631.78 MU at an average rate of 309 P/U.

Talcher Thermal Power Station (TTPS)

246. GRIDCO has submitted that the Tariff Petition No. 334/GT/2014 filed by NTPC in respect of TTPS for the period 2014-19 as per the CERC Tariff Regulations, 2014, has been disposed of by CERC vide Order dated 26.09.2016. GRIDCO has filed a Writ Petition against the CERC (Terms and Conditions of Tariff) Regulations, 2014 before the Hon'ble Odisha High Court which has been admitted as W.P. (C) No.12122 of 2015. Further, another case W.P. (C) No. 18695 of 2014 filed earlier against CERC Tariff Regulations, 2009 before the Hon'ble High Court of Odisha is also sub-judice at present. Besides, two Numbers of cases have been filed by GRIDCO before APTEL against CERC Order 31.08.2016 and 26.09.2016, respectively for the Control Period 2009-2014 and 2014-19 in the matter of non-carrying out of R&M Phase-IV works in TTPS Stage-II by the NTPC. Further, NTPC has filed an appeal before APTEL against Order dtd. 26.09.2016 of the CERC with a prayer to allow Rs.28.42 Crore in the tariff towards the cost incurred for ash disposal in filling of "Mine Voids" which was dis-allowed by the CERC in the Tariff of TTPS for the Control Period 2014-19.
247. **Fixed Charges:** Pending the aforesaid petitions at different judicial Forums, NTPC-TTPS, at present, is claiming the monthly Fixed Charges as per the Annual Fixed Charge as applicable for FY 2018-19 i.e. Rs. 445.48 Crore as per the CERC Tariff Order dated 26.09.2016 along with the cost towards total moisture correction in GCV as mentioned in the Order. In the absence of CERC Tariff order for the Control Period 2019-24, Annual Fixed Charges of TTPS has been claimed by NTPC from Apr'19 to Sept'19 as per the AFC claimed by NTPC during the year 2018-19 along with the

Moisture Correction which is Rs.445.48 Crore. Accordingly, GRIDCO has worked out the Fixed Cost per unit of energy from TTPS as 136.89 P/U for FY 2020-21 at the projected PLF of 90.22 % and Aux. Energy Consumption of 10.50 % for the proposed energy drawal of 3254.22 MU.

248. After scrutiny of the submissions of GRIDCO, the Commission observed that Talcher Thermal Power Station (TTPS) is owned and operated by NTPC and tariff for this generating station has not yet been determined by CERC for the control period FY 2020-21. However, CERC vide its Order dated 26.09.2016 passed in Petition No. 334/GT/2014 has determined the Annual Fixed Charge (AFC) of Rs.445.478 Crore for FY 2018-19 along with the cost towards total moisture correction in GCV in respect of TTPS (NTPC). Hence, the Commission considers the fixed cost of TTPS at Rs.445.478 Crore provisionally for the FY 2020-21 as proposed by GRIDCO for determination of ARR and BSP of GRIDCO. Accordingly, the fixed charge per unit comes to 136.89 P/U for drawal of 3254.22 MU from TTPS during the FY 2020-21.

Energy Charges:

249. GRIDCO has submitted that as per the CERC Tariff Order dated 26.09.2016 in Petition No. 334 of 2014 in consonance with the CERC Tariff Regulations, 2014, the Base Energy Charge for TTPS has been fixed as 110.187 Paise/kWh. Further, in the said Tariff Order, it has been mentioned that NTPC-TTPS is entitled to compute and recover the Energy Charges in accordance with Regulation 21(6) (a) of the Tariff Regulations, 2014. Accordingly, NTPC-TTPS 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 and oil for that month and considering the operational parameters laid down in CERC Tariff Regulation, 2014. However, based on the trend of ECR as claimed by TTPS-NTPC, GRIDCO has considered ECR of 192.73 P/U for FY 2020-21 taking the weighted average of monthly Energy Charges claimed during April, 2019 to October, 2019 as given in the table below.

**Table-32
Energy Charge Rate (ECR) of TTPS (in P/U)**

Apr-19	May-19	June-19	July-19	Aug-19	Sept-19	Oct-19	Monthly Average Energy Charge	ECR approved for FY 2020-21 considering the monthly average ECR from Apr, 19 to Oct, 19
182.4	179.5	197.1	201.3	211.1	211.3	179.4	192.73	192.73

250. The Commission scrutinized the proposal of GRIDCO and observed that NTPC-TTPS is claiming the Energy Charges every month as per Clause 21(6) (a) of the CERC Tariff Regulations, 2014 based on the Price and GCV of Coal and Oil etc. for that month. Accordingly, considering the data on coal and oil price and GCV of Coal etc. from the monthly bills of last ten months i.e. from April, 2019 to January, 2020 as claimed by NTPC in respect of TTPS, the weighted average energy charge rate is computed at 190.42 P/U. Hence, for the purpose of computation of ARR & BSP of GRIDCO for the FY 2020-21, the Commission provisionally approves the energy charge rate of 190.42 P/U for drawal of energy from TTPS.
251. **Year-end Adjustment Charges:** GRIDCO has projected the year-end adjustment charges of TTPS to the tune of Rs.30.56 Crore for the FY 2020-21 based on the pro-rated assessment of actual charges paid by GRIDCO during 1st six months of the FY 2019-20, which includes electricity duty, SLDC charges and incentive. The Commission on examination of the claims provisionally approves (i) Electricity duty of Rs.21.00 Crore calculated @ 55 paise/unit on auxiliary consumption of the generation at 90.22 % PLF, (ii) SLDC Charges of Rs.0.36 Crore and (iii) Rs.9.44 Crore towards incentive on excess generation beyond the normative PLF. Thus, the total year-end charges approved for 2020-21 comes to Rs.30.80 Crore. The year-end charges proposed by GRIDCO and approved by the Commission for the FY 2020-21 is shown in the table below:

Table – 33
Year-End Charges of TTPS for FY 2020-21

Items	OERC approval for FY 2019-20	GRIDCO's Proposal for FY 2020-21	OERC approval for FY 2020-21
Electricity duty	21.53	17.50	21.00
Water Cess / Charge	0.12	0.00	0.00
UI overdrawl	0.00	0.00	0.00
SLDC charges	0.36	0.34	0.36
Incentive	13.53	12.72	9.44
Total (Rs. Crore)	35.54	30.56	30.80
ESO (MU)	3336.04	3254.22	3254.22
Per unit cost (P/U)	10.65	9.39	9.46

252. After taking into account all the above estimated cost, the approved tariff for TTPS power comes to 336.78 P/U comprising of fixed cost @ 136.89 P/U, energy charges @ 190.42 P/U and year end charges @ 9.46 P/U. Hence, the total power procurement

cost from NTPC-TTPS during FY 2020-21 is estimated at Rs.1095.95 Crore for the approved drawl of 3254.22 MU.

Power Purchase from Renewable Energy Sources

Small Hydro

253. In its ARR application for FY 2020-21, GRIDCO has proposed to procure 220 MU from Meenakhi Small Hydro Electric Project of M/s. MPL @ 368 P/U and 80 MU from Samal Small Hydro Electric Project of M/s. OPCL @ 371 P/U including PTC trading margin of 4 P/U in both the cases. Further, GRIDCO has proposed to procure 85 MU of energy from the forthcoming SHEP i.e. M/s Baitarani Power Projects Pvt. Ltd at the rate of 426 P/U as specified by the Commission for the 2nd Control period and as per the PPA executed with this SHEP. Hence, the procurement cost of total 385 MU of energy from small hydro sources has been estimated by GRIDCO at Rs.146.85 Crore with an average rate of 381.43 P/U.
254. 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.MPL. 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 observed that GRIDCO has proposed to procure 85 MU of energy from the SHEP of M/s Baitarani Power Projects Pvt. Ltd. during FY 2020-21 @ 426 P/U as per the rate specified by the Commission for the 2nd control period, in accordance with the PPA executed between GRIDCO and M/s Baitarani Power Projects Ltd. The Commission accepts the proposal of GRIDCO and allows GRIDCO for procurement of 85 MU from M/s Baitarani Power Projects Ltd. during the FY 2020-21 provisionally at the rate of 426 P/U with procurement cost of Rs.36.21 crore. Considering the above, the Commission approves procurement of total 385 MU by GRIDCO from Small Hydro sources i.e. 220 MU from Lower Kolab & Middle Kolab SHEPs of M/s.MPL, 80 MU from Samal Barage SHEP of M/s. OPCL and 85 MU from M/s Baitarani Power Projects Pvt. Ltd. during the FY 2020-21 for state consumption with total procurement cost of Rs.146.85 crore at an average rate of 381.43 P/U.

Bio-mass Energy

255. GRIDCO has proposed to procure Biomass Energy of 80 MU from M/s. Shalivahan Green Energy Ltd. during FY 2020-21 at a cost of Rs. 46.24 Crore @ 578 P/U till determination of the relevant tariff by the Commission. The Commission approves cost of Rs. 46.24 Crore as proposed by GRIDCO at the rate of 578 P/U provisionally for procurement of 80 MU of Biomass energy from M/s. Shalivahana Green Energy Ltd. for the purpose of computation of ARR of GRIDCO for the FY 2020-21.

Wind Energy

256. GRIDCO has submitted that they will avail 189 MU at the tariff of 353 P/U through PTC from the 50 MW wind power allocated under the “1000 MW ISTS connected wind power projects scheme, Phase-I” of MNRE, Govt. of India, 365 MU at the Tariff of 272 P/U through SECI from 100 MW Wind power allocated under the “ISTS connected wind power projects scheme, Phase-II” and another 199 MU at the tariff of 252 P/U through SECI from additional 50 MW allocated under “ISTS connected wind power projects scheme, Phase-III” of the MNRE, Govt. of India during the FY 2020-21. Accordingly, GRIDCO has proposed to purchase 753 MU of wind power during the FY 2020-21 with the procurement cost of Rs. 216.15 Crore. After scrutiny of the proposal of GRIDCO, the Commission approves procurement of 189.22 MU at the rate of 353 p/u, 364.77 MU at the rate of 272 p/u and 198.81 MU at the rate of 252 p/u. Accordingly the power procurement cost comes to Rs.216.11 Crore at an average rate of 287.08 P/U towards purchase of 752.80 MU of wind energy by GRIDCO during the FY 2020-21 for State consumption.

Solar Energy

257. GRIDCO has proposed to procure 1013 MU of solar energy from different sources at the total cost of Rs. 456.75 Crore with an average rate of 448.24 P/U during the FY 2020-21 and also avail solar energy of 6 MU towards deemed purchase through CESU from 4 MW Roof-top Solar PV project developed by GEDCOL under net metering regulation, the details as indicated in the Table below:

Table -34
Procurement & Cost of Solar Power during FY 2020-21

Sl. No.	Solar RE Sources	Energy (MU)	Rate (P/U)	Total Cost (Rs. Cr.)
1	8 Nos. of Solar PV projects of 1 MW each under RPSSGP	13	628	8.16
2	20 MW from NVVN through 'New Projects scheme' under JNN SM, Phase-1	34	1065	36.21
3	5 MW through NTPC from Solar PV project at Dadri	8.5	1294	11.00
4	5 MW through NTPC from Solar PV project at Faridabad	8.5	935	7.95
5	5 MW from M/s Alex Green Energy Ltd. through OREDA State Scheme	8	700	5.60
6	25 MW from M/s ACME Odisha Solar Power Pvt. Ltd.	42	728	30.58
7	70 MW through Solar Energy Corporation of India (SECI) under JNN SM, Phase –II, Batch-I	116	550	63.80
8	270 MW through Solar Energy Corporation of India (SECI) under JNN SM, Phase-II, Batch-IV	450	450	202.50
9	75 MW from M/s. Aditya Birla Renewables Limited under GRIDCO e-bidding	125	300	37.50
10	300 MW through SECI under ISTS-Connected Solar Power Projects Scheme	208	257	53.46
	Sub-Total (Procurement by GRIDCO)	1013	448.24	456.76
11	Deemed purchase through CESU from 4 MW Rooftop Solar PV Project implemented by GEDCOL under net metering regulation	6.00	-	-
	Total (for the purpose of meeting RPO by GRIDCO)	1019.00	448.24	456.76

258. The Commission scrutinized the above proposal of GRIDCO along with the current energy bills raised by the solar generators and observed that no documents has been submitted by GRIDCO in respect of the price of power purchase of 125 MU from M/s. Aditya Birla Renewables Limited under GRIDCO e-bidding and 208 MU through SECI under ISTS-Connected Solar Power Projects Scheme though GRIDCO is expected to purchase power from these two sources during the FY 2020-21. However, the Commission approves the above proposal of GRIDCO for the computation of ARR of GRIDCO for the FY 2020-21. Accordingly, the procurement cost comes to Rs. 456.76 crore at an average rate of 448.24 P/U for procurement of total 1019 MU of solar power during the FY 2020-21.
259. The Commission, in the above paragraphs, has approved a purchase of 2236.80 MU from renewable energy sources (both solar and non-solar) during the FY 2020-21

based on the proposal of GRIDCO and availability of the same. But such available quantum of renewable energy is inadequate to meet the RPO fixed by the Commission. In its submission GRIDCO has stated that they are committed to procure renewable energy from all the available sources during the ensuing year to fulfil the RPO. The Commission observed that in the ARR of GRIDCO for the FY 2016-17, the Commission had allowed a corpus of Rs.30 Cr. to be utilized in exigency exclusively for purchase of renewable power in case of any shortfall of fund for purchase of the same. Since GRIDCO had not procured more than the approved quantum of Renewable Energy during the FY 2016-17, 2017-18 and 2018-19 the corpus amount of Rs. 30 Cr. was not utilized. Hence, in the tariff order for the FY 2019-20, the Commission had directed GRIDCO to utilise the said Rs.30 Cr. towards purchase of additional quantum of renewable energy during the current year 2019-20. But from the submission of GRIDCO it is observed that GRIDCO has procured only 717.25 MU of renewable energy (both solar and non-solar) upto the month of November, 2019 against the approval of 1473 MU for the FY 2019-20. It appears that GRIDCO may not be able to purchase the approved quantum of renewable energy by the end of the current FY 2019-20. Hence, the aforesaid amount of Rs.30 Cr. might have not been utilized in the current year for procurement of additional quantum of renewable energy over and above the approved quantum. Therefore, the Commission directed GRIDCO to utilise the said amount of Rs.30 Cr. towards purchase of additional quantum of renewable energy during the ensuing FY 2020-21.

Independent Power Plants (IPPs)

M/s. Vedanta Ltd.

260. In its application, GRIDCO has submitted that the Multi Year Tariff (MYT) Petition filed by M/s Vedanta Ltd for FY 2014-15 to 2018-19 in Case No.95 of 2013 and application for truing up for the period 2010-11 to 2013-14 in Case No.38 of 2016 have already been disposed of by the Commission vide order dated 26.02.2018 and 29.06.2018 respectively. Accordingly, in respect of M/s. Vedanta Ltd., the Commission in the ARR Order of GRIDCO for FY 2019-20 has fixed a provisional tariff of 255.60 P/U (fixed charge component of 95.11 P/U and energy charge of 160.49 P/U) towards procurement of power by GRIDCO from the said IPP. At present M/s.Vedanta-IPP is raising monthly energy bills based on ECR as per ARR order of GRIDCO and Capacity Charge is claimed considering Annual Fixed Charges

as per their own calculation considering receivable component of working capital for two months thereby deviating from Annual Fixed Charges fixed by OERC in Tariff Order dated 29.06.2018 taking into account the PAFM % calculated on its own and not as issued by SLDC each month. At present, GRIDCO is accepting the monthly energy bills of M/s. Vedanta Ltd at OERC approved Annual Fixed Charges for FY 2018-19 (fixed vide order dated 29.06.2018 in Case No. 95 of 2013) and ECR as per actual for a month. M/s. Vedanta Ltd has not lifted linkage coal in respect of IPP Unit- 2 (600 MW) since March, 2018. The ECR for March, 2018 works out to be 159 Paise/kWh and GRIDCO makes payment at this rate. In absence of determination of tariff for the block period 2019-24, GRIDCO has proposed the normative fixed charges at 94.85 Paise/kWh considering the Annual Fixed Charges for FY 2018-19 and ECR at 159 Paise/kWh totaling to 253.85 Paise/kWh for FY 2020-21. Accordingly, GRIDCO has estimated the power procurement of Rs.138.09 Crore towards purchase of proposed energy of 544 MU from M/s. Vedanta Ltd during FY 2020-21 @ 253.85 P/U.

261. The Commission observed that the MYT petition filed by M/s. Vedanta Ltd. (erstwhile Sesa Sterlite Ltd) before the Commission for the FY 2014-15 to 2018-19 in Case No.95 of 2013 has been disposed of vide its order dated 29.06.2018. No further tariff order has been issued by the Commission for determination of tariff of the IPP Unit-II of M/s. Vedanta Ltd. Further, the Commission in its order dated 27.01.2016 passed in Case No. 21/2015 has concluded that Unit-II of the 4x600 MW power plant of M/s. Vedanta Ltd. will continue to remain as IPP and connected to the State Grid. 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 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. Unit – I, III & IV of the power plant are allowed to be converted to CGP w.e.f. 01.04.2015. The above conversion is based on the assurance of the Petitioner that in case of low or no generation in Unit-II, the Petitioner shall meet its commitment in the PPA from the CGP units and its pricing shall be as per the relevant IPP Regulations of the Commission. The coal used for generating power for State

entitlement shall be linkage coal / captive mines allocated to the Petitioner for State use.

262. In view of the above, for the purpose of computation of ARR of GRIDCO for the FY 2020-21, the Commission considers the fixed cost as approved for FY 2018-19 in its aforesaid order dated 29.06.2018 passed in Case No.95 of 2013. In the said order, the Commission has approved the Annual Capacity Charge of Rs.1597.73 Crore for the FY 2018-19 for the entire 2400 MW power station, out of which GRIDCO share comes to Rs.399.42 Crore for the dedicated Unit-II of 600 MW capacity. Accordingly, the fixed cost is considered at 95.11 P/U on normative generation. Further, since M/s Vedanta Ltd. has not supplied power to GRIDCO during last one year, the ECR data is not available with GRIDCO for computation of tariff. However, the Commission had considered the average ECR of 160.49 P/U for computation of ARR of GRIDCO for the FY 2019-20. Taking 5% escalation on the last year approved ECR of 160.49 P/U, the Commission considers ECR of 168.52 P/U in respect of the IPP of M/s Vedanta Ltd. for computation of ARR of GRIDCO for the FY 2020-21. Accordingly, the provisional tariff for the IPP of M/s. Vedanta Ltd. for the FY 2020-21 has been considered at fixed charge rate of 95.11 P/U and ECR of 168.52 P/U. Further, the Commission allows Rs.17.69 Crore in tariff towards payment of E.D. on normative auxiliary consumption. Accordingly the average tariff for M/s. Vedanta Ltd comes to 251.29 P/U considering the total State share of 5039.45 MU. However, the Commission has earlier approved the power procurement of 3053 MU from M/s. Vedanta Ltd. for state use during the FY 2020-21. Therefore, the power procurement cost is estimated at Rs.767.18 Crore @ 251.29 P/U for the approved quantum of 3053 MU from M/s. Vedanta Ltd. during the FY 2020-21 for state use.

M/s GMR Kamalanga Energy Ltd.

263. GRIDCO has submitted that CERC vide its order dated 29.06.2018 passed 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 for the contracted capacity of 262.5 MW i.e. State share of 25% of the present installed capacity of 1050 MW. The Annual Fixed Charges fixed by CERC in respect of M/s. GKEL for the control period 2014-19 in the said order are as follows:

Table - 35

Item	2014-15	2015-16	2016-17	2017-18	2018-19
AFC (Rs. Cr.)	1228.8875	1255.9932	1272.9462	1280.7911	1258.9628
GRIDCO's Share of AFC (Rs.Cr.)	307.2219	313.9983	318.2373	320.1977	314.7407

264. Since no further tariff order has been issued by CERC, GRIDCO has considered the Annual Fixed Charges of Rs.314.7407 Crore for the FY 2020-21 towards state share of 25% contracted capacity from the IPP of M/s. GKEL which has been approved by CERC for the FY 2018-19. Accordingly, GRIDCO has computed the per unit fixed cost at 171.29 P/U. Further, considering the average of actual monthly Energy Charge Rate (ECR) for the period April'19 to Sept'19 based on use of linkage coal and SHAKTI coal by M/s. GKEL, GRIDCO has worked out the ECR to be 159.13 P/U. Hence, the tariff proposed by GRIDCO comes to 330.42 P/U. Accordingly, for the proposed drawal of 1842 MU from M/s. GKEL during the FY 2020-21, GRIDCO has estimated the power procurement cost of Rs. 608.63 Crore i.e. State share of 1842 MU @ 330.42 P/U. Further, GRIDCO has proposed for the incentive @ 50 P/U on the excess drawal of power above the State share.
265. The Commission observed that the application filed by M/s. GKEL before CERC for determination of tariff for the control period 2014-19 has been disposed of by CERC vide their order dated 29.06.2018 passed in Petition No.61/GT/2016. According to the said order, GRIDCO share of AFC is Rs. 314.74 Crore towards 25% of the State share of installed capacity. GRIDCO has to pay this amount towards drawal of State share of power from M/s. GKEL. Further, considering the actual of ECR claimed by M/s. GKEL in the monthly bills from the month of April'19 to Jan.'20, as submitted by GRIDCO, the average ECR is computed as 163.23 P/U which has been considered by the Commission for procurement of power from M/s. GKEL during FY 2020-21. Earlier in this order the Commission has approved 2167.28 MU to be procured by GRIDCO from M/s. GKEL during FY 2020-21. Hence, the total energy charges for procurement of approved quantum of 2167.28 MU comes to Rs. 353.77 Crore. Accordingly, the total power procurement cost is arrived at Rs. 668.51 Crore (Fixed charges- Rs. 314.74 Crore + Total Energy Charges Rs. 353.77 Crore) at an average rate of 308.46 P/U for drawal of the approved quantum of 2167.28 MU for state use during the FY 2020-21.

M/s Jindal India Thermal Power Ltd.

266. In view of no supply of power by JITPL since June-2019 onwards taking the plea of cases before different forum of law, GRIDCO has not proposed any quantum of power to be procured from JITPL during FY 2020-21. GRIDCO has submitted that, the above proposal is without prejudice to the various on-going cases in different legal forums and subject to prudent decision by the Commission. As per the Para 13(ii) of the Commission's Order dated 04.06.2019 in case no. 1/2017 and 64/2017, a compensation provision should be incorporated in the PPA in case of default of M/s. JITPL to supply the State share of power. The compensation should be equal to the variable cost of the Central Thermal Generating Station approved by the Commission for power purchase of GRIDCO situated at the margin of the merit order dispatch for that year. GRIDCO has submitted that taking plea of various court cases, M/s. JITPL has been denying payment of compensation amount claimed by GRIDCO in line with the above Order of the Commission for short supply by JITPL.
267. The Commission has observed that M/s. JITPL has stopped supplying State share of power to GRIDCO since 23.05.2019 and advised GRIDCO to take up the matter with State Government and pursue the cases related to M/s. JITPL pending at different judicial forum and to make endeavour to purchase full quantum of energy towards State share from this IPP during FY 2020-21 as this energy will be available at the variable cost only. The Commission has approved purchase of 1010.57 MU from the IPP of M/s JITPL during the FY 2020-21 for State use at variable cost/ECR. Since M/s. JITPL has not supplied power from 23.05.2019, the coal data only for the month of April and May, 2019 of the current financial year is available with GRIDCO. Considering the linkage coal price indicated in the monthly bills of M/s. JITPL of these two months as submitted by GRIDCO, the average ECR comes to 157.32 P/U. Pending finalisation of the tariff of such power from M/s JITPL, the Commission considers the ECR of 165.18 P/U provisionally with an escalation of 5% on 157.32 P/U, towards procurement of power from the IPP of M/s JITPL during the FY 2020-21 for the purpose of computation of ARR of GRIDCO. Accordingly, the power procurement cost comes to Rs. 166.93 Crore @ 165.18 P/U for purchase of the approved quantum of 1010.57 MU by GRIDCO for State use.
268. GRIDCO has submitted that since all these IPPs are having respective Fuel Supply Agreement for supply of linkage coal /SHAKTI coal for supply of State entitlement of

power to GRIDCO, the Commission may consider Energy Charge Rate as arrived at by considering the Price & GCV of firm linkage coal & /SHAKTI coal only. The Commission agrees with the proposal of GRIDCO and computed the ECR of the above IPPs based on the past bills raised by them. Accordingly, the procurement cost of total 6230.85 MU from the above IPPs is estimated to the tune of Rs.1602.62 Crore at an average rate of 257.21 P/U as shown in the Table below:

Table -36
Power Procurement & Cost from IPPs during FY 2020-21

IPPs	Quantity	Average Rate (Prov.)	Cost
	(MU)	(P/U)	(Rs. Crore)
M/s. Vedanta Ltd.	3053.00	251.29	767.18
M/s GMR Kamalanga Ltd.	2167.28	308.46	668.51
M/s Jindal India Thermal Power Ltd.	1010.57	165.18	166.93
Total	6230.85	257.21	1602.62

269. The Commission has considered the above price for the purpose of computation of ARR of GRIDCO for the FY 2020-21. However, GRIDCO may 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.

Central Hydro Generating Stations

270. **Chukha:** In its application, GRIDCO has considered the rate of 240.16 P/U (including trading margin @ 4 P/U) for procurement of power from Chukha hydro power station during the FY 2020-21 based on the Office Memorandum dated 08.03.2018 of Ministry of External Affairs, Govt. of India along with the PTC letter No. C/PTC/Chukha/7388 dtd.13.03.2018. GRIDCO has, therefore, proposed a rate of 246.07 P/U including Central Transmission Loss of 2.40% towards drawal of power from Chukha hydro power stations for the FY 2020-21, but excluding transmission charges of PGCIL. Thus, the power purchase cost of 260.00 MU as proposed by GRIDCO works out to Rs. 63.98 crore.
271. The Commission scrutinized the submission of GRIDCO and approves the rate of 246.07 P/U considering the central transmission loss @ 2.40% for power procurement from Chukka HEP for FY 2020-21. So the cost for Chukka power comes to Rs. 63.85 Crore for the approved drawal of 259.48 MU for FY 2020-21. The details are given in Table below.

Table – 37

	GRIDCO's Proposal for FY 2020-21	Commission's Approval for FY 2020-21
Net Energy Drawal (MU)	260.00	259.48
Energy Charge (P/U)	240.16	240.16
Energy Charge incl. Tr. Loss (P/U)	246.07 (C.T.L. of 2.40%)	246.07 (C.T.L. of 2.40%)
Cost of Chukka Power (Rs. Cr.)	63.98	63.85

272. **TALA:** GRIDCO has proposed the rate of 216.00 P/U (including trading margin @ 4 P/U payable to PTC India) for estimating the power purchase cost from TALA during the FY 2019-20. This rate of 216 P/U is based on the bills served to GRIDCO in accordance to the PTC Letter No.C/PTC/Tala/14169 dated 09.12.2016. Considering Central Transmission Loss of 2.40%, the rate of TALA Power comes to 221.31 P/U. Considering the drawl of 131.00 MU, the power purchase cost from TALA HEP worked out by GRIDCO at Rs.28.99 Crore for the FY 2020-21 excluding transmission charges of PGCIL.
273. The Commission scrutinized the above proposal of GRIDCO and approves the rate of 221.31 P/U considering the central transmission loss @ 2.40% for the power procurement from TALA HEP for FY 2020-21. So the cost of TALA power comes to Rs.28.95 Crore for the approved drawal of 130.80 MU for FY 2020-21. The details are given in Table below.

Table – 38

	GRIDCO Proposal for 2020-21	Commission's Approval for 2020-21
Net Energy Drawal MU	131.00	130.80
Energy Charge (P/U)	216.00	216.00
Energy Charge incl. Tr.Loss (P/U)	221.31 (C.T.L. of 2.40%)	221.31 (C.T.L. of 2.40%)
Cost of Tala Power (Rs. In Cr.)	28.99	28.95

274. **MANGDECHHU:** GRIDCO, in the present ARR and BSP Application for FY 2020-21, has considered 419 P/U (412 P/U + PTC Margin of 7 P/U) as the rate for Mangdechu Power. GRIDCO has submitted the copies of the protocol to the Agreement between the Govt. of the Republic of India & the Royal Govt. of Bhutan regarding Mangdechu HEP dtd.23.04.2019 and the Power Sale Agreement executed between PTC & GRIDCO dtd.30.08.2019 to this effect. Considering Central Transmission Loss of 2.40%, the rate of Mangdechu power comes to 429.30 P/U.

Accordingly, GRIDCO has estimated the power purchase cost of Mangdechhu power at Rs.115.91 Crore @ 429.30 P/U for procurement of 270 MU during FY 2020-21.

275. The Commission scrutinized the above proposal of GRIDCO and approves the rate of 429.30 P/U considering the central transmission loss @ 2.40% for the power procurement from Mangdechhu HEP for FY 2020-21. Hence, the cost of Mangdechhu power comes to Rs.115.91 Crore for the approved drawal of 270.00 MU during FY 2020-21. The details are given in Table below.

Table – 39

	GRIDCO's Proposal for 2020-21	Commission's Approval for 2020-21
Net Energy Drawal MU	270.00	270.00
Energy Charge (P/U)	419.00	419.00
Energy Charge incl. Tr.Loss (P/U)	429.30 (C.T.L. of 2.40%)	429.30 (C.T.L. of 2.40%)
Cost of Mangdechhu Power (Rs. In Cr.)	115.91	115.91

276. **TEESTA:** GRIDCO has stated that the Energy Charge Rate (ECR) being claimed by NHPC-TEESTA in the present bills is 116.30 P/U. The ECR in case of TEESTA station constitute 50% of the total charges and balance 50% constitute the fixed charges. Thus, the per unit fixed charge for TEESTA station works out to 116.30 P/U, the total per unit cost being 232.60 P/U. Considering the central sector loss @ 2.55% the proposed rate for TEESTA works out to 238.68 p/u. So, the power purchase cost from TEESTA-V HEP estimated by GRIDCO comes to Rs.121.72 crore considering the proposed drawal of 510.00 MU for FY 2020-21.
277. After due scrutiny, the Commission observed that as per the CERC order dated 16.08.2016, the Annual Fixed charges of TEESTA-V is approved at Rs. 520.32 crore and accordingly the average rate of TEESTA Power comes to 232.62 P/U considering the saleable energy of 2236.81 MU. Hence, the average rate per unit of TEESTA power computed to be 238.70 P/U inclusive of central transmission loss of 2.55% for FY 2020-21. Accordingly, the cost of TEESTA power comes to Rs.121.74 Crore for the approved drawal of 510.00 MU during FY 2020-21. The details are given in Table below.

Table – 40

	GRIDCO Proposal for FY 2020-21	Commission's Approval for FY 2020-21
Net Energy Drawal MU	510.00	510.00
Energy Charge (P/U)	232.60	232.62
Energy Charge incl. Tr. Loss (P/U)	238.68 (C.T.L. of 2.55%)	238.70 (C.T.L. of 2.55%)
Cost of Teesta Power (Rs. In Crore)	121.72	121.74

Central Sector Thermal Power Stations

278. **Fixed Charges:** GRIDCO in its filing has submitted that the Capacity Charges (Fixed Cost) of respective NTPC Stations are being claimed by NTPC as per the relevant Tariff Orders / Regulations notified by the CERC from time to time. The existing tariff orders issue by CERC in respect of the Central Thermal Generating stations are based on the CERC (Terms and Conditions of Tariff) Regulation, 2014, which is applicable up to 31.03.2019. Though the new Tariff Regulations, applicable with effect from 01.04.2019, has been pronounced by the CERC on 07.03.2019, the Tariff Order for the respective ER Generating Stations for the period 2019-24 has not been pronounced by the CERC till now. Hence, in the absence of the new Tariff Orders for ER Generating Stations, the Capacity Charges claimed by NTPC for FY 2019-20 based on the Tariff Order of 2018-19 (along with the adjustment of total moisture in Working Capital) has been considered for determination of Fixed Cost of the respective Stations for FY 2020-21. GRIDCO has made the apportionment of Fixed Cost as per the state share in the pool and with inclusion of Central Transmission Loss (CTL), the Projected Fixed Cost applicable for state share of energy drawal from different Stations is worked out by GRIDCO as Rs. 668.36 Crore as shown in the Table below:

**Table-41
Annual Fixed Cost Projected by GRIDCO for NTPC-ER Stations for FY 2020-21**

Central Thermal Stations	AFC for FY2018-19 as per CERC Order (Rs. Cr.)	Revised AFC based on Interest on Working Capital adjusted towards Moisture Correction in GCV (Rs. Cr.)	Projected AFC by GRIDCO for FY20-21 (Rs. Cr.)	GRIDCO Share (%)	GRIDCO F.C. share for FY 2020-21 at normative availability of 85% (Rs. Cr.)	GRIDCO's Proposed drawal for FY 2020-21 after C.S. Loss (MU)	Fixed Cost (P/U)
TSTPS -I	674.01	676.26	676.26	32.34	218.73	2186.40	100.04
TSTPS -II	1007.23	1012.59	1012.59	10.00	101.26	1360.52	74.43
FSTPS-I&II	914.80	930.04	930.04	14.18	131.91	1542.11	85.54

Central Thermal Stations	AFC for FY2018-19 as per CERC Order (Rs. Cr.)	Revised AFC based on Interest on Working Capital adjusted towards Moisture Correction in GCV (Rs. Cr.)	Projected AFC by GRIDCO for FY20-21 (Rs. Cr.)	GRIDCO Share (%)	GRIDCO F.C. share for FY 2020-21 at normative availability of 85% (Rs. Cr.)	GRIDCO's Proposed drawal for FY 2020-21 after C.S. Loss (MU)	Fixed Cost (P/U)
FSTPS-III	525.44	527.82	527.82	17.15	90.52	586.01	154.47
KhSTPS-I	603.63	606.35	606.35	15.77	95.65	880.36	108.65
KhSTPS-II	1149.96	1155.82	1155.82	2.62	30.29	269.05	112.58
TOTAL	4875.07	4908.88	4908.88		668.36	6824.45	97.94

* In the absence of relevant Tariff Orders of CERC basing on CERC (Terms and conditions of Tariff) Regulations, 2019, the AFC for aforementioned Stations have been calculated considering the Tariff Orders of CERC for the period 2014-19 and revised therefrom due to recalculation of Interest on Working Capital basing upon the Total Moisture Correction in GCV in compliance with the CERC Orders.

279. The Commission scrutinized the above proposal of GRIDCO and observed that since no tariff orders have been issued for the FY 2020-21 in respect of NTPC-ER Thermal Generating Stations, GRIDCO has considered the Fixed Charges of as per the tariff orders issued by CERC for the period from 2014-19. Hence, the Commission provisionally accept the above proposal of GRIDCO in respect of the fixed charges for the Central Thermal Stations.

280. Energy Charge Rate (ECR): GRIDCO has submitted that as per the new CERC Tariff Regulations, 2019-24, the Energy Charges of Central Generating Stations shall now include charges towards both Primary as well as Secondary Fuel Oil (SFO) and 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 ECR worked out from the landed price of Coal and GCV and Oil for that month and considering the operational parameters laid down in CERC Tariff Regulation, 2019. Keeping in the present trend of energy charges, GRIDCO has projected the Energy Charge Rate computed as per the new CERC Tariff Regulation for 2019-24, including the Central Sector Loss as shown in the table below:

Table – 42
Energy Charge Rate of NTPC Stations Projected by GRIDCO for FY 2020-21

Central Thermal Stations	Weighted Average ECR of 1 st six months of FY 2019-20 (Apr.'19 to Sept.'19) as billed by NTPC	Central Sector Transmission Loss	Projection of ECR by GRIDCO for FY 2020-21 including Central Sector Loss
	(P/U)	(%)	(P/U)
TSTPS-I	204.30	2.33	209.17

Central Thermal Stations	Weighted Average ECR of 1 st six months of FY 2019-20 (Apr.'19 to Sept.'19) as billed by NTPC	Central Sector Transmission Loss	Projection of ECR by GRIDCO for FY 2020-21 including Central Sector Loss
TSTPS-II	199.56	2.55	204.78
FSTPS-I&II	244.60	2.10	249.85
FSTPS-III	238.24	2.10	243.35
KhSTPS-I	213.43	1.95	217.67
KhSTPS-II	202.14	1.95	206.16

281. Actual bills submitted by NTPC to GRIDCO from the month of April, 2019 to January, 2020 are scrutinized and the Commission observed that the average ECR of the TSTPS Stage I & Stage II has been lower than the other central sector thermal stations. The details of Price of Coal, GCV & ECR as per the bills served by NTPC to GRIDCO for the period from April, 2019 to January, 2020 are given in the table below:

Table-43
Price of Coal & GCV of CGS

MONTH	FSTPS - I & II			FSTPS-III	KSTPS-I			KSTPS-II	TSTPS-I			TSTPS-II
	Cost of Coal (Rs./MT)	GCV of Coal Kcal/Kg	ECR Rs./KWH	ECR Rs./KWH	Cost of Coal (Rs./MT)	GCV of Coal Kcal/Kg	ECR Rs./KWH	ECR Rs./KWH	Cost of Coal (Rs./MT)	GCV of Coal Kcal/Kg	ECR Rs./KWH	ECR Rs./KWH
Apr-19	3,338.24	3,576.00	2.423	2.379	2,239.53	2,876.00	2.097	1.989	2,154.72	2,993.00	1.871	1.854
May-19	3,283.23	3,576.00	2.384	2.340	2,224.21	2,860.00	2.095	1.987	2,162.05	2,795.00	2.008	1.997
Jun-19	3,140.49	3,502.00	2.329	2.286	2,376.77	2,965.00	2.159	2.047	2,136.32	2,867.00	1.935	1.883
Jul-19	3,396.74	3,440.00	2.562	2.352	2,386.70	3,029.00	2.122	2.013	2,119.61	2,963.00	1.858	1.841
Aug-19	3,340.65	3,542.00	2.447	2.402	2,380.85	2,993.00	2.142	2.032	2,305.19	2,708.00	2.207	2.189
Sep-19	3,384.86	3,495.00	2.514	2.467	2,482.49	3,078.00	2.172	2.059	2,271.00	2,549.00	2.309	2.290
Oct-19	3,553.75	3,640.00	2.534	2.487	2,484.16	3,060.00	2.186	2.074	2,151.10	2,604.00	2.143	2.126
Nov-19	3,548.08	3,611.00	2.551	2.504	2,484.16	3,060.00	2.186	2.158	2,223.29	2,813.00	2.052	2.034
Dec-19	3,204.61	3,302.00	2.521	2.474	2,390.75	2,842.00	2.264	2.147	2,342.78	3,088.00	1.967	1.948
Jan-20	3,767.82	3,497.00	2.796	2.744	2,431.63	2,847.00	2.299	2.181	2,424.11	3,028.00	2.076	2.058
Avg from 4/19 to 01/20	3,373.26	3,547.75	2.505	2.443	2,382.36	2,990.13	2.172	2.069	2,190.41	2,786.50	2.036	2.015

282. From the above table, it is observed that the ECRs of the central generating stations have not followed a particular pattern in their variations. Therefore, reaching at the conclusion on likely ECRs of different power stations for the ensuing year is possible. Therefore, the Commission, for the purpose of computation of ARR of GRIDCO for FY 2020-21, considers the average of actual ECR of first ten months of the current FY 2019-20 (i.e. from April, 2019 to January, 2020) of the Central Thermal Power Stations as indicated in Table below.

Table – 44
Energy Charge Rate (ECR) of CGSs approved for 2020-21

Central Thermal Stations	(Paise/Unit)		
	GRIDCO's Proposal for 2020-21 (including Loss)	Approval of the Commission considering the Avg. of actual ECR from April'19 to Jan'20 (excluding central Tr. Loss)	Approval of the Commission including central Tr. Loss
TSTPS-I	209.17	203.62	208.47
TSTPS-II	204.78	201.51	206.79
FSTPS-I & II	249.85	250.55	255.92
FSTPS -III	243.35	244.34	249.58
KHSTPS-I	217.67	217.17	221.49
KHSTPS-II	206.16	206.85	210.97

283. In case of any variation in ECR during 2020-21 over and above the rate approved by the Commission, the same may be recovered in accordance with the procedure and guidelines outlined in Appendix-7 read with the Regulations 60 of the OERC (Conduct of Business) Regulations, 2004. This would be over and above the normal tariff applicable. Alternatively such additional expenditure would be considered while determining the tariff for FY 2021-22.

284. **Year-end Adjustment Charges (YEA):** GRIDCO had proposed the year-end adjustment charges of central generating stations for FY 2020-21 to the tune of Rs. 15.35 crore based on the actual for FY 2018-19 along with the projected Central Sector loss.

285. The Commission examined the above proposal of GRIDCO and approved the Year-end Charges of Rs.15.23 Crore for the FY 2020-21 which is at the level of the actual Year-end Charges for the FY 2018-19 as proposed by GRIDCO except electricity duty which have been considered by the Commission based on normative auxiliary consumption and the Commission does not allow any incentive due to consideration of normative generation. The details of the year-end charges approved by the Commission are given in the table below.

Table – 45
Year End Charges Approved for the FY 2020-21

Central Generating Stations	Electricity Duty (Rs. Cr.)	SOC & MOC charges (Rs. Cr.)	Total (Rs. Cr.)	Estimated energy after Central Tr. Loss (MU)	Rate including loss (P/U)	GRIDCO Proposal including loss (P/U)
TSTPS –I	9.34	0.24	9.58	2186.40	4.38	4.71
TSTPS-II	5.12	0.13	5.25	1360.52	3.86	3.42

Central Generating Stations	Electricity Duty (Rs. Cr.)	SOC & MOC charges (Rs. Cr.)	Total (Rs. Cr.)	Estimated energy after Central Tr. Loss (MU)	Rate including loss (P/U)	GRIDCO Proposal including loss (P/U)
FSTPS- I & II	-	0.19	0.19	1542.11	0.12	0.12
FSTPS – III	-	0.07	0.07	586.01	0.12	0.12
KhSTPS –I	-	0.11	0.11	880.36	0.12	0.13
KhSTPS –II	-	0.03	0.03	269.05	0.11	0.11
Total	14.46	0.77	15.23	6824.45	2.23	2.25

286. Taking all the above costs into account, the summary of estimated power purchase cost in respect of drawl power from Central Thermal Generating Stations by GRIDCO for FY 2020-21 is given in the table below:

Table –46
Summary of Power Purchase Cost from Central Generating Stations for FY 2020-21

Sl. No.	Generators	Estimated Energy (MU)	Approved drawal of Energy (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	2186.40	1509.01	218.73	100.04	208.47	4.38	312.90	539.93 *
2	TSTPS St-II	1360.52	1360.52	101.26	74.43	206.79	3.86	285.07	387.85
3	FSTPS I & II	1542.11	0.00	131.91	85.54	255.92	0.12	341.59	-
4	FSTPS III	586.01	0.00	90.52	154.47	249.58	0.12	404.17	-
5	KhTPS St-I	880.36	0.00	95.65	108.65	221.49	0.12	330.26	-
6	KhTPS St-II	269.05	0.00	30.29	112.58	210.97	0.11	323.66	-
NB:	(i) The rates include Central Transmission Loss. (ii) * Part energy is considered for State drawal and full fixed cost is allowed.								

Transmission Charges for PGCIL System

287. GRIDCO in its ARR application has submitted that Transmission charges of PGCIL are being determined applying the norms and principles laid down by CERC from time to time. CERC vide its Order dtd.15.06.2010 have notified CERC (Sharing of Inter State Transmission Charges and Losses) Regulation, 2010, amended vide CERC notifications dated 24.11.2011, 28.03.2012 and 01.04.2015. The last amendment came into force with effective from 01.05.2015. According to this Regulation, PGCIL Charges shall be shared applying Hybrid Methodology, which shall be sensitive to distance, direction as well as quantum of power flow using load flow studies. The sharing of Inter-State Transmission System (ISTS) Charges shall be based on the technical and commercial information provided by various customers to the evaluating agency known as Implementing Agency which shall calculate the point of

connection rates on quarterly basis for every customer (such as generator or demand customer) using the aforesaid method, for which Orders are being published by the CERC for the specified period from time to time. The Point of Connection (PoC) rates shall be on Rs/MW/Month basis. CERC vide its Order dtd.28.04.2017 have furnished the Slab PoC Rates for the period from April to June, 2017 taking into consideration the 3rd Amendment Regulations.

288. GRIDCO has submitted that as per the aforesaid CERC Regulations, the CTU bills for levy of PoC Charges shall be calculated in the following manner.

- The first part of the CTU bill shall recover charges for use of the transmission assets of ISTS licensees based on the Point of Connection methodology at the approved injection and withdrawal quantum for a beneficiary at the applicable PoC rate; (Bill #1)
- The second part of the bill shall recover charges for Additional Approved Medium Term Open Access; (Bill #2)
- The third part of the bill shall be used to adjust any variations in interest rates, FERV, rescheduling of commissioning of transmission assets as allowed by the Commission for any ISTS Licensees; (Bill #3)
- The fourth part of the bill shall be a Deviation bill which shall charge the Designated Customer for deviation from the sum of the Approved withdrawal/injection, (Bill #4)

289. In its ARR and BSP application for the FY 2020-21, GRIDCO has proposed the PGCIL transmission charges of Rs. 795.52 Crore @ 75.26 P/U for their projected power procurement of 10815.53 MU of energy from the Central Generating Stations.

290. The Commission observed that the tariff for central transmission system is fixed by the principles and norms laid down by the CERC from time to time. Hence, the Commission feels it prudent to provisionally consider the PGCIL transmission charges in line with the CERC Regulations and also actual bills raised by PGCIL, for the purpose of computation of the ARR of GRIDCO for FY 2020-21. The Commission scrutinized the submission of GRIDCO and estimated the PoC charges of Rs.569.07 Crore towards Bill #1 for the FY 2019-20 by prorating the actual net bills raised by PGCIL for the period from April, 2019 to January, 2020 factoring the reimbursement from short term open access customers. The Commission

provisionally approves the said amount of Rs.569.07 Crore towards Bill #1 for the ensuing year 2020-21. In case the actual payment by GRIDCO during FY 2020-21 exceeds or decrease this approved amount, the differential amount shall be considered in truing up exercise. Similarly, for the Bill #3, considering the proposal of GRIDCO based on the bills raised by PGCIL for the month from April'19 to Sept'19 and prorating the same for the whole year, the anticipated amount is Rs.51.00 Crore. The Commission provisionally approves the same for the ensuing year 2020-21. The Commission scrutinized the Bill #4 towards Deviation charges of PGCIL for the FY 2018-19 (i.e. from April, 2018 to March, 2019) and provisionally approves an amount of Rs. 2.66 Crore for the ensuing year 2020-21. The Commission observed that Bill #2 has not yet been raised by PGCIL to GRIDCO due to absence of additional medium-term Open Access. Accordingly, the Commission provisionally approves the total amount of Rs. 622.73 Crore towards transmission charges of PGCIL for the FY 2020-21 on account of Bill #1, Bill #3 and Bill #4. The Commission also scrutinized the ULDC Charges bills for the period from April, 2019 to January, 2020 and prorating the same for the entire year, provisionally approves Rs.2.67 Crore as pass through in its ARR for FY 2020-21.

291. Taking all the above costs into account the Commission approves a net amount of Rs. 625.40 Crore payable by GRIDCO to PGCIL towards transmission charges for the FY 2020-21. The details of total cost towards PGCIL transmission charges is indicated in the table below:

Table – 47
PGCIL Transmission Charges for FY 2020-21

Particulars	Commission's Approval
Transmission charge payable by GRIDCO towards Bill#1, factoring the amount receivable from STOA customers (Rs. Cr.)	569.07
Deviation charges proposed towards bill #4 (Rs. Cr.)	2.66
Year End Charges proposed towards Bill #3 (Rs. Cr.)	51.00
Total (Rs. Cr.)	622.73
ULD and Communication Charges (Rs. Cr.)	2.67
Net amount payable by GRIDCO towards Transmission Charges (Rs. Cr.)	625.40

292. Further, GRIDCO in its application has proposed for an amount of Rs.1.45 Crore towards payment of ERLDC fees and charges consisting of System Operation Charges (SOC) and Market Operation Charges (MOC) for the FY 2020-21 considering the bills received during April'19 to Sept'19 and prorating the same for

the year. However, considering the bills received by GRIDCO during April, 2019 to February, 2020 towards ERLDC fees and charges and prorating the same for the year, the amounts comes to Rs.3.15 Crore. Therefore, the Commission allows Rs. 3.15 Crore as pass through in the ARR of GRIDCO towards ERLDC fees and charges for the ensuing year 2020-21.

293. 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 2020-21 are given in the table below:

Table -48
GRIDCO's Proposal & Commission's Approval for FY 2020-21

Generators	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	Energy	Total Rate	Total cost	Energy	Total Rate	Total cost
	MU	P/U	Rs.in Cr.	MU	P/U	Rs.in Cr.
HYDRO (OLD)	3660.26	89.86	328.91	3676.86	91.00	334.59
Indravati	1942.38	90.61	175.99	1942.38	92.14	178.97
Machakund	262.50	62.59	16.43	262.50	62.58	16.43
Total Hydro	5865.14	88.89	521.33	5881.74	90.11	529.99
OPGC 1 & 2 nd Unit	2743.56	260.28	714.09	2743.56	244.66	671.23
OPGC 3 & 4 th Units	6947.00	309.00	2146.62	4631.78	309.00	1431.22
TTPS (NTPC)	3254.22	339.02	1103.23	3254.22	336.78	1095.95
IPPs	2386.00	312.96	746.72	6230.85	257.21	1602.62
Renewable Sources						
Small Hydro	385.00	381.43	146.85	385.00	381.43	146.85
Biomass	80.00	578.00	46.24	80.00	578.00	46.24
Wind	753.00	287.05	216.15	752.80	287.08	216.11
Solar	1019.00	448.24	456.76	1019.00	448.24	456.75
Total RE	2237.00	387.13	866.00	2236.80	387.14	865.95
TOTAL STATE	23432.92	260.23	6097.99	24978.95	248.09	6196.97
CHUKHA	260.00	246.07	63.98	259.48	246.07	63.85
Tala HPS	131.00	221.31	28.99	130.80	221.31	28.95
Mangdechhu	270.00	429.30	115.91	270.00	429.30	115.91
Teesta-V	510.00	238.68	121.73	510.00	238.70	121.74
Total Central Hydro	1171.00	282.33	330.61	1170.28	282.37	330.45
TSTPS - I	2186.40	313.92	686.35	1509.01	312.90**	539.93*
TSTPS - II	1360.52	282.63	384.52	1360.52	285.07	387.85
FSTPS I & II	-	335.51	132.10	-	-	-
FSTPS III	-	397.94	90.59	-	-	-
KhTSPS - I	761.28	343.44	261.45	-	-	-
KhTSPS - II	269.05	318.85	85.79	-	-	-
Total Central Thermal	4577.25	358.47	1640.81	2869.53	323.32	927.78
Total Central Sector	5748.25	342.96	1971.42	4039.81	311.46	1258.22

Generators	GRIDCO's PROPOSAL			COMMISSION's APPROVAL		
	Energy	Total Rate	Total cost	Energy	Total Rate	Total cost
	MU	P/U	Rs.in Cr.	MU	P/U	Rs.in Cr.
PGCIL Tr. Charge			795.52			625.40
ERLDC Charges			1.45			3.15
TOTAL GRIDCO	29181.17	303.84	8866.38	29018.76	278.57	8083.74

NB: * Part energy is considered for State drawal and full fixed cost is allowed.

** The average rate of TSTPS-I indicated in the above table has been computed considering the estimated state share of power.

294. The Commission has not allowed any drawal from some of the Central Generating Stations i.e. FSTPS-I, II & III and KhTPS-I & II, since considering merit order despatch principle these Stations lie beyond the margin of the merit order. GRIDCO has entered into PPAs with numbers of State and Central Generating Stations. If, GRIDCO draws power from those stations it will have surplus availability of power. Even, if GRIDCO does not draw power from the power stations which are having PPA, it will have to pay fixed cost to those power stations which will eventually be passed on to the consumers as Tariff burden. In order to avoid passage of unnecessary cost to the consumer, the Commission has not considered the fixed cost of those power stations from which GRIDCO would not draw power due to surplus availability. Therefore, the GRIDCO should take up this matter with the State Government to whom Central allocation of power has been made for payment of fixed cost of those stations. The estimated extra fixed charge for those stations would be Rs. 348.37 Crore for FY 2020-21.
295. The Commission's approval of power purchase for State consumption is based on the merit order dispatch principles in order to keep the power procurement cost at lower level. Hence, any deviation from the merit order dispatch principle should be avoided by GRIDCO. In past years, it is observed that there has 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. The Commission shall review the quantum and cost of power purchase based on merit order during performance review of GRIDCO. Accordingly, GRIDCO shall furnish the relevant data during the review of its performance along with the justification and rationales in case of any deviation from merit order dispatch principle. The Commission shall also consider the same along with other expenses during truing up exercise.
296. In the present case GRIDCO has filed an additional submission on 16.03.2020 i.e. much after the hearing of the case was concluded on 05.02.2020. The issues raised by

GRIDCO are mainly on purchase of state share of power of 4188.38 MU from Darlipalli STPS (2x800 MW) of NTPC during FY 2020-21 with an estimated cost of Rs.1428.24 crore at the average rate of 341 p/u and to allow additional interest of 2% amounting to Rs.30 crore on its loans, which are not backed by Government Guarantee. Since these issues are not in the original application and not raised during the hearing to obtain views of the objectors, the Commission does not consider the above submission of GRIDCO at this stage.

Rebate for Prompt Payment from the Generators

297. The PPA between the generators and GRIDCO provides for a rebate of 2% on the gross power bill, if payment is made through Letter of Credit. 1% rebate on the billed amount is allowed when payment is made within 30 days. In case of payment beyond the due date, delayed payment surcharge @ 1.25% per month is payable by GRIDCO to the generators. For the purpose of calculation of revenue requirement, the cost of power should be calculated at its gross value, as the rebate available from the generator is likely to offset the rebate that will be allowed to the DISCOMs for payment made within due date.

Reimbursement to OHPC during FY 2020-21

298. The Commission while passing the order in ARR and Tariff application of OHPC for the FY 2020-21 in Case No.68 of 2019 has allowed an amount of Rs. 61.70 Crore provisionally for reimbursement by GRIDCO during the FY 2020-21 as given in the table below. The Commission approves the same in the ARR of GRIDCO for the FY 2020-21.

Table – 49

(Rs. in Cr.)

Component of Costs	RHEP	UKHEP	BHEP	HHEP	CHEP	UIHEP	Total
(a) License fee for use of water for generation of electricity	0.735	1.165	1.656	0.958	0.686	2.747	7.95
(b) ED on Auxiliary Consumption	0.289	0.458	0.651	0.376	0.270	1.079	3.12
(c) SLDC charges							1.19
(d) Application fees and publication expenses							0.26
(e) Contribution to ERPC							0.16
(f) Reimbursement of Income tax paid during FY 2018-19							49.02
Total							61.70

Reimbursement to OPGC during FY 2020-21

299. The Commission while passing the order in ARR and Tariff application of OPGC for the FY 2020-21 in Case No.69 of 2019 has allowed an amount of Rs. 60.58 Crore provisionally for reimbursement by GRIDCO during the FY 2020-21 as given in the

table below. The Commission approves the same in the ARR of GRIDCO for the FY 2020-21.

Table- 50

Sl.No.	Particulars	OERC Approval for FY 2020-21 (Rs. in Crore)
1	Electricity Duty	13.17
2	Water Cess and Water Charges	7.80
3	Tax and Cess on Land	0.19
4	SOC and MOC for SLDC	0.29
5	ERPC Charges	0.16
6	Income Tax	38.67
7	ARR and Tariff Petition Fees	0.30
8	Water Conservation Fund	0.00
	Total	60.58

PASS THROUGH OF COSTS IN THE ARR & BSP OF GRIDCO FOR FY 2020-21

300. GRIDCO has submitted to consider an amount of Rs. 308.18 Crore (Rs 127.93 Crore towards guarantee commission and arrear payment to OPGC and Rs 180.25 Crore towards financial impact of costly power purchase during the period from April'19 to Sept'19) under Pass Through in the ARR & BSP for FY 2020-21.
301. GRIDCO submitted that during the 1st half of FY2019-20, due to disruption in supply of coal from MCL coupled with low Hydro condition, GRIDCO could not meet the State Demand during the Peak Season. Hence, it was forced to source power from Power Exchanges (PEs) including Over-drawal of power from the UI Pool to meet the shortfall in State demand. GRIDCO has purchased 1505.55 MU of power at Rs.580.84 Crore at an average Rate of 385.79 Paise/Kwh during the period from April'2019 to Sept'2019 through Trading/Over drawal of power, the details of which are as follows:

Table- 51

Power Transactions through PEs & UI Over-Drawal during April'19 to Sept.'19

Source of Power	Energy Availed	Average Rate	Total Cost
	(MU)	(P/U)	(Rs. Crore)
Trading through IEX	944.372	395.21	373.224
Trading through PXIL	61.381	378.29	23.22
Trading through Intra	121.254	347.24	42.104
UI Over drawal	378.543	375.89	142.292
Total	1505.55	385.80	580.84

302. GRIDCO submitted that the Net Cost / Financial impact of the above transactions is worked to be Rs.180.25 Crore after adjusting the OERC approved Average Cost for

FY 2019-20 vis-à-vis the actual power purchase cost sourced through Power Exchanges during the first half of FY 2019-20, as given in the table below:

Table- 52
Net Cost / Financial Impact due to purchase of costly power
during the period from April'2019 to Sept'2019

Sl. No.	Particulars	Value
1	Average rate of Power Purchase approved by the OERC (P/U)	259.88
2	Average rate of actual purchase of power (Pool Cost) (P/U)	272.67
3	Excess Rate of power purchase (Sl. 2- Sl. 1) (P/U)	12.79
4	Energy sold in Regulatory Business (MU)	13597
5	Loss (%)	3.52
6	Power purchased for Regulatory Business (13597/96.48)*100 (MU)	14093
7	Additional Cost of Power (Sl. 6 × Sl. 3) (Rs. Crore)	180.25

303. GRIDCO has further submitted that the Commission vide its order dated 22.03.2018 passed in Case No. 75/2017 (Tariff order of OPGC for FY 2018-19) at Para-151 has observed as follows:-

“Guarantee Commission:

Reimbursement of guarantee Commission for loan incurred during the period prior to 2016-17 relates to the period when tariff was being guided as per the PPA. Therefore, if it is reimbursed by GRIDCO, the Commission shall appropriately adjust the same in GRIDCO's ARR, if claimed by GRIDCO.”

Accordingly, GRIDCO had made reimbursement of an amount of Rs. 9,77,19,045/- to OPGC on 29.09.2018 towards guarantee commission fees pertaining to loan incurred during the period prior to FY 2016-17. GRIDCO has paid this amount with the condition that it will recover the said amount from the dues payable against the monthly energy bills of OPGC, if the said amount is not appropriately adjusted/allowed by the Commission in the ARR of GRIDCO. Therefore, GRIDCO has prayed for pass through of this amount in its ARR.

304. GRIDCO has further submitted that the Commission vide its order dated 28.03.2019 passed in Case No. 33/2018 has re-determined the tariff of OPGC (Units-I&II) for the FY 2016-17, 2017-18 & 2018-19 in compliance to the direction of the Hon'ble Supreme Court of India vide their judgement dated 19.04.2018 in C.A. No. 9485/2017. Consequently there is a financial impact of Rs. 118.16 Crore on payment of additional fixed charges and reimbursable items such as electricity duty, incentives and income tax etc., out of which GRIDCO has already paid an amount of Rs. 73.62 Crore. Further, GRIDCO has stated that regarding arrear claim towards energy

charges amounting to Rs. 95.21 Crore for the aforesaid period has not been processed for verification by GRIDCO due to lack of supporting documents. OPGC has been requested to provide the requisite information and the GRIDCO shall claim the amount for pass through as per the acceptance and payment to be made to OPGC. Accordingly, in the present application GRIDCO has claimed the amount of Rs. 127.93 Crore (Rs. 118.16 Crore towards arrear payment to OPGC and Rs. 9.77 Crore towards guarantee commission fees paid to OPGC) as pass through in the ARR.

305. The Commission observed that GRIDCO has claimed the total amount of Rs. 308.18 Crore as pass through in the ARR for the FY 2020-21. After scrutiny of the above proposal of GRIDCO, the Commission is of the view that the claim of GRIDCO for pass through of Rs. 180.25 Crore towards financial impact of power purchase through Power Exchanges and UI over drawl during the current FY 2019-20 i.e. for the period from April, 2019 to September, 2019 should not pass through in the ARR of GRIDCO for the FY 2020-21 as the actual amount could be ascertained after audit of the accounts for the FY 2019-20 and be factored in truing up of accounts. Therefore, the Commission does not allow the proposed amount of Rs. 180.25 Crore in the ARR of GRIDCO for the FY 2020-21. Similarly, the Commission does not allow the proposed amount of Rs. 118.16 Crore towards arrear payment of OPGC and directs GRIDCO to claim the amount in truing up of accounts for the FY 2019-20. However, the Commission allows the amount of Rs. 9.77 Crore claimed by GRIDCO towards guarantee commission fees already paid to OPGC, as pass through in the ARR for the FY 2020-21. The proposal of GRIDCO for pass through in the ARR and approval of the Commission thereon is given in the Table below:

Table- 53

Pass through proposal of GRIDCO and approval of the Commission in ARR for FY 2020-21

(Rs. in Cr.)

Sl. No.	Particulars	GRIDCO's Proposal	Commission's Approval
1	Net cost/financial impact of power purchase through PEs and UI over drawl during the period April, 19 to September, 19.	180.25	0.00
2	Reimbursement of Guarantee commission to OPGC for the loan incurred prior to FY 2016-17 and arrear payment to OPGC for the FY 2016-17, 2017-18 and 2018-19.	127.93	9.77
	Total	308.18	9.77

GRIDCO FINANCE

Truing Up

306. GRIDCO, in its ARR application has submitted that the Commission has approved the Truing Up amount of Rs. 3588.02 Crore till FY 2014-15 in the Tariff Order for FY 2017-18. Subsequently GRIDCO has filed its Truing Up application for the FY 2015-16 and FY 2016-17 for Rs.406.66 Cr. and Rs.378.37 Crore respectively for approval by the Commission and the order is awaited.
307. Further, GRIDCO has also filed the Truing Up application along with the copy of Audited Accounts and other required documents for the FY 2017-18 during the process of hearing of ARR and BSP Application for the FY 2019-20 by the Commission. Audit of Accounts of GRIDCO has been completed upto FY 2018-19. Truing-up Application till FY 2018-19 will be filed before the Commission as soon as the Final Accounts along with the CAG Report for FY 2018-19 is received.
308. The Commission observed that GRIDCO has filed truing up application for the FY 2015-16 and 2016-17 which is pending before the Commission and GRIDCO has stated that they will file truing up application for FY 2018-19. Since, the truing up applications has been filed by GRIDCO in separate cases, the same will be dealt by the Commission separately. The Commission directs GRIDCO to file the truing up application for the FY 2018-19 by June 2020 along with justification for deviation in cost of power purchase and other expenditures and also details of revenue earnings from sale of power through trading, UI and other sources of income. The said information are also to be furnished for the FY 2015-16 to 2017-18 for which GRIDCO has already filed the truing up applications. After receipt of the same the Commission will take up all the truing up cases of GRIDCO for analogous hearing and approval thereof.

Employees cost

309. The Annual Revenue Requirement for the Financial Year 2020-21 filed by GRIDCO includes Rs.14.41 crore towards employees cost, which is given in the table below:-

Table – 54

Sl No	Particulars	Previous Year (FY 2018-19)	Current Year (FY 2019-20)	Ensuing Year (FY 2020-21)
A	Salary & Allowance			
1	Basic Pay	6.77	6.40	7.36
2	Grade Pay	0.07	-	-
3	Dearness Allowance	0.97	1.07	1.84
4	House Rent Allowance	0.31	0.35	0.38
5	Other Allowance	0.06	0.10	0.37
6	Over-time	-	-	-
7	Bonus	-	-	-
	Sub-total (A)	8.19	7.92	9.95
B	Additional Employee Cost			
1	Wage/Salary revision if any	-	-	-
2	Contractual Engagement			
3	Out Sources Engagement	0.61	0.55	0.61
4	others if any	-	-	-
	Sub-total (B)	0.61	0.55	0.61
C	Other Employee Cost			
1	Medical Expenses (allowance+Reimbursement)	0.14	0.18	0.20
2	Leave Travel Concession	0.008	0.008	0.01
3	Interim Relief to Staff	-	-	-
4	Encashment of Earned Leave	-	-	-
5	Honorarium	0.01	0.03	0.05
6	Ex-gratia	0.11	0.11	0.11
7	Staff Welfare Expenses	0.01	0.0010	0.00
8	Miscellaneous	0.02	0.02	0.02
	Sub-total (C)	0.30	0.36	0.40
D	Terminal Benefits			
1	Pension	0.72	0.72	1.47
2	Gratuity	-	-	-
3	Leave Salary	0.28	0.28	0.81
4	Other (including contribution to NPS)	0.13	0.16	0.15
	Sub-total (D)	1.13	1.17	2.43
	Arrear towards implementation of 7th Pay Commission(E)		-	1.02
E	Total Employees Cost (A+B+C+D)	10.23	10.00	14.41
F	Less: Employees Cost Capitalized	-	-	-
G	Net Employee Cost (E- F)	10.23	10.00	14.41
	TOTAL	10.23	10.00	14.41

Basic Pay + GP

310. GRIDCO in the reply to queries of the Commission reported that the actual cash outflow on Basic Pay + GP from April 2019 to November 2019 (for a period of 8 month) was Rs.3.31crore. The Basic pay and GP for FY 2019-20 is extrapolated to arrive at Basic pay for FY 2020-21 including 7th pay recommendations. The said calculation is shown in the following table:

Basic Pay

Table-55

(Rs in Crore)

Calculation of Basic Pay and GP	FY 2019-20 (From April 19 to Nov 19) actual	FY 2019-20 (Extrapolated for the whole year)	FY 2020-21 approved
Basic Pay and GP	3.68	5.52	5.69

Dearness Allowance:

311. The Govt of Odisha implemented the 7th Pay Commission with effect from 01.01.2016. The DA was also changed as per the 7th pay recommendations and the following table shows the notified DA by Govt of Odisha and projected DA thereof for FY 2020-21.

Table- 56

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
01.07.2018	9%	Approved By GoO
01.01.2019	12%	Approved By GoO
01.07.2019	17%	Approved By GoO
01.01.2020	22%	Projected
01.07.2020	27%	Projected
01.01.2021	32%	Projected

As per the above table the DA rate for FY 2020-21 is assumed to be 27%.

312. Following principle has been adopted for passing of other items of Employee cost.
- The arrear pertaining to 7th pay recommendations has been projected at Rs 1.02 crore. The commission allows Rs 0.17 crore equal to 10% of the arrear 7th pay recommendations, as per the recent notification by the Govt of Odisha, in the ARR to be passed on to the tariff for FY 2020-21.
 - House rent allowance has been allowed to the tune of Rs 0.32 cr.

iii. Medical reimbursement and all other expenses items claimed under the Employee cost have been allowed.

iv. Terminal Liability has been allowed as per the actual cash outgo basis taking into account the actual payment made during the period from April 2019 to November 2019 (for a period of 8 month) and prorating it for the next year projection with 10% enhancement. Estimation of actual cash outgo has been done taking into components such as Pension, Leave Salary and other contributions like NPS.

Table- 57

Calculation of Basic Pay and GP	FY 2019-20 (From April 19 to Nov 19) actual	FY 2019-20 (Extrapolated for the whole year)	FY 2020-21 approved
Basic Pay and GP	0.72	1.08	1.19

313. With the above principle the approved employees cost for FY 2020-21 is shown in table below:-

Table – 58

	Particulars	Proposed (FY 2020-21)	Approved (FY 2020-21)
A	Salary & Allowance		
1	Basic Pay	7.36	5.69
2	Dearness Allowance	1.84	1.54
3	House Rent Allowance	0.39	0.32
4	Other Allowance	0.37	0.37
	Sub-total (A)	9.96	7.92
B	Additional Employee Cost		
1	Wage/Salary revision if any		
2	Contractual Engagement	0.61	0.61
3	Out Sources Engagement		
4	others if any	-	
	Sub-total (B)	0.61	0.61
C	Other Employee Cost		
1	Medical Expenses (allowance+Reimb.)	0.20	0.20
2	Leave Travel Concession	0.01	0.01
3	Interim Relief to Staff		
4	Encashment of Earned Leave		
5	Honorarium	0.05	0.05
6	Ex-gratia	0.11	0.11
7	Staff Welfare Expenses		
8	Miscellaneous	0.02	0.02
	Sub-total (C)	0.39	0.39
D	Terminal Benefits		
1	Pension	1.47	1.19

	Particulars	Proposed (FY 2020-21)	Approved (FY 2020-21)
2	Gratuity		
3	Leave Salary	0.81	
4	Other (including contribution to NPS)	0.15	
	Sub-total (D)	2.43	
	Arrear towards implementation of 7th Pay (E)	1.02	0.17
E	Total Employees Cost (A+B+C+D+E)	14.41	10.28
F	Less: Employees Cost Capitalized		
G	Net Employee Cost (E- F)	14.41	10.28

314. The Commission approves an amount of Rs.10.28 crore towards employees cost for FY 2020-21 as against proposed amount of Rs.14.41 crore.

Repair Maintenance

315. During Financial Year 2020-21, GRIDCO have proposed an amount of Rs.1.28 crore towards repair & maintenance under the head AMC of computers, vehicles, furniture and office equipment. The Commission, however, taking into account the actual expenditure during the current year approves an amount of Rs.0.25 crore as R&M expenses in the ARR for FY 2020-21 which is equivalent to the amount approved in the ARR for FY 2019-20.

Administration & General Expenses

316. During Financial Year 2020-21, GRIDCO proposed an amount of Rs.8.54 crore under the head Administrative and General Expenses, inclusive of an amount of Rs.1.90 crore towards license fee payable to OERC and Rs.0.15 crore towards ERPC membership fees and Rs. 0.01 crore towards ERPC fund. The Commission allows the A&G Expenses considering the approved amount of normal A&G expenses and escalates it at the rate of 5%. Considering the same principle the approved figure of Rs.3.05 crore for the last year is factored at the rate of 5.0% as the expected annual inflation of for FY 2020-21. According to such calculation the amount works out to Rs.3.20 crore which is allowed as normal A&G expenses for FY 2020-21. Over and above the amount, the licence fee applicable for 2020-21 amounting to Rs.1.90 crore and ERPC membership fees/ Fund of Rs.0.16 crore are also allowed. The details of such is given in the following table:

Table – 59
Approved A&G for 2020-21

Description	Rs. in crore
Normal A&G approved for FY 2019-20	3.05
Annual Inflation for 2020-21@ 5%	0.15
Normal A&G approved for FY 2020-21	3.20
License Fees for 2020-21	1.90
ERPC membership fees/ Fund	0.16
Total A&G for 2020-21 (Approved)	5.26

317. Thus the Commission approves an total amount of Rs.5.26 crore towards Administration and General Expenses for FY 2020-21 with a rider that GRIDCO shall make all endeavours to reduce the A&G costs by prudent management of resources.

Depreciation

318. Under this head GRIDCO has proposed Rs.1.03 crore towards the depreciation on fixed assets (vehicle, furniture and office equipment etc.) for the FY 2020-21. The Commission approves the same as pass through in the ARR of GRIDCO for the FY 2020-21, taking into account the few assets possessed by GRIDCO.

Interest and Financial Charges

319. The proposal of GRIDCO on Interest and Financial Charges is shown in the following table:

Table- 60

Sl No	Particulars	Rate of int. (%) 01-04-19	Ensuing Year (FY 2020-21)					
			Principal		Interest		Closing Bal.	
			Received	Repayment	Due	Paid	Principal	Interest
A								
1	State Govt.(WCL)	13.00%	-	-	15.60	15.60	120.00	327.81
2	State Govt. (OPGC Adj.)	10.50%	-	-	4.47	4.47	42.54	88.37
3	NTPC (Govt. Bonds)	8.50%	-	-	85.98	85.98	818.81	663.57
	Sub-total		-	-	106.05	106.05	981.35	1,079.74
B	Availed During FY 2009-10							
4	Union Bank STL- V	9.50%	-	-	9.50	9.50	100.00	0.00
	Sub-total		-	-	9.50	9.50	100.00	0.00
C	Availed During FY 2010-11							
5	Allahabad Bank - IV	8.45%	-	-	-	-	0.00	0.00
7	Canara -III _200 cr TL	8.40%	-	-	-	-	0.00	0.00
9	Bank of India _200cr_II	8.30%	-	-	-	-	0.00	0.00
11	Andhra Bank_III_2010-12	8.65%	-	-	-	-	0.00	0.00
12	Canara_IV -100_2010-11	8.40%	-	-	-	-	-	(0.00)
13	IOB_I - 200_2010-11	8.50%	-	23.10	1.06	1.06	0.00	-
	Sub-total		-	23.10	1.06	1.06	0.01	0.01
D	Availed During FY 2011-12							
14	Union Bank - SOD	8.50%	-	-	16.00	16.00	180.08	-
15	Bond PF/2012-13 (140 cr)	10.82%	-	-	-	-	0.00	-

Sl No	Particulars	Rate of int. (%) 01-04-19	Ensuing Year (FY 2020-21)					
			Principal		Interest		Closing Bal.	
			Received	Repayment	Due	Paid	Principal	Interest
	Sub-total		-	-	16.00	16.00	180.08	-
E	Availed During FY 2012-13							
16	Real Growth PPB_2012-50cr	10.40%	-	-	-	-	-	-
	Sub-total		-	-	-	-	-	-
F	Availed During FY 2013-14							
17	GRIDCO Bond_2013-127.50cr	8.79%	-	31.88	9.53	9.53	95.62	-
18	Odisha Gramya Bank_II_136cr	8.65%	-	26.69	1.40	1.40	0.00	-
19	Bank of India_III_100 cr	8.70%	-	19.02	1.07	1.07	-	-
	Sub-total		-	77.59	12.00	12.00	95.62	-
G	Availed During FY 2014-15							
20	Bank of India_IV_300 cr	8.70%	-	60.00	8.03	8.03	55.03	-
21	OHPC Loan_619 cr	8.00%	-	88.43	-	-	401.11	-
	Sub-total		-	148.43	8.03	8.03	456.14	-
H	Availed During FY 2015-16							
22	Canara_V -100_2015-16	8.40%	-	19.99	1.19	1.19	1.39	-
23	OMC TL-I_II_& III 1500cr_2012-16	8.20%	-	140.95	7.26	7.26	31.77	-
24	Bank of India_V_500 cr	8.70%	-	62.50	28.28	28.28	285.27	0.00
25	Andhra_IV - 200cr	8.65%	-	25.00	0.75	0.75	0.00	-
	Sub-total		-	248.44	37.48	37.48	318.42	0.00
I	Availed During FY 2016-17							
26	Union Bank- VIII_300_2016-17	8.45%	-	60.00	8.25	8.25	60.00	-
27	Union Bank- IX_500_2016-17	8.65%	-	100.00	27.04	27.04	249.98	-
28	Canara Bank_VI_200 cr 2016-17	8.30%	-	40.00	9.83	9.83	95.61	-
29	Uco_Bank_300 Cr_2016-17	8.45%	-	60.00	14.58	14.58	139.52	-
30	Andhra_V - 200cr_2016-17	8.65%	-	40.00	12.26	12.26	115.76	-
31	Odisha GB_III_25cr	8.65%	-	2.50	1.85	1.85	19.77	-
	Sub-total		-	302.50	73.81	73.81	680.63	-
J	Availed During FY 2017-18							
32	IOB_II - 300_2017-18	8.65%	-	50.00	17.13	17.13	170.82	-
33	Odisha Gramya Bank_IV_40 CR	8.20%	-	8.00	2.71	2.71	28.65	-
34	Andhra_Bank_VI_100CR	8.65%	-	20.00	6.13	6.13	57.16	-
35	Canara Bank_VII_200 CR	8.55%	-	40.00	14.40	14.40	146.64	-
36	Allahabad Bank_V-150 CR	8.65%	-	23.68	9.99	9.99	102.59	-
	Sub-total		-	141.68	50.36	50.36	505.85	-
K	Availed During FY 2018-19							
37	Bank of India_VI_300 cr	8.50%	-	50.00	23.91	23.91	249.86	-
38	Odisha Gramya Bank_V_35 CR	8.70%	-	-	3.04	3.04	34.96	-
39	Canara Bank_VIII_200 CR	8.55%	-	40.00	12.40	12.40	120.00	-
40	Canara Bank_IX_200 CR	8.55%	-	40.00	12.40	12.40	120.00	-
41	Andhra_Bank_VII_200CR	8.75%	-	40.00	12.69	12.69	120.00	-
	Sub-total		-	170.00	64.44	64.44	644.82	-
L	Availed During FY 2019-20							
42	Canara Bank_X_200 CR	8.50%	-	-	17.00	17.00	200.00	-
43	Andhra_Bank_VIII_300CR	8.40%	-	-	25.20	25.20	300.00	-
	Sub-total		-	-	42.20	42.20	500.00	-
	TOTAL (A+B+..+L)		-	1,111.74	420.93	420.93	4,462.91	1,079.75
L	Add: Financial Charges	0.50%	-	-	15.75	15.75	-	-

Sl No	Particulars	Rate of int. (%) 01-04-19	Ensuing Year (FY 2020-21)					
			Principal		Interest		Closing Bal.	
			Received	Repayment	Due	Paid	Principal	Interest
M	Add: Rebate to Customer		-	-	-	-	-	-
N	Add: Proposed Loan for FY 19-20(Dec-Mar)	8.40%	-	-	42.00	42.00	1,000.00	-
O	Add: Proposed Loan for FY 20-21(Apr-Mar)	8.40%	2,500.00		105.00	105.00	2,500.00	-
P	Grand Total (A to O)		2,500.00	1,111.74	583.68	583.68	7,962.91	1,079.75
	Govt. Guarantee Loan						1,623.78	0.01
	Secured		-	882.36	255.92	255.92	2,448.68	0.01
	Unsecured		2,500.00	229.38	327.76	327.76	5,514.23	1,079.74
	Total		2,500.00	1,111.74	583.68	583.68	7,962.91	1,079.75

320. 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 this ARR, based on the figure finalized as per the annual accounts.

321. 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.*

322. In reply to the commission's query GRIDCO has furnished the outstanding amounts due from DISCOMs which is shown in the table as below:

Table- 61

Particulars	WESCO Utility	NESCO Utility	SOUTHCO Utility	Sub-Total	CESU	TOTAL
BSP Bills as on 31.03.2019	982.58	734.00	579.97	2296.55	804.13	3100.68
Year-end Adj.Bills-2007-08 to FY 2010-11	137.67	99.16	134.15	370.98	271.79	642.77
BSP of FY 2019-20 (Bills served for April' 19 to Sept'2019)	1229.17	905.65	358.45	2493.27	1215.98	3709.25
Sub Total	2349.42	1738.81	1072.57	5160.80	2291.90	7452.70
Less: Payment received including rebate during 01.04.2019 to 21.11.2019	1718.29	1185.35	388.24	3291.88	1343.32	4635.20
BSP outstanding up to Nov'2019	631.13	553.46	684.33	1868.92	948.58	2817.50

323. As seen from the above table that the outstanding dues from four DISCOMs is Rs. 2817.50 crore as on 30.11.2019 which may be collected to meet the power purchase dues. The Commission in line with the earlier order disallows the interest on further loans taken after FY 2015-16.
324. In view of the above analysis the interest approved for FY 2020-21 is given in the following table:

Table - 62

	(Rs. Cr.)
Total interest proposed (2020-21)	583.68
Less disallowed:	
(i) Interest on Govt. loan	15.60
ii) State Govt. (OPGC Adj.)	4.47
(iii) Interest on NTPC Bond	85.98
iv) Guarantee commission	15.75
(v) Interest on loan during the FY 2016-17	73.81
(vi) Interest on loan during the FY 2017-18	50.36
(vii) Interest on loan for the FY 2018-19	64.44
(viii) Interest on loan proposed for the FY 2019-20 (Apr 19 to Nov19)	42.20
(ix) Interest on loan proposed for the FY 2019-20(Dec 19 to Mar 20)	42.00
(x) Interest on Proposed Loan for FY 20-21(Apr-Mar)	105.00
Total interest disallowed	499.61
Total Interest allowed for FY 2020-21	84.07

325. The Commission as shown in the above table allows Rs. 84.07 crore towards interest and financial charges for FY 2020-21.

Special Appropriation of Repayment of Principal

326. For the FY 2020-21 GRIDCO has proposed Special Appropriation of Rs.1079.75 crore under the following heads:-

Table - 63
Special Appropriation claimed by GRIDCO

Particulars	(Rs. in Crore)	
	Loan Repayment Dues	Interest Dues
State Govt. Loan	162.54	416.18
NTPC-GoO Special Bonds (Rs.1102.87 Crore)	818.81	663.57
Sub-Total (A) (Proposed to be deferred)	981.35	1079.75
Bank Loans& Inter Corporate Loan (OMC)	1023.31	-
OHPC Securitized Dues	88.43	
Sub-Total(B)	1111.74	
Grand Total (A+B)	2093.09	1079.75

327. GRIDCO has proposed to defer the State Govt. loan & interest and NTPC-GoO special bonds & interest to the tune of Rs.1079.75 crore as shown in the above table.
328. The other loan of commercial bank loan and inter corporate loan (OMC) amounting Rs.1111.74 crore (principal repayment) is shown as special appropriation but no interest has been proposed to be recovered in the ARR.
329. The Commission took note of the submission made by the licensee. In para 295 and 296 of the BSP order for the FY 2014-15, the Commission made the following observation regarding the disallowance of repayment liability through amortisation of Regulatory Asset . The same is extracted below:

“295. The repayment liability of the State Govt. loan as well as Bank loan put a huge burden on the Bulk Supply Price of DISCOMs. The Commission feels that in order to keep the BSP at a reasonable level, the repayment liability should not be considered as pass through in the ARR of GRIDCO so that the revenue requirement of GRIDCO is kept at minimum and DISCOMs will have the benefit of the lower BSP. In this context it is necessary to analyse in depth the generation potential of OHPC and its commercial implication. A large number of objectors have pointed out that by proper planning with regard to storage of water in the reservoir and having satisfied the need for flood control and irrigation in the normal monsoon year OHPC can generate much more than its design energy. We have already provided for generation of 5881 MU and any generation beyond the design energy available to GRIDCO can be traded with profit and this amount can be made available for repayment of loan. In the current year Tariff Hearing OHPC submitted that GoO directed them to restrict generation. The Commission is, therefore, of the view that lesser generation from OHPC is not so much due to monsoon failure but because of administrative Order issued by GoO from time to time. In the present context the Commission would like to advise the Govt. to revisit its earlier assumption with regard to storage capacity for flood control and irrigation. The Commission is of the view that by proper planning and redesigning of priorities, power generation of OHPC can go beyond the design energy without sacrificing obligation towards flood control and irrigation. The Commission feels that a proper day to day planning and co-ordination with different purchaser within and outside the State, GRIDCO on conservative estimate will be able to trade about 2500 MU of power and generate a substantial amount of revenue, which can be utilised for repayment of principal loan liabilities.

296. *In view of this Commission decides the following measures to be taken by GRIDCO:-*

- a) *A separate head may be created under GRIDCO account where the revenue from trading of surplus power above design energy of OHPC, UI Charges and other miscellaneous receipts, shall be shown as receipts for repayment of principal. Since GRIDCO is fully owned Govt. of Odisha undertaking the State Govt. shall monitor and ensure that the money kept under this separate head is utilised only for repayment of loan.*
- b) *In case the earmarked fund receipts as mentioned above is not sufficient to meet the repayment obligation of principal amount of loan, the State Govt. may make budget provision for the differential amount and pay the same to Banks/Financial Institutions through GRIDCO.*

- c) *For the time being, repayment of the principal amount along with interest on State Govt. loans and Bonds may be deferred till the financial health of GRIDCO becomes sound.*

Hence, in view of the above decision of the Commission, the repayment liability recognized by the Commission through amortisation of Regulatory Asset as stated in the Para above has not been considered as a pass through in the revenue requirement for the year 2014-15.”

330. The Commission for the FY 2016-17, 2017-18, 2018-19 and 2019-20 has taken the same stand and did not consider such amounts as a pass through under the head special appropriation in the revenue requirement. Commission directed GRIDCO to collect the BSP arrear from the DISCOM Utilities, proactively.
331. However the Commission considers that the market fluctuations are likely to swing to the advantage of GRIDCO. The Commission therefore directs that GRIDCO should continue to procure power from CGPs and IPPs of the State and market the surplus power in order to reduce the accumulated loss. To overcome the deficit situation GRIDCO is further directed to make all out effort for collection from DISCOMs its current dues and also arrear dues finalized in the securitization order dt.01.12.2008 of the Commission to avoid borrowings.

Return on Equity

332. GRIDCO has not proposed any amount towards Return on Equity (RoE) for FY 2020-21, hence not considered by the Commission.

Other Income/ Miscellaneous Receipts

333. During the FY 2020-21 GRIDCO expects to earn an amount of Rs.41.70 crore (at existing approved BSP @ 695 P/U for FY 2019-20 towards Emergency Sale of Power) from the proposed emergency sale of 60 MU to Long Term Customers like NALCO and IMFA for meeting their emergency & back-up power requirements as per the MOU signed with them. The commission approves the same amount of Rs.41.70 crore towards the miscellaneous revenue for the FY 2020-21.

Receivables from DISCOMs and Others

Securitized Dues

334. GRIDCO in its filing submitted that the DISCOMs have defaulted payment of Rs.2117.45 crore by 31.03.2019 towards securitized dues as per the direction of the

Commission vide order dated 01.12.2008. The DISCOMs wise default is given below:-

Table – 64
Outstanding Securitised Dues payable by DISCOMs to GRIDCO
(Rs. in Crore)

Utility	Unpaid as on 31-03-2019
WESCO	285.41
NESCO	294.87
SOUTHCO	259.98
CESU	1277.19
Total	2117.45

The Commission directs GRIDCO to discuss the matter with DISCOMs for collection of the above securitized dues.

Rs. 400 Crore NTPC Bond dues

335. GRIDCO has submitted that apart from Securitised Dues, the DISCOM Utilities have failed to honour the OERC Order dated 29-03-2012 read with Corrigendum Order dated 30.03.2012 against the Bond dues of Rs.308.45 Crore. In the said Order, the commission had directed the erstwhile RIL managed DISCOMs to pay Rs.50 Crore by the end of April 2012 and at least @Rs.10 Crore per month w.e.f. May, 2012 so that the entire amount shall be cleared by the end of FY 2012-13 or else the Order would stand non-est. The erstwhile R-Infra managed DISCOMs paid Rs.62 Crore by 31-10-2014, besides payment of Rs.50 Crore in March 2012. Now the Outstanding Balance against the two DISCOM Utilities as on 31.03.2019 is Rs.195.36 Crore.
336. On this issue the Commission have given direction to both GRIDCO and DISCOMs several times for compliance of the order. The Commission reiterates the same and directs both GRIDCO and DISCOMs to comply the order dtd.29.03.2012 in case No.107 of 2011.

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

337. GRIDCO in the ARR has further submitted that besides the default in securitised dues and Rs.400 crore of bond the DISCOMs have made default in payment of BSP dues and year-end bill amounting Rs.2817.50 crore. The details of which is given below.

Table- 65
Outstanding Dues relating to Current BSP and Year end Adjustment bills of DISCOMs payable to GRIDCO

(Amount Rs. Crore)

Particulars	WESCO Utility	NESCO Utility	SOUTHCO Utility	Sub-Total	CESU	TOTAL
BSP Bills as on 31.03.2019	982.58	734.00	579.97	2296.55	804.13	3100.68
Year-end Adj.Bills-2007-08 to FY 2010-11	137.67	99.16	134.15	370.98	271.79	642.77
BSP of FY 2019-20 (Bills served for April' 19 to Sept'2019)	1229.17	905.65	358.45	2493.27	1215.98	3709.25
Sub Total	2349.42	1738.81	1072.57	5160.80	2291.90	7452.70
Less: Payment received including rebate during 01.04.2019 to 21.11.2019	1718.29	1185.35	388.24	3291.88	1343.32	4635.20
BSP outstanding up to Nov'2019	631.13	553.46	684.33	1868.92	948.58	2817.50

338. The Commission directs both GRIDCO and DISCOMs to file a reply before the Commission regarding action plan taken for liquidation of the arrears as stated above by 31.07.2020.

339. The summary of the ARR of GRIDCO approved for the FY 2020-21 is given below:

Table -66
Revenue Requirement of GRIDCO for FY 2020-21

(Rs. in Cr.)

	Particulars	Approved for 2019-20	Proposed for 2020-21	Approved for 2020-21
A	Items of Expenses			
	Cost of Power Purchase	7466.64	8866.39	8083.74
	Employee costs	10.68	14.41	10.28
	Repair & Maintenance	0.25	1.28	0.25
	Administrative and General Expenses	5.11	8.54	5.26
	Depreciation	0.76	1.03	1.03
	Interest Chargeable to Revenue	153.97	477.63	84.07
	Total Expenses	7637.41	9369.28	8184.63
B	Special Appropriation			
	Amortization of Regulatory Assets			
	Repayment of principal (Bank and Commercial Loans)	0	1111.74	0
	Pass Through of OHPC and OPGC Dues	86.34	308.18	132.05
	Total Special Appropriation	86.34	1419.92	132.05
C	Return on Equity	0	0	0
	TOTAL (A+B+C)	7723.75	10789.20	8316.68
D	Less Miscellaneous Receipt	20.85	41.70	41.70
E	Revenue proposed from trading of surplus power	0	0	0
F	Total Revenue Requirement	7702.90	10747.50	8274.98
G	Expected Revenue (Full year) from DISCOMs	7529.96	7623.84	7614.83
H	GAP (+/-)	-172.94	-3123.66	-660.15
I	Energy Sale to DISCOMs (MU)	27840	28187.37	28090.00
J	Per Unit Realisation (Paisa per Unit)	270.47	381.29	271.09

340. It is observed from above table that the Commission has estimated the net revenue requirement of GRIDCO to the tune of Rs.8274.98 Crore after adjustment of miscellaneous receipts of Rs.47.70 Crore and GRIDCO would recover Rs.7614.83 Crore from the DISCOM Utilities through Bulk Supply Price during the FY 2020-21 leaving a negative gap of Rs.660.15 Crore. The Commission has estimated the energy availability of 34960.13 MU to GRIDCO from different sources during FY 2020-21 and the State requirement has been estimated at 29018.76 MU, leaving a surplus availability of 5941.37 MU. The Commission directs GRIDCO for trading of the available surplus power on prudent commercial principles in the market after meeting the State requirement and adjust the revenue earnings from trading and UI sources towards meeting the above gap and past losses. In case the above gap of Rs. 660.15 Crore is not met from the trading and the UI accounts, the balance amount shall be treated as regulatory asset to be amortized by the Commission at future date. The gap in the ARR has been allowed by the Commission to provide relief to the consumers of the State considering COVID-19 situation prevailing now. If the situation improves during the current financial year, the Commission may revisit the gap on an application of GRIDCO.

Design for Bulk Supply Pricing

341. 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 DISCOM Utilities. It is not possible to allocate particular power station to a DISCOM Utility since the Power Purchase Agreement of that Generator has been made with the GRIDCO and not with a particular DISCOM Utility. Moreover, DISCOM Utilities have also Bulk Supply Agreement (BSA) with GRIDCO. This is a past legacy. The allocation of power from a generator to a particular DISCOM Utility shall be a possibility only when the PPAs will be allocated to DISCOM Utilities as per the decision of the Government. Therefore, the Commission has no alternative but to consider the pooled power purchase cost of GRIDCO while designing the BSP of DISCOM Utilities.

342. OERC has been following a uniform retail tariff policy. Considerations of public interest for consumers of the entire State warrants continuance of a uniform retail

tariff policy. The retail tariff for each distribution Utility based solely on its ARR and its expected revenue ought not to be considered in isolation. The law requires the Commission to take into consideration not only the annual revenue requirement and the expected revenue of the distribution utility, but also such policy inputs for safeguarding consumers' interest, one of which is the uniform retail tariff for the whole State, vide Section 61(d) of the Electricity Act, 2003. Moreover, uniformity of retail tariff for the whole State is in line with the National Tariff Policy, vide Para 8.4(2) thereof. Only when distribution utilities show appreciable rise in their respective levels of efficiency by reducing distribution losses, both technical and commercial, a question of rewarding efficiency by a differential retail tariff may arise. This is not the case now. Besides, the benefit of differential Bulk Supply Price has been an accepted practice, as the State transmission network serves the whole State as a single backbone system and the consumers of Odisha have been paying for the cost of this transmission system uniformly. The distribution companies have little contribution towards the growth and development of the EHT industries and yet a distribution Utility would reap substantial higher revenue than another distribution Utility by virtue of mere concentration of EHT industries in its area. It is just and proper that differential Bulk Supply Price should be higher for the DISCOM Utilities with higher concentration of HT/EHT industries than for those with little HT/EHT load. Therefore, with differential Bulk Supply Price there is no necessity of shifting away from the uniform retail tariff prevailing in the state of Odisha.

343. Until we move away from the uniform RST structure, the higher bulk pricing mechanism should give a signal to the utility having higher EHT & HT concentration that improved performance at LT through higher LT sale would enable that utility to get power at a lower rate. That is to say, such utility should endeavour to convert lost units to billing units at LT resulting in reduction of commercial loss, which needs to be encouraged.
344. Tariff is essentially intended to balance the conflicting interest of various stakeholders like the distribution Utilities and various groups of consumers as well as the generators. Some amount of judgement is to be exercised while determining the bulk supply price for distribution utilities. The process has to be fair, transparent, with sound logic, so that the revenue earned by the utilities are adequate to service all their expenditures like the cost of employees, servicing the interest burden, meet return on

equity in addition to meeting the cost of power purchase which constitute a substantial part of their revenue requirement.

345. At this point, we are taking into consideration the extent of revenue that a distribution utility likely to earn from sale of power to HT & EHT groups of consumers. Besides, the volume of sale at LT is an important criterion where the loss level is high and the expected revenue realisation is low. Thus, the Bulk Supply Price (BSP) is fixed in a manner that makes all the distribution utilities financially near viable.

Determination of Bulk Supply Price

346. GRIDCO has proposed a BSP @ 381.29 P/U to be levied on the DISCOM Utilities towards their purchase of power during FY 2020-21. Now, the Commission determines the Bulk Supply Price in such a way that their expected estimated revenue shall be sufficient to pay the power bills, the transmission charge bills including SLDC charges and they shall also meet their statutory obligations including meeting the expenses towards establishment, maintenance and other allied expenses. The gap in the revenue requirement in the present order is recognised by the Commission.
347. The details of Bulk Supply Price as well as the quantum of energy approved by the Commission for each DISCOM Utility are presented in a table below:

Table – 67
Bulk Supply Price and Quantum of Energy for FY 2020-21

Name of the DISCOMs	Existing Bulk Supply Price i.e. approved for FY 2019-20 (P/U)	Quantum of Energy for sale during FY 2020-21 (MU)	Total Revenue for FY 2020-21 (Rs. Crore)	Bulk Supply Price approved for FY 2020-21 (P/U)
CESU	261.00	9470.00	2471.67	261.00
NESCO	298.00	6570.00	1957.86	298.00
WESCO	304.00	8000.00	2432.00	304.00
SOUTHCO	186.00	4050.00	753.30	186.00
Total	270.47	28090 .00	7614.83	271.09

348. The above approved revenue is to be realized by GRIDCO from the DISCOM Utilities through escrow mechanism. In case of any default in monthly BSP dues by the DISCOM Utilities, they are liable for imposition of power regulations. It is directed that GRIDCO should resort power regulation to the DISCOM Utilities to the extent of non-payment of monthly BSP dues.

Demand Charges

349. Like the ARR approval of GRIDCO for previous years, there shall not be any levy of separate maximum demand charges upto the permitted SMD in a month for the Distribution Utilities for the FY 2020-21. 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 drawal over the permitted SMD will have to be paid by DISCOM Utilities @ Rs.250 per KVA per month. This is again subject to the condition that the annual average SMD shall be limited to the SMD approved in the order. This is necessary to maintain the load planning and system stability. In case the annual average SMD is more than the approved SMD, then overdrawal quantum shall attract the penalty @ Rs.250 per KVA per month, notwithstanding the fact that a utility might have paid the SMD charges for exceeding the permitted SMD in any month.

Charges for Overdrawal of Energy

350. In its application, GRIDCO has proposed that any excess drawl of energy by a Distribution and Retail Supply Utility during a month over and above the approved drawal would be payable on provisional basis at the highest power purchase rate for a station approved by the Commission for the FY 2020-21 (which includes transmission charges & transmission loss) on a monthly basis instead of the normal differential BSP applicable to the respective DISCOM Utilities subject to final year-end adjustment considering the highest power purchase rate/cost including the rate(s) of energy drawn through UI / Deviation Settlement of the month plus transmission charges and transmission loss.
351. GRIDCO has further submitted that presently the over drawal of energy by DISCOM Utilities is billed at the corresponding OERC approved applicable BSP rates in terms of the judgment dated 07.05.2018 of Hon'ble APTEL passed in Appeal No. 55/2015. Therefore, GRIDCO has filed a review petition in Case No. 51/2019 before this Commission for review of ARR and BSP order of GRIDCO for the FY 2019-20, wherein, GRIDCO has prayed the Commission to address the issue of billing of over drawal energy by the DISCOM Utilities in view of the aforesaid judgment of Hon'ble APTEL. The order of this review petition is yet to be pronounced by the Commission.

352. The Commission observed that it has already framed guidelines/regulations for intra-state ABT and in the 1st phase introduced same for transaction between GRIDCO and DISCOM Utilities. 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 DISCOM Utilities as per the present Tariff Order of the Commission and any deviation from the scheduled energy shall be billed by SLDC and paid by DISCOM Utilities as per the prevalent UI rate. However, the Commission further observed that being aggrieved by the order dated 05.04.2014 of this Commission in Case No. 40/2013 on the matter of settlement of dues between GRIDCO and DISCOM Utilities in respect of payment towards over drawal energy by DISCOM Utilities, GRIDCO had made an appeal before the Hon'ble APTEL. Hon'ble APTEL in their judgment dated 07.05.2018 in Appeal No. 55/2015 and IA No. 75/2015 have pronounced that as per the amicable settlement among GRIDCO, DISCOM Utilities and SLDC, for the period from 17.02.2014 and onwards, in absence of any prevailing DSM Regulations for the State, the deviation energy may be settled between GRIDCO and DISCOM Utilities at BSP rate, till any Intra-State DSM Regulation in this regard comes into effect. SLDC will stop billing to DISCOM Utilities on account of deviation of energy henceforth till DSM Regulation is pronounced by OERC and to withdraw the DSM bills so raised since 17.02.2014.
353. In view of the above, GRIDCO in its aforesaid review petition in Case No. 51/2019 has prayed the Commission to allow it to bill the DISCOM Utilities for the deviation quantum of energy at the applicable BSP rate as per the said judgment dated 07.05.2018 of Hon'ble APTEL, till the Intra-State DSM and related Regulations comes into force in the State. The Commission observed that the Intra-State DSM Regulations will be notified by the Commission shortly. However, till implementation of DSM Regulations in the State, the quantum of over drawl energy by DISCOM Utilities shall be billed by GRIDCO at the applicable BSP rate determined by the Commission.

Rebate

354. For payment of bills through letter of credit/NEFT/RTGS or by cash within two working days (excluding holidays under N.I. Act, 1881) of presentation of bills, a rebate of 2% shall be allowed on current dues. If the payments are made after two working days but within a period of 30 days by the Distribution Utilities, a rebate of

1% shall be allowed. However, payment by DISCOM Utilities within the specified period shall be first adjusted towards current months dues raised in the bill. If the current dues are fully met within the specified time period, GRIDCO shall allow rebate. Payments over and above the current dues shall be adjusted towards the arrears after rebate.

Delayed Payment Surcharge

355. In case payment of bills by the Distribution Utilities is delayed beyond a period of 30 days from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied by GRIDCO on the unpaid amount.

Duty and Taxes

356. The Commission approves that statutory levy/duty/tax/cess/toll etc. imposed under any law from time to time shall be charged over and above the bulk supply price fixed by the Commission.
357. The Bulk Supply Price in respect of GRIDCO as indicated below will become effective from 1st May, 2020 and shall continue until further orders.

Table -68

Name of the DISCOMs	Paise/ Kwh
CESU	261.00
NESCO	298.00
WESCO	304.00
SOUTHCO	186.00

358. Considering the COVID-19 situation there has been no hike in BSP for the FY 2020-21. However, if the situation improves during the course of the current financial year, the revision of BSP may be considered by the Commission at appropriate time under Section 62 (4) of the Act.
359. The application of GRIDCO in Case No. 71 of 2019 is disposed of accordingly.

Sd/-
(S. K. PARHI)
MEMBER

Sd/-
(U. N. BEHERA)
CHAIRPERSON