

Summary of ARR & BSP Filings

Submitted by

GRIDCO

For

FY-2018-19

Summary of ARR & BSP Application of GRIDCO for FY 2018-19

1. GRIDCO Limited (hereinafter called as GRIDCO) is a Deemed Trading Licensee under the 5th Proviso to Section 14 of the Electricity Act, 2003. GRIDCO, a wholly State owned Company, is engaged in the business of purchase of electricity in bulk from various generators located inside Odisha and the State share of power from the Central Generators for supply in bulk to the four Electricity Supply Companies (hereinafter called as DISCOM Utilities). 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.

Under the existing Bulk Supply Agreements between the DISCOM Utilities and GRIDCO, the DISCOM Utilities are to purchase power from GRIDCO at a regulated price to be determined by Odisha Electricity Regulatory Commission (OERC). This Price incidentally happens to be the Bulk Supply Price at which GRIDCO supplies power to the DISCOM Utilities. Thus, as a statutory requirement, GRIDCO is required to submit its Annual Revenue Requirement (ARR) before OERC for determination of the procurement price of the DISCOM Utilities. Further, 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 Annual Revenue Requirement (ARR) and Bulk Supply Price (BSP) proposal to the Commission for approval, before 30th November of each year for the ensuing year.

In the above backdrop, GRIDCO has filed an application for approval of its proposed Annual Revenue Requirement (ARR) and revision of Bulk Supply Price (BSP) for the FY 2018-19 to enable it to carry out its functions of bulk supply to DISCOM Utilities and emergency supply to CGPs.

Projection of Demand and Energy

2. The Simultaneous Maximum Demand (SMD) of DISCOM Utilities for the FY 2018-19 has been projected at 4996 MVA as furnished by the DISCOM Utilities. GRIDCO mentions that SMDs projected for FY 2018-19 is on the higher side because of the “Saubhagya Scheme” of the Centre, under which it is planned to supply power to each household in the State contributing to enhanced load growth during FY 2018-19. The actual highest SMD recorded during first six months of 2017-18 and projection for 2018-19 as submitted by GRIDCO in the ARR and BSP application are given in Table -1.

Table – 1
Projection of Simultaneous Maximum Demand (SMD) for FY 2018-19
(MVA/Month)

| DISCOM Utility | OERC approval for 2017-18 | Highest SMD recorded during FY 2017-18 (Apr.'17 to Sept'17) | SMD Projected by DISCOM Utilities for FY 2018-19 | GRIDCO's Projection of SMD of DISCOM Utilities for FY 2018-19 |
|-----------------------|----------------------------------|--|---|--|
| CESU | 1620 | 1487.11 | 1896 | 1896 |
| NESCO | 920 | 912.41 | 1100 | 1100 |
| WESCO | 1350 | 1204.05 | 1350 | 1350 |
| SOUTHCO | 590 | 587.36 | 650 | 650 |
| TOTAL | 4480 | 4190.94 | 4996 | 4996 |

3. GRIDCO has projected 26561 MU as the energy consumption of DISCOM Utilities for FY 2018-19 based on the projections submitted by DISCOM Utilities. Emergency Power Supply to Captive Generating Plants (CGPs) like NALCO and IMFA for FY 2018-19 has been projected at 5 MU. The actual for first six months of FY 2017-18, projection for FY 2017-18 on pro-rata basis and projection for FY 2018-19 as submitted by GRIDCO are indicated in Table -2.

Table - 2
Projected Energy Demand of DISCOM Utilities and CGPs for FY 2018-19 (MU)

| DISCOM Utilities | Actual from April' 2017 to Sept' 2017 | Projection for 2017-18 on pro-rata basis | Corresponding OERC approval for FY 2017-18 | GRIDCO's projection based on the submission of DISCOM Utilities for FY 2018-19 |
|-------------------------------|--|---|---|---|
| CESU | 4574.43 | 9148.85 | 8850.00 | 9354.00 |
| NESCO | 2810.54 | 5621.08 | 5680.00 | 6307.00 |
| WESCO | 3651.36 | 7302.73 | 7090.00 | 7200.00 |
| SOUTHCO | 1790.88 | 3581.75 | 3520.00 | 3700.00 |
| TOTAL DISCOM Utilities | 12827.20 | 25654.41 | 25140.00 | 26561.00 |
| NALCO & IMFA | 11.30 | 22.60 | 5.00 | 5.00 |
| TOTAL SALE | 12838.50 | 25677.01 | 25145.00 | 26566.00 |

Energy Availability to GRIDCO for FY 2018-19

4. GRIDCO has projected energy availability of 27458.40 MU during FY 2018-19 from different generating stations. The estimation for drawal of hydel power from OHPC is 5866.13 MU including 262.50 MU from Machhkund and 1943.37 MU from Indravati; and thermal power of 2913.49 MU from OPGC, 3376.07 MU from TTPS, 4974.82 MU from thermal IPPs (M/s Vedanta Ltd, M/s GMR Kamalanga Energy Ltd, M/s Jindal India Thermal Power Ltd) and 8281.89 MU of Odisha share of power from central thermal power stations. GRIDCO has proposed to purchase 914 MU towards Odisha share from central hydro power stations like Tala, Chukha and Teesta hydel plants. Further, GRIDCO has proposed to procure 1132 MU from Renewable Energy sources during FY 2018-19 (320 MU from small hydro, 110 MU from biomass, 22 MU from wind, and 680 MU from solar projects). The station-wise details in respect of availability of power are given in the Table below.

Table-3
Summary of Proposed Energy Availability to GRIDCO for FY 2018-19

| Stations | Availability (After transformation loss and Auxiliary Consumption) (MU) | Share % | Projection for FY 2018- 19 (MU) | Commission's approval for FY 2017-18 (MU) |
|---|--|------------|---------------------------------------|--|
| HHEP | 661.55 | 100 | 661.55 | |
| CHEP | 309.87 | 100 | 309.87 | |
| Rengali | 759.33 | 100 | 759.33 | |
| Upper Kolab | 754.38 | 100 | 754.38 | |
| Balimela | 1175.13 | 100 | 1175.13 | |
| OHPC(Old) | 3660.26 | 100 | 3660.26 | 3676.86 |
| Indravati | 1943.37 | 100 | 1943.37 | 1942.38 |
| Sub-Total OHPC | 5603.63 | 100 | 5603.63 | 5619.24 |
| Machhkund | 262.50 | 100 | 262.50 | 262.50 |
| Total State hydro availability | 5866.13 | 100 | 5866.13 | 5881.74 |
| OPGC | 2913.49 | 100 | 2913.49 | 2861.50 |
| TTPS | 3376.07 | 100 | 3376.07 | 3162.93 |
| Small Hydro | 320.00 | | 320.00 | 320.00 |
| Biomass + Wind Energy | 132.00 | | 132.00 | 80.00 |
| Solar Energy | 680.00 | | 680.00 | 363.00 |
| CGPs | 0.00 | | 0.00 | 0.00 |
| Co-generation Plants | 0.00 | | 0.00 | 0.00 |
| IPPs | 4974.82 | | 4974.82 | 7060.49 |

| Stations | Availability (After transformation loss and Auxiliary Consumption) (MU) | Share % | Projection for FY 2018- 19 (MU) | Commission's approval for FY 2017-18 (MU) |
|---|--|------------|---------------------------------------|--|
| Total State availability | 18262.51 | | 18262.51 | 19729.66 |
| TSTPS Stg.-I | 2229.92 | 32.34 | 2229.92 | 2218.42 |
| TSTPS Stg.-II | 1371.85 | 10.00 | 1371.85 | 1363.95 |
| FSTPS-I&II | 1552.63 | 14.18 | 1552.63 | 679.09 |
| FSTPS-III | 622.30 | 18.05 | 622.30 | 0.00 |
| KhSTPS Stg.-I | 884.27 | 15.77 | 884.27 | 880.76 |
| KhSTPS Stg.-II | 271.69 | 2.62 | 271.69 | 270.61 |
| Barh-STPS-II (Unit-IV &V) | 1349.23 | 14.79 | 1349.23 | 0.00 |
| Total Central Thermal Availability | 8281.89 | | 8281.89 | 5412.83 |
| Chukha | 262.00 | 15.19 | 262.00 | 256.52 |
| TALA | 139.00 | 4.25 | 139.00 | 140.51 |
| Teesta | 513.00 | 20.59 | 513.00 | 512.11 |
| Total Central Hydro Availability | 914.00 | | 914.00 | 909.14 |
| Total EREB | 9195.89 | | 9195.89 | 6312.97 |
| Total Availability | 27458.40 | | 27458.40 | 26051.63 |

Energy Demand and Availability

5. The total projected Energy Demand by GRIDCO is 26,566 MU for FY 2018-19 consisting of the estimated energy requirement of 26,561 MU for sale to DISCOM Utilities and 5 MU towards Emergency & Back-up Power Sale to M/s. NALCO & M/s. IMFA. Considering 892.40 MU towards Transmission Loss @ 3.25%, procurement of energy to the tune of 27,458.40 MU (26,566 MU + 892.40 MU) has been proposed by GRIDCO. The energy requirement vis-a-vis the availability to GRIDCO for supply to the State is estimated below in the following Table- 4.

Table – 4
Projected Energy Requirement of GRIDCO for FY 2018-19

| Sl. No. | Particulars | Projection for FY 2018-19 (MU) |
|---------|---|--------------------------------------|
| 1 | Energy Demand of DISCOM Utilities (26561 MU & CGPs 5 MU) | 26566.00 |
| 2 | Transmission Loss @ 3.25% | 892.40 |
| 3 | Energy Required to be purchased by GRIDCO to meet the power demand of DISCOM Utilities & CGPs | 27458.40 |
| 4 | Available Energy | 27458.40 |

Power Purchase Cost Projected for FY 2018-19

6. In its application for FY 2018-19, GRIDCO has projected to procure hydel power of 5603.63 MU from OHPC and 262.50 MU from Machhkund. In absence of tariff projection of OHPC for FY 2018-19, GRIDCO has assumed the OERC approved rates for FY 2017-18 towards procurement of such energy from different OHPC Stations along with likely payout towards SLDC Charges (SOC & MOC Charges), Electricity Duty (ED) & Water Tax / Cess etc. The rate of energy from Machhkund Joint Project has been calculated at 79.76 P/U considering Odisha share. Accordingly, GRIDCO has proposed to procure the total hydel energy of 5866.13 MU from OHPC at a cost of Rs.510.88 Crore with an average rate of 87.09 P/U against average rate of 83.78 P/U approved for FY 2017-18.
7. The power purchase cost of Rs.670.43 Crore has been projected for procurement of 2913.49 MU from OPGC @ 230.11 P/U for FY 2018-19. The proposed variable charge (ECR) is provisionally considered as 139.66 P/U which is 10% more than the approved ECR for FY 2017-18. The Commission had allowed an amount of Rs.52.31 Crore towards Year End Charges for FY 2017-18; accordingly GRIDCO has considered the same amount provisionally for FY 2018-19 which works out to be 17.95 P/U. GRIDCO has projected the fixed cost @ 72.50 P/U based on the approval for the FY 2017-18. GRIDCO submits that the Commission may kindly determine the quantum of power and the tariff for procurement of such power from Unit #1 & #2 of OPGC by GRIDCO for FY 2018-19 as per the OERC (Terms and Condition for Determination of Generation Tariff) Regulation, 2014. The approved power purchase cost from OPGC for FY 2017-18 was Rs. 561.60 Crore (2861.50 MU @ 196.26 P/U).
8. Based on the Tariff Order dated 26-09-2016 in Petition No.334 of 2016 passed by the CERC in respect of NTPC-TTPS for the period from 2014-19, the Annual Fixed Charges of TTPS is fixed as Rs. 445.48 Crore for FY 2018-19. Accordingly, the Fixed Cost per Unit of energy from TTPS works out to be 131.95 P/U for the proposed energy drawal of 3376.07 MU for FY 2018-19. Based on the trend of Energy Charge Rate (ECR) as claimed by TTPS-NTPC during last six months, GRIDCO has considered 5% escalation over and above the Monthly Average Energy Charge of 167.37 P/U and thus, proposes 175.74 P/U towards Energy Charge Rate (ECR) for FY 2018-19. Accordingly, considering Year End Charges @ 10.68 P/U, GRIDCO has projected to procure 3376.07 MU from TTPS with the procurement cost of Rs. 1074.85 Crore @ 318.37 P/U against 306.45 P/U approved for FY 2017-18.
9. GRIDCO has no plan for procurement of energy from co-generation plants and CGPs to meet the state requirement during FY 2018-19.

10. GRIDCO has proposed to procure 1132 MU of renewable energy at a cost of Rs.554.85 Crore @ 490.15 P/U on an average. It includes 320 MU from small hydro sources (100 MU from SAMAL Barrage SHEP of M/s. OPCL and 220 MU from M/s. Meenakshi Power Limited at an average price of 368.93 P/U, 680 MU from solar energy at an average rate of 537.94 P/U (13 MU from 8 Nos. of Solar PV projects of 1MW each under RPSSGP, 34 MU from NVVN through 20 MW of 'New Projects' scheme under JNNSM phase-I, 17 MU from NTPC's Solar PV power plants at Dadri and Faridabad, 8 MU from Alex Green Energy Ltd through OREDA State scheme, 42 MU from ACME Odisha Solar Power Private Ltd., 116 MU from Solar Energy Corporation of India through 70 MW of JNNSM Phase – II, Batch – I and 450 MU from Solar Energy Corporation of India through 270 MW of JNNSM Phase – II, Batch - IV). GRIDCO proposes to procure 110 MU of bio-mass energy from biomass projects (M/s Shalivahan Green Energy Ltd and M/s. Octant Industries Ltd) at a cost of Rs.63.22 Crore @ 574.73 P/U on an average during FY 2018-19. Similarly, GRIDCO has proposed to procure around 22 MU of Wind Energy for an amount of Rs. 7.76 Crore @ 353 P/U from the wind power projects through M/s PTC India Ltd.

11. GRIDCO has proposed to procure 2630.82 MU from Vedanta Ltd-(IPP) with the estimated cost of Rs. 781.35 Crore at an average rate of 297 P/U for FY 2018-19, comprising of the fixed charge @ 116.90 P/U based on the submission made by M/s. Vedanta Ltd in their Multi Year Tariff Application admitted by the Commission in Case No.95 of 2013 and the Energy Charge Rate of 180 P/U calculated by considering 10% escalation on the weighted average ECR for the period from April-17 to Sept-17.

The total proposed power procurement cost from GKEL (GMR Kamalanga Energy Ltd) for 1840 MU @ 348 P/U is worked to be Rs.640.32 Crore for FY 2018-19.

GRIDCO proposes to procure 504 MU @ 141 P/U from M/s. JITPL. The total proposed procurement cost is worked out to be Rs.71.06 Crore for FY 2018-19.

12. For central sector thermal power stations of NTPC, CERC has computed the cost of fuel components in Working Capital at 85% NAPAF for the year 2017-18 & 2018-19 and based on “as billed” GCV of coal and price of coal procured by NTPC for the preceding 3 months. Similarly, the Energy Charge Rate (ECR) have been computed by the CERC basing on the billed GCV with an adjustment on account of coal received at the generating station for equilibrated basis in the billed GCV of M/s. Coal India. Accordingly, NTPC has recalculated the AFC as determined by the CERC as per new Interest on Working Capital based on Total Moisture Correction in GCV. Except Barh STPS-II, the AFC for central thermal stations has been calculated by GRIDCO basing upon 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 CERC Order.

GRIDCO has projected the Energy Charge Rate of central sector NTPC stations considering 5% escalation on ECR computed as per the new CERC Tariff Regulation for FY 2018-19. Going by the presumptions for FC, ECR, YEA, the Projected Power Procurement Cost from different Central Sector Thermal Generating Stations (NTPC-ER Stations) is calculated as Rs.3249.66 Crore for 8281.89 MU at average rate of 392.38 P/U.

13. GRIDCO has also projected to procure 914 MU from Chukha, Tala, Teesta-V hydro power stations with the procurement cost of Rs.265.03 Crore at average rate of 289.97 P/U.
14. The PGCIL Transmission Charges payable by GRIDCO for the ensuing year has been projected as Rs. 524 Crore. Considering energy drawal of 9363.60 MU and after allowing 2.05% of CTU loss, the per Unit PGCIL Transmission Charge works out to 57.14 P/U. Considering the bills received during April'17 to Sept'17 and prorating the same for a year, GRIDCO proposes for payment of an amount of Rs.2.20 Crore towards SOC & MOC of ERLDC for the FY 2018-19.
15. The detailed cost of power purchase as furnished by GRIDCO for FY 2018-19 is reproduced hereunder in Table -5 below.

Table – 5
Summary of Proposed Power Procurement Cost during FY 2018-19

| Stations | Availability (After Transformation Loss and Auxiliary Consumption) (MU) | Avg. Rate (P/U) | Proposed power procurement cost (Rs.Cr.) | Commission's approval for FY 2017-18 (P/U) |
|--------------------------|---|-----------------------|--|---|
| HHEP | 661.55 | 150.23 | 99.38 | |
| CHEP | 309.87 | 85.31 | 26.44 | |
| Rengali | 759.33 | 82.96 | 62.99 | |
| Upper Kolab | 754.38 | 62.99 | 47.52 | |
| Balimela | 1175.13 | 84.36 | 99.13 | |
| OHPC(Old) | 3660.26 | 91.65 | 335.47 | 89.16 |
| Indravati | 1943.37 | 79.49 | 154.48 | 77.50 |
| Sub-Total OHPC | 5603.63 | 87.43 | 489.94 | |
| Machhkund | 262.50 | 79.76 | 20.94 | 55.07 |
| Total State Hydro | 5866.13 | 87.09 | 510.88 | 83.78 |
| OPGC | 2913.49 | 230.11 | 670.43 | 196.26 |

| Stations | Availability (After Transformation Loss and Auxiliary Consumption) (MU) | Avg. Rate (P/U) | Proposed power procurement cost (Rs.Cr.) | Commission's approval for FY 2017-18 (P/U) |
|--|---|-----------------------|--|---|
| TTPS | 3376.07 | 318.37 | 1074.85 | 306.45 |
| Small Hydro Renewable Energy | 320.00 | 368.94 | 118.06 | 368.94 |
| Biomass Energy (Shalivahan Energy Ltd.) | 80.00 | 578.00 | 46.24 | 616.00 |
| Biomass Energy (Octant Industries) | 30.00 | 566.00 | 16.98 | - |
| Wind Energy | 22.00 | 353.00 | 7.77 | - |
| Solar Energy | 680.00 | 537.94 | 365.80 | 615.00 |
| CGPs | 0.00 | 275.00 | 0.00 | 0.00 |
| Co-generation Plants | 0.00 | 275.00 | 0.00 | 0.00 |
| IPPs | 4974.82 | 300.06 | 1492.74 | 237.92 |
| Total State | 18262.51 | 235.66 | 4303.75 | 207.51 |
| TSTPS Stg.-I | 2229.92 | 326.46 | 727.97 | 263.36 |
| TSTPS Stg.-II | 1371.85 | 308.17 | 422.76 | 239.65 |
| FSTPS-II&III | 1552.63 | 422.68 | 656.26 | 326.78 |
| FSTPS-III | 622.30 | 494.72 | 307.86 | 386.84 |
| KhSTPS Stg.-I | 884.27 | 406.24 | 359.22 | 348.19 |
| KhSTPS Stg.-II | 271.69 | 396.29 | 107.67 | 344.65 |
| Barh-STPS-II | 1349.23 | 495.03 | 667.91 | - |
| Total Central Thermal | 8281.89 | 392.38 | 3249.66 | 313.44 |
| Chukha | 262.00 | 290.84 | 76.20 | 233.84 |
| TALA | 139.00 | 277.57 | 38.58 | 206.27 |
| Teesta | 513.00 | 292.88 | 150.25 | 237.01 |
| Total Central Hydro | 914.00 | 289.97 | 265.03 | 231.36 |
| Total EREB | 9195.89 | 382.20 | 3514.69 | 301.64 |
| SOC & MOC Charges | | | 2.20 | |
| GRAND TOTAL | 27458.40 | 284.82 | 7820.65 | 246.42 |

Pass through of arrear dues paid / to be paid during FY 2018-19

16. GRIDCO proposes to consider pass through of expenses, already incurred or to be incurred in the ARR for the FY 2018-19. These expenses amount of Rs.293.71 Crore consisting of arrear of Rs.19 Crore in respect of TTPS for differential AFC for the period from October 2016 to March 2017, arrear of Rs. 94 Crore in respect

of NTPC (FSTPS-III), differential arrear of Rs. 171.33 Crore in respect of GKEL for FY 2014-15, 2015-16 & 2016-17 and arrear of Rs.1.50 Crore towards reactive energy charges along with Transmission & Scheduling Charges of Rs.7.88 Crore paid for availing Solar Power from outside during FY 2016-17.

Special Appropriation for Loan and Interest towards Past Power Purchase Liabilities

17. GRIDCO has been forced to resort to borrowing in the earlier years to meet the payment obligations in order to keep supplying power to the DISCOM Utilities to meet the consumers demand in greater public interest. Total loan availed by GRIDCO to meet the deficit is given in Table 6.

**Table -6
Loan Availed to Meet Deficit (Amount in Rs. Crore)**

| FY | Profit/(loss) in P&L Accounts | Loan Repayment | BSP Dues defaulted by DISCOM Utilities | Total Cash Deficit | Loan availed to meet deficit |
|-----------------------------|--|-----------------------|---|---------------------------|-------------------------------------|
| 2008-09 | 98.14 | 374.26 | 163.94 | 440.06 | 300.00 |
| 2009-10 | - 1560.84 | 205.06 | 164.22 | 1930.12 | 1213.00 |
| 2010-11 | - 587.86 | 328.15 | 297.01 | 1213.02 | 1640.71 |
| 2011-12 | - 936.81 | 382.40 | 269.74 | 1588.95 | 864.16 |
| 2012-13 | 31.79 | 777.69 | 590.01 | 1335.91 | 943.83 |
| 2013-14 | - 1464.34 | 1006.57 | 167.30 | 2638.21 | 483.50 |
| 2014-15 | - 120.35 | 868.31 | 86.91 | 1075.57 | 1609.49 |
| 2015-16 | - 406.66 | 532.62 | 102.20 | 1041.48 | 1300.00 |
| 2016-17 | - 378.37 | 801.01 | 90.74 | 1270.12 | 1300.00 |
| 2017-18 (04/17 to 09/17) | 122.48 | 280.28 | 1281.07 | 1438.87 | 425.00 |
| Total | - 5202.82 | 5556.35 | 3213.14 | 13972.3 | 10079.69 |

18. GRIDCO has proposed the Special Appropriation of Rs. 832.04 Crore towards principal loan repayment for recovery through the ARR and BSP for FY 2018-19 as detailed in Table- 7.

**Table – 7
Proposed Special Appropriation claimed in the ARR & BSP for FY 2018-19
(Rs. Crore)**

| Particulars | Loan Repayment Dues | Interest Dues | Total | Proposed special appropriation by GRIDCO |
|--------------------|----------------------------|----------------------|--------------|---|
| | | | | |

| | | | | |
|---|----------------|---------------|----------------|-------------------------|
| State Govt. Loan | 162.54 | 376.04 | 538.58 | |
| NTPC-GoO Special Bonds (Rs.1102.87 Crore) | 818.81 | 491.62 | 1310.43 | |
| Sub-Total (A) | 981.35 | 867.66 | 1849.01 | Proposed to be deferred |
| Bank Loans & Inter Corporate Loan (OMC) | 832.04 | - | 832.04 | 832.04 |
| OHPC Securitized Dues | 88.44 | 49.52 | 137.96 | Proposed to be deferred |
| Sub-Total(B) | 920.48 | 49.52 | 970.00 | 832.04 |
| Grand Total (A+B) | 1901.83 | 917.18 | 2819.01 | 832.04 |

Interest, Financing and Other expenses

19. GRIDCO has proposed to incur about Rs.441.51 Crore during the FY 2018-19 towards expenses on account of interest, Employees Cost, A&G Expenses, R&M, Depreciation etc. as shown in the table below.

Table – 8
Interest, Financing & Other expenses for FY 2018-19 (Rs. Crore)

| Particulars | GRIDCO proposal for FY 2018-19 | |
|---------------------------------|-----------------------------------|---------------|
| 1. Interest & Financial Charges | | 417.28 |
| 2. Other Costs: | | |
| a. Employee Cost | 14.26 | |
| b. A&G Cost | 8.59 | |
| c. Repair & Maintenance Cost | 0.28 | |
| Sub-Total | | 23.13 |
| 3. Depreciation | | 1.10 |
| Total (1+2+3) | | 441.51 |

Proposed Interest and Financial Charges have been considered as Rs.417.28 Crore after considering deferment of interest payable to the State Govt. and interest on securitized dues payable to OHPC during FY 2018-19.

Proposed employees cost of Rs.14.26 Crore for FY 2018-19 has been computed considering an indexing factor of 2.57 hike in the Basic pay and Grade Pay as per the 7th Pay Commission Report as implemented by the State Government.

Other Income / Miscellaneous Receipts

20. GRIDCO expects to earn an amount of **Rs. 3.48 Crore** during FY 2018-19 (at existing approved rate of 695 P/U) from proposed emergency power sale of 5 MU to long term customers like NALCO and IMFA.

Receivable from DISCOM Utilities and other parties

21. DISCOM Utilities have defaulted in payment of Rs.2135.23 crore towards securitized dues (as on 31.03.2017), Rs.664.27 crore towards Year-end-Adjustment (YEA) Bills and Rs. 4182.42 crore towards BSP bills (upto September, 2017). Further, Rs.195.36 crore is outstanding against three erstwhile R-Infra managed DISCOM Utilities towards the dues of Rs.400.00 crore Bond as on 31.03.2017.

Aggregate Revenue Requirement (ARR)

22. The proposal for Aggregate Revenue Requirement of GRIDCO for FY 2018-19 is summarized in the Table below.

**Table - 9
Proposed Aggregate Revenue Requirement of GRIDCO for FY 2018-19**

| Particulars | | GRIDCO Projection for FY 2018-19 (Rs. Crore) |
|---|--------|---|
| Power Purchase cost | | 7820.65 |
| The Interest & Financing Charges | | 417.29 |
| Employees Cost | | 14.26 |
| A&G Expenses | | 8.59 |
| R & M Expenses | | 0.28 |
| Depreciation | | 1.10 |
| Sub Total | | 8262.17 |
| Proposed Pass Through Expenses | | |
| ❖ Arrear of TTPS (Differential AFC from Oct.'16 to Mar.'17) | 19.00 | 293.71 |
| ❖ Arrear of NTPC (FSTPS-III) (Apr'17 to Sept'17) | 94.00 | |
| ❖ Arrear of M/s. GKEL (FY 2014-15, 2015-16 & 2016-17) | 171.33 | |
| ❖ STU & Scheduling Charges paid for availing Solar Power from outside during FY 2016-17 | 7.88 | |
| ❖ Arrear towards Reactive Energy Charges paid to ER Pool from Sept'17 to Oct.'2017 | 1.50 | |
| Special Appropriation | | |
| State Govt. Loans & Interest (Rs.182.61 Crore) (Deferred) | | |
| NTPC-GoO Special Bonds & Interest (Rs.904.79 Crore)(Deferred) | | |
| OHPC Securitized Dues & Interest (Rs.137.76 Crore) (Deferred) | | |
| Repayment of Bank / Commercial Loans | 832.03 | |

| | | |
|--|--|---|
| Particulars | | GRIDCO Projection for FY 2018-19 (Rs. Crore) |
| Sub Total :Special Appropriation | | 832.03 |
| Gross Revenue Requirement | | 9387.91 |
| Less: Miscellaneous Receipts from Emergency & Back-up Power Sale to NALCO & IMFA | | 3.48 |
| Net Revenue Requirement to be recovered from DISCOM Utilities | | 9384.42 |

Proposed Revenue Earning at Existing BSP

23. GRIDCO estimates to earn revenue of Rs 7362.97 Crore during FY 2018-19 from the anticipated sale of 26561 MU to DISCOM Utilities at the existing BSP for 2017-18; the details of which is given in Table below.

**Table – 10
Expected Revenue for FY 2018-19 at Existing BSP for FY 2017-18**

| DISCOM Utilities | Energy (MU) | Existing BSP (P/U) | Amount (Rs. Crore) |
|-------------------------|--------------------|---------------------------|---------------------------|
| CESU | 9354.00 | 274 | 2562.40 |
| NESCO | 6307.00 | 301 | 1898.02 |
| WESCO | 7200.00 | 301 | 2166.85 |
| SOUTHCO | 3700.00 | 199 | 735.71 |
| TOTAL | 26561.00 | | 7362.97 |

Excess / Deficit in the ARR for FY 2018-19

24. GRIDCO has proposed that it would suffer revenue deficit of **Rs.2021.46 Crore** considering the proposed **ARR of Rs. 9387.91 Crore** and the revenue of **Rs.7362.97 Crore** to be earned from sale of the proposed energy of **26561 MU** to DISCOM Utilities during FY 2018-19 at the existing BSP for FY 2017-18; the details of which are shown in the Table below.

**Table - 11
Excess / Deficit on Revenue Requirement for FY 2018-19**

| ITEM | GRIDCO Projection for FY 2018-19 (Rs. Crore) |
|---|---|
| Total Revenue Requirement | 9387.91 |
| <i>Less:</i> Misc. Receipt from Emergency sale of Power to NALCO & IMFA | 3.48 |
| Net Revenue Requirement to be recovered from DISCOM Utilities | 9384.42 |

| | |
|---|-----------------|
| Revenue Receipt from DISCOM Utilities at the existing BSP | 7362.97 |
| Gap i.e. Surplus / Deficit (-) | -2021.46 |

Proposal for Revision of Bulk Supply Price

25. In order to meet the estimated deficit of Rs. 2021.46 Crore, GRIDCO has submitted the application before the Commission for revision of Bulk Supply Price for the FY 2018-19. GRIDCO proposes to recover its estimated net Revenue Requirement of Rs. 9384.42 Crore from the DISCOM Utilities by way of two alternative methods i.e. either through existing single part BSP and levy of conditional demand charges or through two part BSP consisting of both energy charges and demand charges.

In the existing single part BSP method, GRIDCO proposes to recover the estimated Net Revenue Requirement of Rs.9384.42 crore from the DISCOM Utilities through Energy Charge at the uniform BSP of 353.32 P/U and on levy of a conditional demand charge Rs. 250/KVA/Month only when their actual SMD in a month exceeds the permitted monthly SMD (110% of the approved SMD), to take care of monthly variations subject to Year-End Adjustment within the permitted annual SMD i.e. 110% of the approved annual SMD.

In the alternative method, GRIDCO proposes to recover the estimated Net Revenue Requirement of Rs.9384.42 crore from the DISCOM Utilities by recovering fixed cost through demand charges (Rs/kVA/Month) and variable cost through energy charges (P/U) as shown in the table below.

Table - 12
Proposed two part BSP (demand and energy charges) for FY 2018-19

| Particulars | Unit | Fixed Cost | Variable Cost |
|--|---------------------|-------------------|----------------------|
| Power purchase Costs | Rs. Crore | 3499.54 | 4614.81 |
| Finance Costs | Rs. Crore | 1249.32 | 0.00 |
| Misc. Costs | Rs. Crore | 24.23 | 0.00 |
| Less Misc. Receipts | Rs. Crore | 0.00 | -3.48 |
| Total | Rs. Crore | 4773.09 | 4611.33 |
| Demand charges (related to fixed cost) | Rs/kVA/Month | 955.38 | |
| Energy charges (related to variable cost and energy sale to DISCOM Utilities of 26561 MU) | P/U | | 173.61 |

**Other Allied Submissions to Facilitate GRIDCO for Recovery of its Expenses
Over Drawl and Year End Charges**

26. GRIDCO proposes 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 2018-19 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 2018-19 (which includes transmission charges and transmission loss) on monthly basis instead of the normal differential BSP applicable to the respective DISCOM Utilities, 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)

27. Any excess payment made by GRIDCO towards FPA for a particular / relevant month will be levied on DISCOM Utilities 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

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 of current BSP 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 within 30 days, 1% rebate may be allowed. However, no rebate will be allowed if full BSP is not paid within thirty days.

Delayed Payment Surcharge

28. For payment after the periods of 30 days from the date of submission of bills, delayed payment surcharge @ 1.50% per month may be levied pro-rata for the period of delay from the due date, on the amount remain unpaid (excluding arrears on account of delayed payment surcharge).

Escrow Arrangement

29. DISCOM Utilities 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 & BSP order for FY 2016-17 as well as in FY 2017-18 to allow escrow relaxation, GRIDCO is facing inconvenience. GRIDCO has requested to pass suitable direction as may be deemed necessary without affecting interest of GRIDCO.

Carry Forward of Revenue Gap

30. GRIDCO prays that the proposed Annual Revenue Requirement & Bulk Supply Price be made applicable from 1st April 2018. However, in case of a gap between the approved revenue requirements for FY 2018-19 and the revenue realized, the Commission may kindly approve to carry forward the gap for adjustment during the future years.

Prayer

31. GRIDCO has prayed the Commission to approve the following for FY 2018-19 and make the same effective from 1st April, 2018.
- i) Consider Pass Through amount of **Rs.293.71 Crore** as requested in the ARR application for FY 2018-19 and accordingly, approve the ARR and Bulk Supply Price (BSP) for FY 2018-19 as proposed.
 - ii) Allow carry forward of the additional costs, if any, for recovery in the future BSP;
 - iii) Allow recovery of the additional cost/s due to overdrawal of energy, Fuel Price Adjustment / Fuel Surcharge Adjustment etc. or on account of any other statutory increase/s, significant rise in the fuel cost etc. if any, be passed on to GRIDCO on account of the OERC / CERC / Tribunal / Court Orders, as surcharge during the year;
 - iv) 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, if any, be passed on to GRIDCO imposed under any relevant law from time to time, as surcharge during the year;
 - v) Suitably frame and approve the Intra State UI / Deviation Settlement Mechanism & Rates in a manner by which GRIDCO will be in a position to recover its dues payable to the generators from the BSP Bills charged to the DISCOM Utilities.
