# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No.400/MP/2019

Coram: Shri P.K. Pujari, Chairperson Shri I.S. Jha, Member Shri Arun Goyal, Member

Date of Order: 9.6.2021

#### In the matter of

Application under subsection (4) of section 28 of Electricity Act, 2003 and Regulation 10 of the Central Electricity Regulatory Commission (Fee and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2019 for determining the WRLDC Charges for the control period 01.04.2019-31.03.2024.

#### And in the matter of

Western Regional Load Despatch Centre (WRLDC)
Power System Operation Corporation of India Limited (POSOCO),
(A Government of India Undertaking)
Registered Office: B-9, Qutub Institutional Area,1st floor,
Katwaria Sarai, New Delhi- 110016 .....Petitioner

#### Versus

#### <u>Users of Western Regional Load Despatch Centre (WRLDC)</u>

#### I. Users under the category of Distribution Licensees and Buyers

- 1. Managing Director, MSEDCL, Prakashgadh, 5th Floor, Bandra East, Maharashtra Mumbai 400051.
- 2. Managing Director, GUVNL, Sardar Patel Vidyut Bhavan race Course Gujarat Vadodara 390007.
- 3. Managing Director, MP Power Management Co Ltd, 3rd Floor, Block No 11, Shakti Bhavan, Rampur, Madhya Pradesh 482008
- 4. Managing Director, CSPDCL, PO Sunder Nagar Chhattisgarh Raipur, Dangania 492013.
- 5. Secretary (Power), Electricity Department, UT of Daman & Diu, Sachivalaya, Daman & Diu, Moti Daman 396210



- 6. Secretary (Power), UT of Dadra Nagar & Haveli, Secretariat, Electric Depatment, 66kv Amli Road, Dadra Nagar & Haveli Silvassa 396230
- 7. Managing Director, ESSAR STEEL INDIA LIMITED, 27th KM, Surat Hazira Road, Gujarat Surat 394270
- 8. Chief Electrical Engineer, Goa Electricity Department, Government of Goa, 3rd Floor, Vidyut Bhavan, Panjim, Goa 403001.
- 9. General Manager, Bhadravathi HVDC, Power Grid Corporation of India Ltd, Sumthana Village, Bhadravathi (Tahsil), Bhadravathi, Chandrapur (Dist), Maharashtra-442 902
- 10. General Manager, Vindhayachal HVDC, NH-3 Opp. NTPC Hospital, Old Tiny Tots Bldg, P.O. Vindhyanagar, Distt: Singrauli, Madhya Pradesh-485886
- 11. BARC FACILITY- Plant Superintendent, BARC-Nuclear Recycle Board(NRB), BARC, Tarapur, Mumbai 401502, Maharashtra
- 12. Station Incharge, +/- 800 kV Champa HVDC Terminal, Power Grid Corporation of India Ltd, Vill: Taga, Tahsil: Akaltara, Janjgir-Champa, Chhattisgarh 495868

# II. Users under the category of Generating Stations and Sellers

- 13. General Manager, Korba STPS STG (I& II), NTPC Ltd., P.O.: Vikas Bhavan, Jamnipali, Korba District, Chhattisgarh- 495 450.
- 14. General Manager, Korba STPS STG (III), NTPC Ltd, P.O. Vikas Bhavan, Jamnipali, Korba Dist, Chhattisgarh- 495 450.
- 15. General Manager, VSTPS-STAGE-I, Vindhayachal STPS, NTPC Ltd, P.O.: Vindhyanagar, Sidhi District, Madhya Pradesh 486 885
- 16. General Manager, VSTPS-STAGE-II, Vindhayachal STPS, NTPC Ltd., P.O.: Vindhyanagar, Sidhi Dist., Madhya Pradesh 486 885
- 17. General Manager, VSTPS-STAGE-III, Vindhayachal STPS, NTPC Ltd, P.O.: Vindhyanagar, Sidhi Dist, Madhya Pradesh 486 885

- 18. General Manager, VSTPS-STAGE-IV, Vindhayachal STPS, National Thermal Power Corporation of India Ltd, P.O Vindhyanagar, Sidhi (Dist), Madhya Pradesh – 486 885
- 19. General Manager, VSTPS-STAGE-V, Vindhayachal STPS, National Thermal Power Corporation of India Ltd, P.O Vindhyanagar, Sidhi (Dist), Madhya Pradesh 486 885
- 20. General Manager, Kawas Gas Power Project, NTPC Ltd., P.O. Aditya Nagar, Surat, Gujarat 394 516
- 21. General Manager, Gandhar Gas Power Project, NTPC Ltd, P.O.: NTPC Township, Bharuch (Dist), Gujarat- 392215
- 22. General Manager, SIPAT TPS Stg-I, NTPC Ltd, SIPAT, Chhattisgarh 495558.
- 23. General Manager, SIPAT TPS Stg-II, NTPC Ltd., SIPAT, Chhattisgarh-495558.
- 24. General Manager, Mouda STPP Stage-I, NTPC Ltd, Mouda Ramtek Road, P.O.Mouda, Nagpur (Dist), Maharashtra
- 25. General Manager, Mouda STPP Stage-II, NTPC Ltd, Mouda Ramtek Road, P.O. Mouda, Nagpur (Dist), Maharashtra
- 26. General Manager Solapur STPS Post Hotgi Power Station, PO: Hotgi Station, Taluka: South Solapur, District: Solapur, Maharashtra-413215.
- 27. Station-In-charge, NTPC Ltd LARA STPP, Vill-Chhappora, Po+Ps- Pussora, Raigarh, Chattisgarh-496001
- 28. Station-In-charge, NTPC Ltd. Gadarwara STPP, Village-Dongargaon, PO: Gangai, Tehsil- Gadarwara, Dist-Narsinghpur, Madhya Pradesh (Mobile: 9004497016)
- 29. General Manager ,2 X 135 MW Kasaipali Thermal Power Project, ACB (India) Ltd. District Korba Chhattisgarh Chakabura 495445
- 30. General Manager, Bharat Aluminium Co. Ltd, Captive Power plant-II, BALCO Nagar Chhattisgarh Korba 495684
- 31. Executive Director, Costal Gujarat Power Ltd (CGPL-UMPP), Tunda Vandh Road, Tunda Village, Mundra, Gujarat Kutch 370435



- 32. Excecutive Director, DB Power, Village Baradarha, Post Kanwali, Dist Janjgir, Champa, Chhattisgarh Baradarha 495695
- 33. Executive Director Jindal Power Ltd. Stg-I, OP Jindal STPP, PO-Tamnar, Gjarghoda Tehsil, Chhattisgarh District Raigarh, 496107
- 34. Executive Director Jindal Power Ltd. Stg-II, OP Jindal STPP, PO-Tamnar, Gjarghoda Tehsil, Chhattisgarh District Raigarh, 496107
- 35. Executive Director, DGEN Mega Power Project, Plot No Z-9, Dahej SEZ Area (Eastern side), At: Dahej, Taluka-Vagra, Dist-Bharuch, Gujarat 392130
- 36. Executive Director, GMR Warora Energy Limited, Plot No B-1, Mohabala MIDC Growth Center Post Tehsil Warora, Dist Chandrapur, Maharashtra 442907
- 37. Executive Director, ESSAR POWER MP LTD. Village Bandhora, Post-Karsualal, Tehsil- Mada, Distt. Singrauli, Madhya Pradesh 486886
- 38. Head(Commercial), GMR CHHATTISGARH ENERGY LTD, Skip House, 25/1, Museum Road, Karnataka, Banglore-560025
- 39. Managing Director, Jaypee Nigrie Super Thermal Power Project, Nigri District, Singrauli, Madhya Pradesh 486668
- 40. Executive Director, DCPP, OP Jindal STPP, PO-Tamnar, Gjarghoda Tehsil, Chhattisgarh District Raigarh, 496107
- 41. Station Director, Nuclear Power Corporation of India ltd, Kakrapara Atomic Power Station, PO via Vyara, Dist Surat, Gujarat 395651
- 42. Station Incharge, Kakrapar Atomic Power Project-3&4 (KAPP-3&4), Regd. Office: NPCIL, 16th Floor, Centre-1, World Trade Centre, Cuffe Parade, Colaba, Mumbai-400005
- 43. Station Director, Tarapur Atomic Power Station 1&2, Nuclear Power Corporation of India Ltd, P.O. TAPP, Thane (Dist), Maharashtra- 401 504
- 44. Station Director, Tarapur Atomic Power Station 3&4, Nuclear Power Corporation of India Ltd, P.O. TAPP, Thane (Dist), Maharashtra- 401 504

- 45. Managing Director, Korba West Power Co.Ltd., Village Chhote Bhandar, P.O. Bade Bhnadar, Tehsil Pussore, District Raigarh, Chhattisgarh Raigarh 496100
- 46. Managing Director, KSK Mahanadhi , 8-2-293/82/A/431/A, Road No 22 Jubilee Hills Andhra Pradesh Hyderabad 500033
- 47. General Manager (Comml), LANCO Power Ltd, Plot No 397, phase -III, Udyog Vihar, Haryana Gurgaon 122016
- 48. General Manager, NTPC-SAIL Power Company Private Ltd, Puranena Village, Chhattisgarh Dist Durg, Bhilai 490021
- 49. General Manager, Ratnagiri Gas & Power Pvt Ltd (RGPPPL), 5th floor, GAIL Jubilee Tower, B-35-36, Sector-1, Noida, Gautam Budh Nagar, Uttar Pradesh 201301
- 50. M/s Sasan Power Ltd, DACK, I Block, 2<sup>nd</sup> Floor, North Wing, Thane, Belapur Road, Koparkhairana Maharashtra New Mumbai -400710
- 51. Member (Power), Narmada Control Authority, Narmada Sadan, Sector -B, Scheme No 74, Vijaynagar, Indore, Madhya Pradesh-452010 (Mobile: 9978934846)
- 52.CEO, MB Power (Madhya Pradesh) Ltd., Vilagelaharpur, post Jaithari, Dist: Anupur, Madhya Pradesh-484330
- 53. Chief General Manager, RKM Powergen Pvt. Ltd., Village: Uchpinda, PO: Dhurkot, Dist: Janjgir-Champa, Chhattisgarh -495692
- 54. Head (Commercial), Jhabua Power Ltd., Village Barrella, Post Attaria, Tahsil –Ghansor, Dist Seoni, Madhya Pradesh 480997
- 55. Head(Commercial), Dhariwal Infrastructure Ltd., CESC House, Chowringhee Square, Kolkata 700001
- 56. Head (Commercial), SKS Power Generation Chhattisgarh Ltd., 501B, Elegant Business Park, Andheri Kurla Road, J B Nagar, Andheri (East), Mumbai 400059 (Mob: 07389939063)
- 57. Sr. Vice President (Power), M/s. TRN Energy Pvt. Ltd., 18, Vasant Enclave, Rao Tula ram Marg, New Delhi-110057



- 58. Mahindra Renewables Pvt Ltd, RUMS, Deputy Manager, Mahindra Towers, Dr. G.M Bhosale Marg, P.K Kurne Chowk, Worli, Mumbai-400018
- 59. Arinsun Clean Energy Pvt Ltd, RUMS, Construction Manager, Unit-3, ACEPL, Rewa Ultra Mega Solar Plant, Gurh Tehsil, Dist. Rewa, MP- 486553
- 60. ACME Jaipur Solar Power Pvt Ltd, RUMS, Senior Manager, Plot No 152, Sector-44, Gurgaon-122002, Haryana
- 61.OSTRO Kutch Wind Pvt. Ltd, Sr. Manager, Unit No G-0, Mira Corporate Suites,1&2 Iswar Industrial Estate, Mathura Road, New Delhi-110065
- 62. GIWEL II -5th Floor Tower C, Building-8 DLF Cyber City, Haryana Gurugram 122002
- 63. GIWEL III -5th Floor Tower C, Building-8, DLF Cyber City, Haryana Gurugram 122002
- 64. Inox Wind Infrastructure Services Ltd., Dayapara Gujarat Kutch 370625
- 65. Khargone Super Thermal Power Project, PO Khedi (Bujurg), So-Bediya, Dist-Khargone, MP Khargone -451113
- 66. ReNew Power LTD, Commercial Block 1 Zone 6, Golf Race Cource Road, DLF City Phase V Haryana Gurugram -122009

## III. Users under the category of Inter State Transmission Licensees

- 67. General Manager, Power Grid Corporation of India Ltd. Western Region I Headquarters, PO Sampritinagar, Nari Ring Road, Nagpur, Maharashtra 440026
- 68. Managing Director, Essar Power Transmission Co. Ltd.- 27 Km Surat Hazira Road, Surat Gujarat -394270 India
- 69. Executive Director, Jindal Power Ltd., OP Jindal STPP, OP Jindal STPS, PO-Tamnar, Chhattisgarh District - Raigarh, 496107
- 70. Executive Director, Torrent Power Grid Ltd, Torrent House, Off Ashram Road, Gujarat Ahmedabad 380009
- 71. General Manager, Western Transco Power Limited., 601,6th Floor, Hallmark Business Plaza, Opp. Gurunanak Hospital, Bandra(E), Mumbai-51



- 72. General Manager, Western Transmission Gujarat Limited., 601,6th Floor, Hallmark Business Plaza, Opp. Gurunanak Hospital, Bandra(E), Mumbai-51
- 73. General Manager (Comml), Adani Power Ltd. Achalraj, Opp. Mayor Bungalow, Law Garden, Ahmedabad, Gujarat 380006
- 74. Head (Commercial), Bhopal Dhule Transmission Company Ltd., Sterlite Grid Ltd. 634 Tulip, New Minal Presidency, J K Road, Ayodhya Bypass, Madhya Pradesh Bhopal 462023
- 75. Head (Commercial), Raichur Solapur Power Transmission Company Ltd, Patel Estate, SV Road, Jogeshwari West, Mumbai 400102
- 76. Head(Commercial), Jabalpur Transmission Company Limited (JTCL)-Sterlite Grid Ltd. 634 Tulip, New Minal Presidency, J K Road, Ayodhya Bypass, Madhya Pradesh Bhopal 462023
- 77. RAPP Transmission Company, Sterlite Grid Ltd. 634 Tulip, New Minal Presidency, J K Road, Ayodhya Bypass, Madhya Pradesh Bhopal 462023
- 78. Powergrid Warora Transmission Ltd (PWTL), CEO, Sampriti Nagar, Nari Ring Road, Nagpur, Maharashtra- 440026
- 79. Chhattisgarh-WR Transmission Limited (CWRTL), General Manager, 8A, Sambhav House, Judges Bunglow Road, Bodakdev Ahmedabad, Gujarat-380015
- 80. Powergrid Parli Transmission Ltd, CEO, Sampriti Nagar, Nari Ring Road, Nagpur, Maharashtra- 440026
- 81. Khargone Transmission Limited, O&M Head Office, A (Tulip) 634, Project Director Asset Management and Grid Planning, New Minal Residency, J.K Road Near Ayodha Bypass Road, Bhopal 462023
- 82. Sipat Transmission Limited, 8A, Sambhav House Judges Bunglow Road, Bodakdev Gujarat Ahmedabad 380015
- 83. Power Grid-Jabalpur Transmission Ltd. Powergrid Corporation of India Limited, WR-II, Head Quarter, Sama Savli Road, Opp. Ambe School, Gujarat Vadodara 390008.

- 84. Odisha Generation Phase II Transmission Ltd, Power Grid Corporation of India Ltd. Western Region I Headquarters, PO Uppalwadi, Sampritinagar, Maharashtra Nagpur 440026.
- 85. Raipur-Rajnandgaon Warora Transmission Ltd, 8A, Sambhav House Judges Bunglow Road, Bodakdev Gujarat Ahmedabad 380015.

..... Respondents

Parties Present: Shri Aditya Das, WRLDC

Shri Rakesh Kumar, NRLDC

Shri Ankur, NRLDC

Shri Shiv Sharma, NRLDC

#### <u>ORDER</u>

The instant petition has been filed by the Petitioner, Western Regional Load Despatch Centre (WRLDC) under Regulation 10 of the Central Electricity Regulatory Commission (Fees & Charges of Regional Load Despatch Centre and other related matters) Regulations, 2019 (hereinafter referred to as "the 2019 RLDC Regulations") for determining the charges of WRLDC for the control period from 1.4.2019 to 31.3.2024.

- 2. The Petitioner has made following prayers:
  - "1. Approve the charges for WRLDC, as per para-5 above, for control period 01.04.2019 to 31.03.2024.
  - 2. Approve the proposed CAPEX/ REPEX mentioned in para 8 above.
  - 3. Approve the proposed manpower mentioned in para 5 (e) above
  - 4. Approve the additional corporate leasing accommodation under HR expenses
  - 5. Allow the Applicant to bill and adjust impact of FERV from the respondents on year-to-year basis as negative or positive FERV.
  - 6. Approve the reimbursement of expenditure towards publishing of notices in newspapers and other expenditure (if any) in relation to the filing of application as one time recovery.
  - 7. Pass such other order as the Hon'ble Commission deems fit and appropriate in this case and in the interest of justice."

- 3. The brief facts of the case are as follows:
  - a. National Load Despatch Centre (NLDC) and the Regional Load Despatch Centre (RLDCs) are statutory bodies set up under Section 26 and Section 27 respectively of the Electricity Act, 2003 (hereinafter referred to as 'the Act'). The RLDCs perform the functions as specified under Section 28 of the Act.
  - b. NLDC and the RLDCs are being operated by Power System Operation Corporation Limited (POSOCO), a Government of India undertaking, w.e.f.
    1.10.2010 in accordance with the Gazette Notification dated 27.9.2010 and
    19.12.2016 of Ministry of Power, Government of India.
  - c. In exercise of powers conferred under Section 178 of the Electricity Act, 2003, the Central Electricity Regulatory Commission (hereinafter referred as "the Commission"), vide notification dated 5<sup>th</sup> April 2019 issued the 2019 RLDC Regulations for determination of fees and charges of NLDC and RLDCs for the control period 2019-24.
  - d. The Commission vide order dated 26.3.2021 in Petition No. 434/MP/2019, has approved the true-up of fee and charges of WRLDC for the period 2014-19.
  - e. In accordance with the Clause 1 of Regulation 10 of the 2019 RLDC Regulations, WRLDC has filed the instant Petition for determination of charges for the control period 2019-24 based on the capital expenditure incurred as on 1.4.2019 and projected to be incurred during the said control period.
- 4. The charges of WRLDC for period 2019-24 include Return on Equity (ROE), Interest on Loan Capital (IOL), Depreciation, Operation and Maintenance Expenses excluding human resources expenses (O&M expenses), Operational Expenditure (OPEX), Human Resource expenses (HR expenses), NLDC charges and Corporate expenses and Interest on working capital (IWC).
- 5. The summary of charges claimed by the Petitioner in the instant petition for the control period 2019-24 is as follows:

| Sr. |  |         |         |         |         | `       | ,        |
|-----|--|---------|---------|---------|---------|---------|----------|
| No. | Particulars                                | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total    |
| 1   | Return on Equity                           | 81.39   | 102.27  | 129.18  | 160.55  | 182.41  | 655.80   |
| 2   | Interest on Loan<br>Capital                | -       | -       | -       | -       | -       |          |
| 3   | Depreciation                               | -       | -       | 155.82  | 223.88  | 264.34  | 644.04   |
| 4   | O & M Expenses<br>excluding HR<br>Expenses | 663.04  | 691.81  | 721.95  | 753.52  | 786.60  | 3616.93  |
| 5   | Human Resource<br>(HR) Expenses            | 2711.40 | 3026.20 | 3494.39 | 4034.29 | 4759.93 | 18026.20 |
| 6   | NLDC and Corp<br>Office exp.               | 1598.86 | 1845.94 | 2340.57 | 2562.96 | 2831.38 | 11179.71 |
| 7   | Interest on Working Capital                | 133.81  | 149.64  | 178.93  | 201.90  | 229.99  | 894.27   |
| 8   | Operating<br>Expenses (OPEX)               | 25.73   | 13.56   | 13.56   | 32.43   | 21.04   | 106.31   |
|     | Total                                      | 5214.24 | 5829.41 | 7034.39 | 7969.53 | 9075.69 | 35123.26 |

- 6. The Respondents are the generating companies, distribution companies, electricity departments and transmission licensees, which are availing services from the Petitioner.
- 7. The hearing in this matter was held on 25.2.2020. The Petitioner was directed to submit certain information vide ROP (record of proceedings) of the hearing, which the Petitioner has submitted vide affidavit dated 13.3.2020.
- 8. The Petitioner has served the copy of the petition upon the respondents.

  None of the respondents have filed any reply in the instant Petition.
- 9. The hearing in the matter was again held on 20.5.2020 through video conferencing and the order was reserved. The Petitioner was directed to submit certain information vide ROP of the hearing which has been furnished by the Petitioner vide affidavit dated 8.6.2020.

- 10. This order has been issued after considering the main petition dated 4.10.2019 and submission of additional information by the Petitioner vide affidavits dated 13.3.2020 and 8.6.2020.
- 11. Having heard the representative of the Petitioner and having perused the material on record, we proceed to dispose of the instant petition.

# <u>DETERMINATION OF ANNUAL CHARGES FOR 2019-24 PERIOD</u>

12. The Petitioner has submitted information as required under the 2019 RLDC Regulations for determination of charges for control period 2019-24. The computation of charges for control period 2019-24 has been discussed in the subsequent paragraphs.

## **Capital Cost**

13. Regulation 14 of the 2019 RLDC Regulations provides as under: -

#### "14. Computation of Capital Cost

- (1) The capital cost as admitted by the Commission after prudence check, for each of the Regional Load Despatch Centres or NLDC, as the case may be, shall form the basis for determination of annual charges.
- (2) The capital cost shall be computed by considering the following:
  - i) The Capital cost as admitted by the Commission as on 01.04.2019 duly trued up by excluding liability, if any;
  - *ii)* Expenditure on account of additional capitalization determined in accordance with the Regulation 15 (1);
  - iii) The fixed assets which have been replaced during control period shall be decapitalized in accordance with Regulation 15 (2);
  - iv) Interest during construction and incidental expenditure during construction;
  - v) Any grant received from the Central or State Government or any statutory body or authority for execution of the project which does not carry any liability of repayment shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation;
- (3) The Capital cost shall be admitted after prudence check which may include scrutiny of the reasonableness of the capital expenditure, financing plan, Interest During Construction (IDC), Incidental Expenditure During Construction (IEDC), financing charges, any gain or loss on account of Foreign Exchange Rate Variation (FERV), cost over-run and time over-run and such other matters as may be considered appropriate by the Commission:

Provided that interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds duly adjusting IDC on account of time overrun if any;

Provided further that incidental expenditure during construction shall be computed after prudence check duly adjusting the IEDC on account of time over run, if any, interest on deposits or advances, or any other receipts and liquidated damages recovered or recoverable corresponding to the delay.

- (4) RLDC or NLDC shall submit Auditor Certificate for the capital expenditure incurred as on 1.4.2019 and, a Management Certificate duly signed by an authorised person, not below the level of Director of the company, for the projected capital expenditure for respective years of the period 2019-24."
- 14. The capital cost of Rs 1213.12 lakh as on 31.3.2019 was admitted by the Commission vide order dated 26.3.2021 in Petition No. 434/MP/2019 which has been considered as opening capital cost as on 1.4.2019 to determine the WRLDC charges in accordance with Regulation 14 of the 2019 RLDC Regulations.

# Capital Expenditure (CAPEX) and Replacement Expenditure (REPEX)

- 15. Regulation 8 of the 2019 RLDC Regulations provides as under:
  - "8. Capital Expenditure (CAPEX) and Replacement Expenditure (REPEX) Plan:
  - (1) The RLDCs and NLDC shall formulate the scheme for Capital Expenditure (CAPEX) and Replacement Expenditure (REPEX) for the control period duly approved by the Board of Directors of Power System Operation Corporation Limited. The CAPEX and REPEX plan shall also include future costs to be incurred for the up-gradation, modernization, automation and expansion of infrastructure in addition to existing capital assets.
  - (2) The concerned RLDCs or NLDC as the case may be shall submit the following along with the petition for determination of fees and charges:
    - a) the CAPEX for the control period along with details of estimated expenses, and estimated completion period of each scheme;
    - b) the REPEX plan for capital expenditure of existing asset, completion of life of existing asset, cumulative depreciation recovered, date of replacement, cumulative repayment of loan up to date of replacement, writing off of the gross value of the original assets from the original fixed assets along with estimated expenses and estimated completion period of each scheme.



16. The Petitioner has claimed the projected Capital Expenditure (CAPEX) and Replacement Expenditure (REPEX) during the control period 2019-24 as follows:

(Rs. in lakh)

| Sr.<br>No. | Expenditure<br>head | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|------------|---------------------|---------|---------|---------|---------|---------|---------|
| 1          | CAPEX               | 146.42  | 399.30  | 245.00  | 498.00  | 99.72   | 1388.44 |
| 2          | REPEX               | 141.24  | 23.00   | 223.86  | 123.43  | 50.36   | 561.89  |
|            | Total               | 287.66  | 422.30  | 468.86  | 621.43  | 150.08  | 1950.32 |

17. The detailed head-wise break-up of the CAPEX and REPEX submitted by the Petitioner is as follows:

# **CAPEX Plan**

|            | (NS. III IANII)  |         |         |         |         |         |        |
|------------|--|---------|---------|---------|---------|---------|--------|
| Sr.<br>No. | Name of the Work   | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total  |
| Α          | Other Assets   |         |         |         |         |         |        |
| I          | Building & Civil Engineering works   |         |         |         |         |         |        |
| (i)        | Offices and Residential  | -       | 322.71  | -       | -       | -       | 322.71 |
| (a)        | Boundary wall / Fencing  | 15.00   | -       | -       | -       | -       | 15.00  |
| (b)        | Construction of new Toilet and bathroom block  | 7.00    | -       | -       | -       | -       | 7.00   |
| II         | Transformers, Kiosks, substation equipment & Other fixed apparatus (including plant Foundation)        | -       | -       | -       | 50.00   | -       | 50.00  |
| III        | Water Supply System (Piping from over roof tank to various parts of building and internal in building) | -       | -       | -       | -       | 15.00   | 15.00  |
| (a)        | Transformers including foundation having rating of 500 KVA and over                                    | -       | -       | 32.00   | 32.00   | -       | 64.00  |
|            | Sub-Total  | 22.00   | 322.71  | 32.00   | 82.00   | 15.00   | 473.71 |
| В          | Office Equipment   |         |         |         |         |         |        |
| (i)        | Sliding Gate at entrance including motor ( Only Motor and Gear are to be replaced)                     | 4.00    | -       | -       | -       | -       | 4.00   |

| (ii) | Internal Wiring including fittings and apparatus  | 5.00  | 4.00  | 4.00  | 3.00   | 2.00  | 18.00  |
|------|---|-------|-------|-------|--------|-------|--------|
|      | Sub-Total   | 9.00  | 4.00  | 4.00  | 3.00   | 2.00  | 22.00  |
| С    | Communication equipment   |       |       |       |        |       |        |
| I    | Telephone lines and telephones  | -     | -     | -     | -      | 10.00 | 10.00  |
| D    | IT Equipment  |       |       |       |        |       |        |
| D.1  | SCADA systems<br>Hardware   |       |       |       |        |       |        |
| I    | Dynamic Security Assessment (DSA) hardware  | -     | -     | 36.00 | -      | -     | 36.00  |
| II   | WAMS based real time analytics  | -     | -     | 20.00 | 20.00  | -     | 40.00  |
| (a)  | Decision Support Systems for Real Time Operator   | -     | -     | 20.00 | 20.00  | -     | 40.00  |
| (b)  | Smart operation Infrastructure for control room for integration of SCADA/EMS, URTDSM, REMC, WBES, Outage Management System, POSOCO mail service, etc. | -     | -     | 20.00 | 80.00  | -     | 100.00 |
| III  | Communication Network Infrastructure  | 10.00 | 5.00  | -     | 5.00   | 5.00  | 25.00  |
| IV   | Automatic Generation<br>Control System  | -     | 30.00 | -     | -      | -     | 30.00  |
|      | Sub-Total of D.1  | 10.00 | 35.00 | 96.00 | 125.00 | 5.00  | 271.00 |
| D.2  | IT Hardware Other than SCADA System   |       |       |       |        |       |        |
| I    | IT Infrastructure Upgradation at WRLDC (Servers, Routers, Switches, etc.)-  | -     | -     | -     | 50.00  | -     | 50.00  |
| II   | Video Conference system   | 5.00  | -     | -     | -      | 24.72 | 29.72  |
| III  | Mics. Items (Interactive White Board, WiFi presentation System etc.)  | 2.59  | 2.59  | 3.00  | 3.00   | 3.00  | 14.18  |
|      | Sub-Total of D.2  | 22.59 | 2.59  | 3.00  | 53.0   | 27.72 | 108.90 |
|      | Sub-Total of D  | 32.59 | 37.59 | 99.0  | 178.0  | 32.72 | 379.90 |
| E    | Software  |       |       |       |        |       |        |
| E.1  | SCADA systems   |       |       |       |        |       |        |
| I    | DSA software  | -     | -     | -     | 15.00  | -     | 15.00  |

| II  | WAMS based real time analytics   | -      | -      | 70.00  | 30.00  | -     | 100.00  |
|-----|--|--------|--------|--------|--------|-------|---------|
| (a) | Decision Support Systems for Real Time Operator  | -      | -      | 20.00  | 20.00  | 20.00 | 60.00   |
| (b) | Smart operation Infrastructure for control room for integration of SCADA/EMS, URTDSM, REMC, WBES, Outage Management System, POSOCO mail service, etc.  | -      | -      | -      | 100.00 | -     | 100.00  |
| III | Automatic Generation<br>Control System   | -      | 15.00  | -      | -      | -     | 15.00   |
|     | Sub-Total of E.1   | -      | 15.00  | 90.00  | 165.00 | 20.00 | 290.00  |
| E.2 | IT Software except<br>SCADA  |        |        |        |        |       |         |
| I   | Software development for DSM, Logbook, Relay Reading, Reporting Software, Metering, New Regulation in STOA, Security Desk Reports, Control Room Software like dashboard, Monitoring, Transient Analysis etc, Assets Management System. Etc | 39.75  | 20.00  | 20.00  | 20.00  | 20.00 | 119.75  |
| II  | Software for Server<br>Virtualization  | -      | -      | -      | 50.00  | -     | 50.00   |
| III | Software for Disaster<br>Recovery  | 35.00  | -      | -      | -      | -     | 35.00   |
|     | Sub-Total of E.2   | 74.75  | 20.00  | 20.00  | 70.00  | 20.00 | 204.75  |
|     | Sub-Total of E   | 74.75  | 35.00  | 110.00 | 235.00 | 40.00 | 494.75  |
| F   | Any other assets not covered above   |        |        |        |        |       |         |
|     | Smart Storage System   | 8.08   | -      | -      | -      | -     | 8.08    |
|     | Sub-Total of F   | 8.08   | -      | -      | -      | -     | 8.08    |
|     | Grand Total (A to F)   | 146.42 | 399.30 | 245.00 | 498.00 | 99.72 | 1388.44 |

# REPEX Plan

|       |                  | ( /                                     |       |
|-------|------------------|---|-------|
| S.No. | Name of the Work | Estimated Expenditure in Financial Year | Total |

|       |  | 2019-<br>20 | 2020-<br>21 | 2021-<br>22 | 2022-<br>23 | 2023-<br>24 |        |
|-------|--|-------------|-------------|-------------|-------------|-------------|--------|
| Α     | Batteries  | -           | -           | 24.00       | -           | -           | 24.00  |
| (i)   | Underground cable including joint boxes and disconnected boxes ( UPS Input/Output ACDB)  | -           | -           | -           | 10.00       | -           | 10.00  |
|       | Sub-Total  | -           | -           | 24.00       | 10.00       | -           | 34.00  |
| В     | Air conditioning Plants  |             |             |             |             |             |        |
| (i)   | Static   | 53.10       | 5.00        | 5.00        | 5.00        | 30.00       | 98.10  |
|       | Sub-Total  | 53.10       | 5.00        | 5.00        | 5.00        | 30.00       | 98.10  |
| С     | IT Systems other than SCADA  |             |             |             |             |             |        |
| (i)   | Back-up storage(Storage<br>Area Network SAN),<br>NAS (Network Array<br>Storage) Box etc. | -           | -           | -           | 45.00       | -           | 45.00  |
| (ii)  | Office Computing System:- (It involves Computers, Laptops, Printers, Scanners etc.)      | 24.00       | 4.00        | 4.00        | 36.50       | 4.00        | 72.50  |
| (iii) | Conference Audio<br>System   | 26.90       | -           | -           | 26.93       | -           | 53.83  |
| (iv)  | Communication LAN infrastructure   | 21.24       | -           | -           | -           | -           | 21.24  |
| (v)   | Cyber Security (Firewall Replacement)  | -           | -           | 14.95       | -           | -           | 14.95  |
| (vi)  | Video Conferencing<br>System   | -           | -           | -           | -           | 12.36       | 12.36  |
| (vii) | CCTV &Surveillance system  | -           | -           | 5.00        | -           | -           | 5.00   |
|       | Sub-Total  | 72.14       | 4.00        | 23.95       | 108.43      | 16.36       | 224.88 |
| D     | Software Software for IT Systems   |             |             |             |             |             |        |
|       | other than SCADA   |             |             |             |             |             |        |
| (i)   | Website & Intranet for WRLDC   | -           | -           | 18.36       | -           | -           | 18.36  |
| (ii)  | WBES up-gradation (Regulation Changes)   | -           | -           | 152.54      | -           | -           | 152.54 |
|       | Sub-Total of N   | -           | -           | 170.91      | -           | -           | 170.91 |
| E     | Any other assets not covered above   |             |             |             |             |             |        |
| (i)   | Fire alarm/fighting system   | 16.00       | 14.00       | -           | -           | -           | 30.00  |
| (ii)  | Fitness equipment  | -           | -           | -           | -           | 4.00        | 4.00   |
|       | Sub-Total  | 16.00       | 14.00       | -           | -           | 4.00        | 34.00  |

| TOTAL (A to F) | 141.24 | 23.00 | 223.86         | 123.43 | 50.36 | 561.89 |
|----------------|--------|-------|----------------|--------|-------|--------|
|                | 171.67 | 20.00 | <b>LL</b> 3.00 | 120.70 | 30.30 |        |

18. The head-wise details of the de-capitalisation of assets has been submitted by the Petitioner are as follows:

(Rs. in lakh)

| Name of the<br>Asset                             | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total  |
|--|---------|---------|---------|---------|---------|--------|
| Power Supply                                     | -       | -       | -       | 33.13   | -       | 33.13  |
| IT Systems<br>(Hardware)                         | 35.83   | 2.90    | 22.97   | 26.42   | 2.90    | 91.02  |
| Any other asset not covered under any categories | -       | -       | -       | -       | 7.43    | 7.43   |
| Total  | 35.83   | 2.90    | 22.97   | 59.55   | 10.33   | 131.58 |

- 19. The Petitioner has submitted resolution of Board of POSOCO regarding CAPEX Plan and REPEX Plan and the major components of CAPEX and REPEX claimed by the Petitioner are as follows:
  - Rs. 561.00 lakh towards up-gradation of SCADA systems under CAPEX.
  - Rs. 313.65 lakh towards procurement of IT systems (hardware and software) under CAPEX.
  - Rs. 322.71 lakh towards civil works at WRLDC office under CAPEX.
  - Rs.98.1 lakh for air conditioning system under REPEX.
  - Rs. 395.8 lakh towards IT system under REPEX.
  - Rs 22 lakh under CAPEX towards other infrastructure equipment.
  - Rs 34 lakh under REPEX towards Power Supply.
- 20. Clause 5 of Regulation 10 of the 2019 RLDC Regulations is reproduced below:
  - "(5) The concerned RLDC or NLDC, as the case may be, shall be allowed the fees and charges by the Commission based on the audited capital expenditure incurred as on 1.4.2019 and projected to be incurred during control period as per Management Certificate for CAPEX and REPEX.:

Provided that the application shall contain details of underlying assumptions and justification for the capital expenditure incurred and the expenditure proposed to be incurred in accordance with the CAPEX and REPEX."

21. Clause 5 of Regulation 10 and Regulation 12 of the 2019 RLDC Regulations provide that CAPEX and REPEX incurred and projected to be incurred during the control period shall also contain the underlying assumptions and justification for the same to enable prudence check by the Commission.

## **CAPEX**

- 22. The Petitioner has claimed an amount of Rs. 322.71 lakh towards building and civil works. The Petitioner has submitted that the existing building of WRLDC is 41 years old and has already completed its useful life and has depreciated fully. Due to aging and weathering, the structural strength of the building has waned and a number of incidences of falling of concrete from the ceiling in control room and other parts of building have been observed in the recent past. The Petitioner has also submitted that a detailed structural audit of the building was carried out to assess the condition of the building and measures required to maintain the building for future use and the audit report has recommended major structural reparation of the building. Hence, to use the building safely in future, structural stability of the building is essential.
- 23. The Petitioner has submitted that additional expenditure required to be incurred towards civil work includes Concertina wire fencing at WRLDC boundary wall amounting to Rs. 15 lakh, construction of new toilet and bathroom block at WRLDC costing Rs. 7 lakh, transformers, kiosk, sub-station equipment, other equipment & fixed apparatus (including plant foundation) amounting to Rs. 50 lakh and water supply system (from rooftop tanks to interior of building) costing Rs.15 lakh.

- 24. The Petitioner has submitted that the existing electrical transformer 1 & 2 are approximately 35-40 years old and completed their useful lives. These items were under ownership of CEA and are not in the books of WRLDC. Hence, the Petitioner has planned to replace the existing transformers with new ones in 2021-22 and 2022-23 one by one. Estimated cost considered is Rs. 64 lakh which is based on market rates.
- 25. The petitioner has projected an amount of Rs. 271.00 lakh and Rs. 290.00 lakh towards up-gradation of SCADA hardware and software. These are projected to be spent towards procurement of new hardware for Dynamic Security Assessment (DSA), Wide Area Measurement System (WAMS) based real time analytics, Enhanced Operator Facilities: Decision Support Systems for Real Time Operator Operation, Smart operation Infrastructure for control room for integration of SCADA/EMS, URTDSM, REMC, WBES, Outage Management System, POSOCO mail service, Computer Network Infrastructure and Automatic Generation Control (AGC). The Petitioner has submitted that the DSA tools shall be integrated with the existing SCADA/EMS system and is expected to provide decision support in voltage stability, transient stability, frequency violations, poorly damped power swings, grid code violations and others.
- 26. The Petitioner has submitted that apart from SCADA/EMS system, POSOCO has adopted synchro-phasor technology in various aspects of system operation through numerous pilot projects during the period 2009- 14. Subsequently, under the Smart Grid initiative of Ministry of Power (MoP), Gol, Wide Area Measurement System (WAMS) titled as 'Unified Real Time Dynamic State Measurement (URTDSM) System' has been established by Power Grid Corporation of India Ltd.

- (PGCIL). Under this scheme, control centre infrastructure including hardware and basic visualization software has been setup at all five RLDCs and the NLDC.
- 27. The Petitioner has submitted that URTDSM system is already installed and functional at WRLDC. Under the project, synchro-phasor units, popularly known as Phasor Measurement Units (PMUs) have been installed in the field/ sub-stations. The Petitioner submitted that currently data from 480 PMU are available at WRLDC which amounts to around 150 GB of synchro-phasor data per day with 40 ms resolution. The URTDSM system has huge potential for system operation in real time as well as event analysis and synchro-phasor analytics being developed through IIT-B are mostly focused towards transmission asset management. The Petitioner submitted that to facilitate functions mandated under the Act, WRLDC requires applications focused towards Real Time Grid Operation.
- 28. The Petitioner has further submitted that efforts are underway to upgrade SCADA system to comply with the new responsibilities mandated under various Regulations framed by the Commission. SCADA replacement work is completed at WRLDC in last control period i.e. 2014-19. Hence, requisite provision of upgradation has to be built progressively in the CAPEX starting from 2019-20 onwards.
- 29. An amount of Rs. 313.65 lakh (Rs. 108.9 lakh towards IT hardware + Rs. 204.75 lakh towards IT software) is envisaged to be spent on IT hardware and software other than the SCADA system. IT hardware includes items related to procurement of hardware such as disaster recovery, servers, routers and switches, VC system and miscellaneous items such as white board, Wi-Fi presentation system etc. The amount included under IT software includes software development for DSM, logbook, relay reading, reporting software, metering, STOA, security desk

reports, transient analysis, asset management systems etc. While claiming these expenses, the Petitioner has submitted a detailed justification, purpose and use of the items that are going to be acquired for IT support systems.

- 30. The Petitioner has submitted that the Communication Network infrastructure (in SCADA H/W) is being installed at WRLDC premises by Central Transmission Utility for facilitating millions of modern sensors data streaming with a resolution ranging from milliseconds to 15 minutes. The Petitioner has provisioned an amount of Rs. 25 lakh on projection basis.
- 31. We have considered the claims of expenditure proposed by the Petitioner and also perused the justifications submitted by the Petitioner for the proposed capital expenditure. We observe that the Petitioner has submitted Board resolution for CAPEX Plan. However, the Petitioner is directed to submit the background note approved by the Board which includes the approved projected figures along with true up petition. In view of the justifications provided by the Petitioner, we allow the proposed CAPEX for the control period 2019-24 subject to submission of relevant documents including the audit report recommending major structural reparation of the building at the time of true-up.

#### **REPEX**

32. Under the REPEX Plan, WRLDC has claimed an expense on Rs. 561.9 lakh for the control period 2019-24 and submitted the details which primarily consists of installation of e-batteries, underground cabling works, air conditioning system (static), backup storage systems, office computing systems, audio-conference systems, cyber security (firewall), WBES up-gradation, intranet for WRLDC, CCTV surveillance system, fire alarm/ fire-fighting systems and fitness equipment.

- 33. The Petitioner has submitted that in its REPEX Plan, an amount of Rs. 395.8 lakh (Rs. 224.9 lakh towards IT hardware + Rs. 170.9 lakh towards IT software) is projected to be incurred. IT hardware includes backup storage systems, office computing systems, conference audio systems, communication LAN infrastructure and cyber security. IT software systems include website and intranet for WRLDC and WBES up-gradation.
- 34. We have considered the submissions of the Petitioner regarding REPEX. The Petitioner has submitted detailed justification for applicability and usability of various assets claimed under REPEX. The Petitioner has also submitted Board resolution for REPEX Plan. However, the Petitioner is directed to submit the background note approved by the Board which includes the approved projected figures along with true up petition. Accordingly, we allow the expenditure claimed under REPEX Plan.
- 35. Further, as per clause 2(b) of Regulation 8 of the 2019 RLDC Regulations, the Petitioner is required to submit REPEX plan for capital expenditure of existing asset, completion of life of existing asset, cumulative depreciation recovered, date of replacement, cumulative repayment of loan up to date of replacement, writing off of the gross value of the original assets from the original fixed assets along with estimated expenses and estimated completion period of each scheme. Accordingly, the Commission vide ROP of hearing dated 25.2.2020 sought to "Submit the corresponding de-capitalisation along with its gross value and cumulative depreciation, if there is REPEX".
- 36. In compliance to the ROP, the Petitioner vide affidavit dated 13.3.2020 has submitted that it has already submitted the details regarding the de-capitalisation

along with its gross value and cumulative depreciation in the instant Petition. However, we observe that the Petitioner has not submitted the complete details as required under clause 2(b) of Regulation 8 of 2019 RLDC Regulations. Therefore, the Petitioner is directed to submit the said information against each de-capitalised asset in the respective heads as mentioned at Form-5B at the time of true-up.

37. As per the above discussions, the allowed CAPEX and REPEX for the control period 2019-24 is as follows:

(Rs. in lakh)

| Particulars   | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|---------------|---------|---------|---------|---------|---------|---------|
| CAPEX Allowed | 146.42  | 399.30  | 245.00  | 498.00  | 99.72   | 1388.44 |
| REPEX Allowed | 141.24  | 23.00   | 223.86  | 123.43  | 50.36   | 561.89  |

38. The expenditure allowed under CAPEX and REPEX are subject to submission of justification and reasonableness of the expenditure incurred along with Auditor Certificate and other details as per the clause 5 of Regulations 10 read with Regulation 12 and clause 2(b) of Regulation 8 the 2019 RLDC Regulations at the time of true up.

#### **De-capitalisation**

39. Regulation 15 of the 2019 RLDC Regulations provides as follows:

#### "15. Additional Capitalization and De-Capitalization

- (1) The capital expenditure incurred or projected to be incurred for the assets already in service and the additional assets projected to be procured during tariff period may be admitted, by the Commission, subject to prudence check.
- (2) In case of de-capitalization of assets under the REPEX or otherwise, the original cost of such asset as on the date of de-capitalization shall be deducted from the value of gross fixed asset along with corresponding adjustment in equity, outstanding loan, cumulative repayment of loan and depreciation in the year such de-capitalization takes place."

40. The Petitioner has submitted Form-3C wherein year-wise de-capitalisation of assets have been provided as follows:

(Rs. in lakh)

|                   | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total  |
|-------------------|---------|---------|---------|---------|---------|--------|
| De-Capitalization | 35.83   | 2.90    | 22.97   | 59.55   | 10.33   | 131.58 |

#### **Net Additional Capitalisation**

41. The net additional capitalisation has been derived after considering allowed CAPEX/ REPEX and de-capitalization. Following is the net additional capitalisation allowed in the instant Petition:

(Rs. in lakh)

| Net Additional capitalization | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|-------------------------------|---------|---------|---------|---------|---------|---------|
| capitalization                | 251.83  | 419.40  | 445.89  | 561.88  | 139.75  | 1818.74 |

#### **Debt-Equity Ratio**

- Regulation 16 of the 2019 RLDC Regulations provides as under:-
  - "(1) The actual debt equity ratio as admitted by the Commission for the period ending 31.3.2019 shall be considered for the opening capital cost of the Regional Load Despatch Centres and National Load Despatch Centre for the next control period:
  - (2) The capital expenditure incurred prior to 1.4.2019, where debt-equity ratio has not been determined by the Commission for determination of annual charges of RLDC for the period ending 31.3.2019, the Commission shall determine the debt: equity ratio in accordance with Regulation 11(3) of the Central Electricity Regulatory Commission (Fees and Charges for Regional Load Despatch Centres and other related matters) Regulations 2015:
  - (3) For the capital expenditure incurred or projected to be incurred on or after 1.4.2019, the debt-equity ratio shall be considered as 70:30. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan: Provided that:
    - i. Where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of Return on Equity;
    - ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;

iii. Any grant, other than LDC development Fund obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt – equity ratio.

Explanation: The premium, if any, raised by the Power System Operation Corporation Limited while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilized for meeting the capital expenditure of the RLDC."

- 43. The Commission vide order dated 26.3.2021 in Petition no. 434/MP/2019 has trued up the fees and charges for the period 2014-19 and the admitted debt-equity ratio as on 31.3.2019 is 70.73:29.27. The same debt-equity ratio has been considered as on 1.4.2019.
- 44. The Petitioner has submitted that the capital expenditure and replacement expenditure during the 2019-24 period shall be in debt-equity ratio of 70:30. Further, 70% of the CAPEX and REPEX shall be funded through debt (from LDCD funds) and 30% of the CAPEX and REPEX shall be funded through equity capital.
- 45. The Petitioner vide Form 3C has submitted that de-capitalisation during 2019-24 period is in debt-equity ratio of 70.73:29.27. Therefore, we have considered debt-equity ratio for the additional capitalisation and de-capitalisation in the ratio of 70:30 and 70.73:29.27 respectively for 2019-24 control period. After removing the debt and equity in respect of the de-capitalised assets from the respective debt and equity of the CAPEX/REPEX, the equity of the net additional capitalization was restricted to 30% as per clause 3 of Regulation 16 of the 2019 RLDC Regulations.
- 46. The details of the debt-equity considered as on 1.4.2019 and 31.3.2024 for the purpose of charges of WRLDC for the 2019-24 period is as follows:

| Particular | Car<br>cost as o | oital<br>n 1.4.2019 | Capital cost<br>as on 31.3.2024 |        |  |
|------------|------------------|---------------------|---------------------------------|--------|--|
|            | Amount           | %                   | Amount                          | %      |  |
| Debt       | 858.06           | 70.73               | 2131.18                         | 70.29  |  |
| Equity     | 355.06           | 29.27               | 900.68                          | 29.71  |  |
| Total      | 1213.12          | 100.00              | 3031.86                         | 100.00 |  |

# **Return on Equity (ROE)**

47. Regulation 19 of the 2019 RLDC Regulations provides as under:

#### "19. Return on Equity

- (1) Return on equity shall be computed in Rupee terms on the equity base determined in accordance with Regulation 16 of these regulations.
- (2) Return on equity shall be computed on pre-tax base rate of 15.50% to be grossed up as per the sub-clause (3) of this Regulation.
- (3) The rate of return on equity shall be computed by grossing up the base rate with the effective tax rate of the respective financial year based on relevant Finance Act.
- (4) Return on equity with respect to the actual tax rate applicable to the Power System Operation Corporation Limited in line with the provisions of the relevant Finance Acts of the respective year during control period shall be trued up at the end of the control period.
- (5) Rate of return on equity shall be rounded off to three decimal points and be computed as per the following formula:

Rate of pre-tax return on equity = Base rate/(1-t)

Where, t is the effective tax rate in accordance with sub-clause (3) and regulation 3(15)."

- 48. The Petitioner has submitted that 30% of the capital expenditure for the period 2019-24 shall be done through the Petitioner's own equity capital. The Petitioner vide Form-2 has also submitted that the effective tax rate considered for computation of ROE for the period 2019-24 is 25.17%.
- 49. Clause 6 of Regulation 27of the 2019 RLDC Regulations is reproduced below:

"(5)xxxxx

(6) Any asset created by the POSOCO out of the money deposited into the LDCD Fund shall be considered for computation of depreciation as per the rates specified



in these Regulations. If required, POSOCO may finance capital assets partly from the equity and partly from LDCD Fund. As such, if the capital project is partly financed from equity share capital, it shall be considered for computation of return on equity, in which case, the funding shall be considered in a normative debt equity ratio of 70:30 with the interest on loan component as NIL and the treatment of equity as per regulation 16(2) of these Regulations. Load Despatch Centre shall submit details of such assets in the CAPEX plan.

(7) xxxxxx"

50. We observe that in the instant case, the Petitioner has proposed to finance 30% of capital expenditure for the period 2019-24 from the equity share capital and 70% of capital expenditure (debt portion) from LDCD funds. Therefore, year-wise ROE allowed has been worked out as per the 2019 RLDC Regulations considering effective tax rate as 25.17% as follows:

(Rs. in lakh)

| Particulars          | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|----------------------|---------|---------|---------|---------|---------|
| Opening Equity       | 355.06  | 430.60  | 556.42  | 690.19  | 858.76  |
| Addition due to      | 75.55   | 125.82  | 133.77  | 168.56  | 41.92   |
| Additional           |         |         |         |         |         |
| Capitalization after |         |         |         |         |         |
| considering          |         |         |         |         |         |
| de-capitalization    |         |         |         |         |         |
| Closing Equity       | 430.61  | 556.43  | 690.19  | 858.76  | 900.68  |
| Average Equity       | 392.83  | 493.52  | 623.31  | 774.48  | 879.72  |
| Return on Equity     | 15.50%  | 15.50%  | 15.50%  | 15.50%  | 15.50%  |
| (Base Rate) %        |         |         |         |         |         |
| Effective Tax rate % | 25.170% | 25.170% | 25.170% | 25.170% | 25.170% |
| Rate of Return on    | 20.714% | 20.714% | 20.714% | 20.714% | 20.714% |
| Equity (Pre-tax) %   |         |         |         |         |         |
| Return on Equity     | 81.37   | 102.23  | 129.11  | 160.43  | 182.23  |
| (Pre-tax)            |         |         |         |         |         |

51. The Petitioner is directed to submit year-wise actual equity capital infused for incurring capital expenditure during the 2019-24 period duly certified by the Auditor at the time of true up.

# Interest on Loan (IOL)

52. The Petitioner has submitted that it has not claimed Interest on Loan component for the 2019-24 period as the principal portion of the loan has been repaid fully. We observe that in the instant case, the Petitioner has proposed to finance 30% of capital expenditure for the period 2019-24 from the equity capital and 70% of capital expenditure (debt portion) from LDCD funds. Therefore, as per clause 6 of Regulation 27 of the 2019 RLDC Regulations described above, Interest on Loan component has been considered as NIL.

# **Depreciation**

- 53. The Petitioner has submitted that depreciation has been worked as per Regulation 21 of the 2019 RLDC Regulations and the salvage value of assets excluding IT equipment and software has been considered as 10% while there is no salvage value for IT equipment and software. The Petitioner has further submitted that depreciation has been worked out as per the rates given in Appendix III of the 2019 RLDC Regulations.
- 54. The Petitioner vide affidavit dated 8.6.2020 has submitted the reasons for not claiming depreciation for FY 2019-20 and FY 2020-21 in the Petition, which are as follows:
  - a) Depreciation for financial years 2019-20 and 2020-21 was not calculated due to inadvertent clerical error of not considering the correct opening Accumulated Depreciation.
  - b) Against the Opening Gross figure of Rs. 500.85 lakh as on 01.04.2019, Rs. 1210.01 lakh Accumulated Depreciation is shown in petition, in place of Rs.499.57 lakh.
- 55. Revised year-wise depreciation claimed after incorporating above-stated correction is given below:

(Rs. in lakh)

| Particulars             | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total  |
|-------------------------|---------|---------|---------|---------|---------|--------|
| Revised<br>Depreciation | 81.35   | 99.12   | 155.82  | 223.88  | 264.34  | 824.53 |
| Existing Depreciation   | 0.00    | 0.00    | 155.82  | 223.88  | 264.34  | 644.04 |

56. Regulation 21 of the 2019 RLDC Regulations provides as under:

#### "21. Depreciation

- (1) XXXXX
- (2) The salvage value of the asset (excluding IT equipment and Software) shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset. The salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered as depreciable.
- (3) Land shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the capital cost of the asset.
- (4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the Regional Load Despatch Centre.
- (5)Xxxxxx
- (6)Xxxxxx
- (7) The balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation from the gross depreciable value of the assets appearing in the books of accounts of the Power System Operation Corporation Limited for the respective Regional Load Despatch Centre and National Load Despatch Centre.
- (8) In case of de-capitalization of assets in respect of concerned RLDC, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful life."
- 57. We have perused the documents submitted by the Petitioner. As per the order dated 26.3.2021 in Petition No. 434/MP/2019 (WRLDC true-up for 2014-19 period), the admitted "closing gross block" of assets as on 31.3.2019 is Rs 1213.12 lakh and the admitted "accumulated depreciation recovered" as on 31.3.2019 is Rs 1210.01 lakh. Accordingly, we have considered "opening gross block" of asset as on

- 1.4.2019 as Rs 1213.12 lakh and "accumulated depreciation recovered" as on 1.4.2019 as Rs 1210.01 lakh to work out the depreciation for 2019-24 period.
- 58. Depreciation has been calculated annually based on Straight Line Method and at rates specified in the 2019 RLDC Regulations. Year-wise Weighted Average Rates of Depreciation (WAROD) have been calculated by applying specified rates of depreciation for individual items and WAROD has been worked out (Annexure-1). The depreciation worked out for the instant assets is as follows:

(Rs. in lakh)

| Particulars   | 2019-20 | 2020-21 | 2021-22 | 2022-23  | 2023-24  |
|---|---------|---------|---------|----------|----------|
| Opening Gross Block   | 1213.12 | 1464.95 | 1884.35 | 2330.24  | 2892.11  |
| Additional Capital expenditure after considering de-capitalisation during 2019-24 | 251.83  | 419.40  | 445.89  | 561.88   | 139.75   |
| Closing Gross Block   | 1464.95 | 1884.35 | 2330.24 | 2892.11  | 3031.86  |
| Average Gross Block   | 1339.03 | 1674.65 | 2107.29 | 2611.18  | 2961.99  |
| Average Gross Block of 90% Depreciable assets                                     | 811.35  | 1038.30 | 1243.65 | 1309.59  | 1369.81  |
| Average Gross Block of 100% Depreciable assets                                    | 527.68  | 636.35  | 863.64  | 1301.59  | 1592.18  |
| Weighted Average Rate of Depreciation (%)   | 9.6675% | 9.2233% | 9.3008% | 10.1142% | 10.4662% |
| Depreciable Value (excluding IT equipment and software)                           | 730.22  | 934.47  | 1119.29 | 1178.63  | 1232.82  |
| Depreciable value of IT equipment and software                                    | 527.68  | 636.35  | 863.64  | 1301.59  | 1592.18  |
| Total Depreciable Value   | 1257.90 | 1570.82 | 1982.93 | 2480.22  | 2825.01  |
| Remaining Depreciable Value   | 47.89   | 348.66  | 609.20  | 933.41   | 1073.49  |
| Depreciation  | 47.89   | 154.46  | 196.00  | 264.10   | 310.01   |
| Cumulative Depreciation/<br>Advance against<br>Depreciation                       | 1222.16 | 1373.73 | 1546.81 | 1751.51  | 2051.22  |

#### **Operation and Maintenance Expenses (O&M Expenses)**

59. The Petitioner has submitted that the normalized O&M expenses of the 2014-19 period have been escalated at the rate of 4.77% and then averaged to arrive at the normalized average O&M expenses at 2018-19 level. Further escalation rate of 4.77% has been considered for escalating the average normalized O&M expenses of 2018-19 price level to arrive at the O&M expenses for the year 2019-20 and further for each year of 2020-2024.

- 60. The Petitioner vide affidavit dated 8.6.2020 has submitted that the total O&M expenses arrived for the year FY 2019-20 have been allocated in the ratio of actual head-wise expenses incurred during the last year of the control period 2014-19. Thereafter, the head-wise O&M expenses for the FY 2019-20 have been escalated further at 4.77% to arrive at the O&M expenses for subsequent years.
- 61. The Petitioner has submitted that charges towards AMC of SCADA have been added on the basis of LOAs awarded earlier in accordance with the clause 5 of Regulation 22 of the 2019 RLDC Regulations.
- 62. The summary of O&M Expenses claimed by the Petitioner for period 2019-24 is as follows:

(Rs. in lakh)

| ITEMS  | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|--|---------|---------|---------|---------|---------|---------|
| Repairs and Maintenance Expenses (R&M Expenses)          | 172.93  | 178.32  | 183.96  | 189.88  | 196.07  | 921.16  |
| Administrative and General Expenses, etc. (A&G Expenses) | 490.11  | 513.49  | 537.98  | 563.65  | 590.53  | 2695.76 |
| Total  | 663.04  | 691.81  | 721.95  | 753.52  | 786.60  | 3616.93 |

63. Details of the projected R&M expenses and A&G expenses claimed by the Petitioner for period 2019-24 are as follows:

#### Repair and Maintenance Expenses (R&M Expenses)

(Rs. in lakh)

| Account Head   | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total  |
|--|---------|---------|---------|---------|---------|--------|
| Plant and<br>Machinery<br>Repairs and<br>Maintenance | 7.09    | 7.43    | 7.78    | 8.15    | 8.54    | 38.99  |
| Civil Works<br>Repairs and<br>Maintenance            | 20.33   | 21.29   | 22.31   | 23.37   | 24.49   | 111.80 |
| Others(Specify)                                      | 85.52   | 89.60   | 93.87   | 98.35   | 103.04  | 470.38 |
| Total  | 112.93  | 118.32  | 123.96  | 129.88  | 136.07  | 621.16 |
| AMC of SCADA   | 60.00   | 60.00   | 60.00   | 60.00   | 60.00   | 300.00 |
| Grand Total<br>(R&M)                                 | 172.93  | 178.32  | 183.96  | 189.88  | 196.07  | 921.16 |

# **Administration and General Expenses (A&G expenses)**

|                                      |         |         |         |         | (NS. III Iai |        |
|--------------------------------------|---------|---------|---------|---------|--------------|--------|
| Account Head                         | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24      | Total  |
| PROPERTY<br>RELATED EXPENSES         |         |         |         |         |              |        |
| Rates and Taxes                      | 1.51    | 1.58    | 1.66    | 1.73    | 1.82         | 8.29   |
| Insurance                            | 1.23    | 1.28    | 1.35    | 1.41    | 1.48         | 6.74   |
| Sub Total                            | 2.73    | 2.86    | 3.00    | 3.14    | 3.29         | 15.04  |
|                                      |         |         |         |         |              |        |
| COMMUNICATION                        |         |         |         |         |              |        |
| Telephone and Trunk Call             | 12.19   | 12.77   | 13.38   | 14.02   | 14.69        | 67.05  |
| Postage and Telegram                 | 1.19    | 1.24    | 1.30    | 1.37    | 1.43         | 6.53   |
| Other (Internet Leased Line Charges) | 41.85   | 43.84   | 45.93   | 48.12   | 50.42        | 230.16 |
| Sub Total                            | 55.22   | 57.86   | 60.62   | 63.51   | 66.54        | 303.75 |
|                                      |         |         |         |         |              |        |
| PROFESSIONAL CHARGES                 |         |         |         |         |              |        |
| Legal Expenses                       | 4.13    | 4.32    | 4.53    | 4.74    | 4.97         | 22.69  |
| Consultancy Charges                  | 2.00    | 2.10    | 2.20    | 2.30    | 2.41         | 11.02  |
| Technical Fees                       | 1.17    | 1.22    | 1.28    | 1.34    | 1.41         | 6.42   |
| Audit Fees                           | 0.42    | 0.44    | 0.46    | 0.48    | 0.50         | 2.30   |
| Other Charges                        | 2.72    | 2.85    | 2.99    | 3.13    | 3.28         | 14.98  |
| Sub Total                            | 10.44   | 10.94   | 11.46   | 12.01   | 12.58        | 57.42  |
|                                      |         |         |         |         |              |        |
| CONVEYANCE AND TRAVELLING            |         |         |         |         |              |        |
| Conveyance Charges                   | 33.86   | 35.47   | 37.16   | 38.94   | 40.80        | 186.23 |
| Travelling Charges                   | 66.13   | 69.28   | 72.59   | 76.05   | 79.6         | 363.73 |

| Hire Charges of Vehicle             | 23.87  | 25.00  | 26.20  | 27.45  | 28.76  | 131.27  |
|-------------------------------------|--------|--------|--------|--------|--------|---------|
| Sub Total                           | 123.85 | 129.76 | 135.95 | 142.44 | 149.23 | 681.23  |
|                                     |        |        |        |        |        |         |
| OTHER EXPENSES                      |        |        |        |        |        |         |
| Electricity Charges                 | 111.78 | 117.11 | 122.70 | 128.55 | 134.68 | 614.82  |
| Fees and Subscription               | 0.02   | 0.02   | 0.02   | 0.02   | 0.02   | 0.11    |
| Books and Periodicals               | 0.40   | 0.42   | 0.44   | 0.46   | 0.48   | 2.19    |
| Printing and Stationery             | 3.50   | 3.67   | 3.84   | 4.03   | 4.22   | 19.27   |
| Entertainment                       | 3.78   | 3.97   | 4.15   | 4.35   | 4.56   | 20.82   |
| Watch and Ward                      | 41.51  | 43.48  | 45.56  | 47.73  | 50.01  | 228.29  |
| Miscellaneous                       | 100.60 | 105.40 | 110.43 | 115.69 | 121.21 | 553.33  |
| Organizational Development Expenses | 9.17   | 9.61   | 10.07  | 10.55  | 11.05  | 50.46   |
| Water Charges                       | 26.23  | 27.48  | 28.79  | 30.17  | 31.60  | 144.27  |
| Sub Total                           | 297.00 | 311.16 | 326.00 | 341.56 | 357.85 | 1633.57 |
| ADDITIONAL<br>EXPENSES              |        |        |        |        |        |         |
| EDP Expenditure                     | 0.87   | 0.91   | 0.95   | 1.00   | 1.04   | 4.76    |
| Sub Total                           | 0.87   | 0.91   | 0.95   | 1.00   | 1.04   | 4.76    |
| Total                               | 490.11 | 513.49 | 537.98 | 563.65 | 590.53 | 2695.76 |

- 64. The Petitioner, in compliance of RoP of hearing dated 29.05.2020, vide affidavit dated 8.6.2020 has submitted that expenses on other heads such as donation, loss-in-inventory, claims and advances written-off, provisions, etc. have been 'NIL' during the control period 2014-19.
- 65. Regulation 22 of the 2019 RLDC Regulations provides as under:
  - "22. Operation and Maintenance Expenses
  - (1) Operation and maintenance (O&M) expenses (excluding human resource expenses) shall be derived on the basis of actual operation and maintenance expenses for the years 2014-15 to 2018-19, based on the audited balance sheets. The O&M expenses shall be normalized by excluding abnormal operation and maintenance expenses, donation, loss-in-inventory, prior period adjustments, claims and advances written-off, provisions, etc., if any, after prudence check by the Commission
  - (2) The normalized operation and maintenance expenses, after prudence check, for the years 2014- 15 to 2018-19, shall be escalated at the rate of 4.77% to arrive at the normalized operation and maintenance expenses at the 2018-19 price level respectively and then averaged to arrive at normalized average operation and maintenance expenses for the 2014-15 to 2018-19 at 2018- 19 price level. The average normalized operation and maintenance expenses of 2018-19 price level shall

be escalated at the escalation rate as worked out in accordance with clause(4) of this Regulation to arrive the operation and maintenance expenses for the year 2019-20.

- (3) The operation and maintenance expenses for the year 2019-20 shall be escalated further at the annual escalation rate as worked out in accordance with clause (4) this Regulation to arrive at permissible operation and maintenance expenses for the subsequent years of the control period.
- (4) The escalation rate shall be worked out by considering the compounded annual growth rate, inflation rate, rationalization of O&M expenses and other factors, if any.
- (5) The actual expenditure towards Annual Maintenance Contract (AMC) of SCADA system and other Software/Hardware like REMC, National Open Access Registry (NOAR), web based scheduling software etc. involving significant expenditure, after prudence check, shall be considered for arriving at the Operation and Maintenance Expenses during 2019-20 to 2023- 24."
- 66. Clause 2 of Regulation 22 of the 2019 RLDC Regulations provides for normalisation of O&M expenses for the period 2014-2019. The O&M expenses for period 2014-19 have been normalised considering disallowed expenditure in order dated 26.3.2021 in Petition No. 434/MP/2019 (true-up petition of WRLDC fees and charges for the period 2014-19) such as rebate to customer and the expenditure claimed under organizational development and training expenses. The organizational development and training expenses have been excluded during normalisation for 2014-19 period as these expenses shall be considered under HRD expenses during the 2019-24 control period.
- 67. Further, as per clause 5 of Regulation 22 of the 2019 RLDC Regulations, the actual expenditure towards Annual Maintenance Contract (AMC) of SCADA system is to be considered and, hence, the same has been excluded during normalization for 2014-19 period.
- 68. From the data submitted for actual R&M Expenses and A&G Expenses of 1<sup>st</sup> six months of FY 2019-20 and expected R&M Expenses and A&G expenses for balance six months of FY 2019-20, we observe that the Petitioner has booked

certain expenses under Organizational Development Expenses. We direct the Petitioner to book such expenses on trainings or Organisational development under HRD Expenses.

#### **AMC of SCADA Expenses**

- 69. Regulation 22(5) of the 2019 RLDC Regulations states the following:
  - "(5) The actual expenditure towards Annual Maintenance Contract (AMC) of SCADA system and other Software/Hardware like REMC, National Open Access Registry (NOAR), web based scheduling software etc. involving significant expenditure, after prudence check, shall be considered for arriving at the Operation and Maintenance Expenses during 2019-20 to 2023-24."
- 70. We observe that as per above-mentioned Regulation, actual expenditure towards AMC of SCADA is to be considered for arriving at the O&M expenses during 2019-24. Also, we observe that in case of the Petitioner, actual AMC of SCADA expenses as approved vide order in 434/MP/2019 dated 26.3.2019 are as below:

(Rs. in lakh)

|                    |         |         |         |         | (110.111 | iditi i) |
|--------------------|---------|---------|---------|---------|----------|----------|
| Year               | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19  | Total    |
| AMC SCADA Expenses | 334.12  | 264.15  | 0.00    | 42.34   | 36.95    | 677.56   |

71. We observe that expenses towards AMC of SCADA vary widely during the five year period 2014-19 for which the Petitioner has submitted reasons in Petition No. 434/MP/2019. We observe that these expenses, which have wide annual variation, would not be prudent to consider while calculating O&M expenses for control period 2019-24 and, therefore, expenses towards AMC of SCADA have been excluded during normalization of O&M Expenses and while calculating O&M expenses for FY 2019-20. The Petitioner has submitted that AMC of SCADA has been added on the basis of LOAs awarded in accordance with the Regulation 22(5) of the 2019 RLDC Regulations. The Petitioner has projected Rs. 60 lakh/annum as

expenses on AMC of SCADA. The Petitioner has also submitted the expenses on AMC of SCADA for the first six months of 2019-20 as Rs. 30.3 lakh which also translates to nearly Rs. 60 lakh/annum. Therefore, projected expenses on AMC SCADA for Control Period 2019-24 is allowed, based on justification given by the Petitioner subject to filing of documentary proof at the time of truing-up.

- 72. As per clause 4 of Regulation 22 of the 2019 RLDC Regulations, escalation rate is to be worked out considering compounded annual growth rate, inflation rate and rationalization of O&M expenses. We observe that the compounded annual growth rate (CAGR) of normalized O&M expenses for the control period 2014-19 works out as 7.88% whereas the Petitioner has considered escalation rate of 4.77% to arrive at O&M expenses for FY 2019-20. Considering CAGR of 7.88% for previous control period, it would not be prudent to take 4.77% as escalation rate to arrive at O&M expenses for FY 2019-20. Further, considering that POSOCO came into existence only in 2017 and is a growing organisation, escalation of 7.88% has been considered to arrive at O&M Expenses for the FY 2019-20.
- 73. The above arrived O&M expenses (R&M expenses excluding AMC of SCADA and A&G expenses) for FY 2019-20 have further been escalated at 4.77% each year as claimed by the Petitioner to arrive at O&M expenses for period 2020-2024. Accordingly, O&M expenses allowed are as under:

| Year                                   | FY<br>2019-20 | FY<br>2020-21 | FY<br>2021-22 | FY<br>2022-23 | FY<br>2023-24 | Total   |
|--|---------------|---------------|---------------|---------------|---------------|---------|
| O&M Expenses<br>excluding AMC<br>SCADA | 560.22        | 586.94        | 614.94        | 644.27        | 675.00        | 3081.38 |
| AMC SCADA 2019-24 as per submissions   | 60.00         | 60.00         | 60.00         | 60.00         | 60.00         | 300.00  |

| Total O&M Expenses 2019-24 | 620.22 | 646.94 | 674.94 | 704.27 | 735.00 | 3381.38 |
|----------------------------|--------|--------|--------|--------|--------|---------|

74. The O&M expenses excluding AMC of SCADA have been allocated headwise on the basis of actual head-wise expenses approved for year 2018-19 vide order dated 26.3.2021 in Petition No. 434/MP/2019. The head-wise breakup for R&M Expenses and A&G Expenses is as follows:

# **R&M Expenses**

(Rs. in lakh)

| Allowed R&M Expenses 2019-24                               |        |        |        |        |        |        |  |  |  |
|--|--------|--------|--------|--------|--------|--------|--|--|--|
| 2019-20 2020-21 2021-22 2022-23 2023-24 Total              |        |        |        |        |        |        |  |  |  |
| R&M Expenses excluding AMC SCADA                           | 116.28 | 121.83 | 127.64 | 133.73 | 140.11 | 639.60 |  |  |  |
| AMC SCADA  | 60.00  | 60.00  | 60.00  | 60.00  | 60.00  | 300.00 |  |  |  |
| Total R&M Expenses 176.28 181.83 187.64 193.73 200.11 939. |        |        |        |        |        |        |  |  |  |

# **A&G Expenses**

(Rs. in lakh)

|                      | Allowed A&G Expenses 2019-24               |        |        |        |        |         |  |  |  |  |  |
|----------------------|--|--------|--------|--------|--------|---------|--|--|--|--|--|
| Account Head         | Account Head 2019-20 2020-21 2021-22 2022- |        |        |        |        |         |  |  |  |  |  |
| Property related     |  |        |        |        |        |         |  |  |  |  |  |
| Expenses             | 2.74                                       | 2.87   | 3.01   | 3.15   | 3.30   | 15.07   |  |  |  |  |  |
| Communication        | 55.35                                      | 57.99  | 60.76  | 63.66  | 66.70  | 304.46  |  |  |  |  |  |
| Professional Charges | 10.46                                      | 10.96  | 11.49  | 12.03  | 12.61  | 57.56   |  |  |  |  |  |
| Conveyance and       |  |        |        |        |        |         |  |  |  |  |  |
| Travelling Expenses  | 124.15                                     | 130.07 | 136.27 | 142.77 | 149.58 | 682.85  |  |  |  |  |  |
| Other Expenses       | 250.36                                     | 262.30 | 274.82 | 287.92 | 301.66 | 1377.07 |  |  |  |  |  |
| Additional Expenses  |  |        |        |        |        |         |  |  |  |  |  |
| (EDP)                | 0.87                                       | 0.91   | 0.95   | 1.00   | 1.05   | 4.77    |  |  |  |  |  |
| Total A&G Expenses   | 443.94                                     | 465.11 | 487.30 | 510.54 | 534.89 | 2441.78 |  |  |  |  |  |

75. The summary of O&M Expenses allowed for period 2019-24 is as follows:

| Allowed O&M Expenses 2019-24                             |         |         |         |         |         |         |  |  |  |
|--|---------|---------|---------|---------|---------|---------|--|--|--|
| ITEMS  | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |  |  |  |
| Repairs and<br>Maintenance Expenses<br>(R&M Expenses)    | 176.28  | 181.83  | 187.64  | 193.73  | 200.11  | 939.60  |  |  |  |
| Administrative and General Expenses, etc. (A&G Expenses) | 443.94  | 465.11  | 487.30  | 510.54  | 534.89  | 2441.78 |  |  |  |
| TOTAL  | 620.22  | 646.94  | 674.94  | 704.27  | 735.00  | 3381.38 |  |  |  |

# **Operational Expenditure (OPEX)**

76. The Petitioner has submitted OPEX plan for the period 2019-24 as follows:

(Rs. in lakh)

|     |  |         |            |           |            | (113. III lak | '''    |
|-----|--|---------|------------|-----------|------------|---------------|--------|
| Sr. | Name of the Work                             | E       | stimated E | xpenditur | e in Finan | cial Year     | Total  |
| No. |  | 2019-20 | 2020-21    | 2021-22   | 2022-23    | 2023-24       |        |
| ı   | Data/ Process Services                       |         |            |           |            |               |        |
| (1) | Big data analytic tools                      | 2.50    | 2.50       | 2.50      | 2.50       | 2.50          | 12.50  |
| (2) | Weather data services                        | -       | -          | -         | -          | 2.21          | 2.21   |
| (3) | Forecasting Services                         | -       | -          | -         | -          | 4.91          | 4.91   |
|     | Sub Total of I                               | 2.50    | 2.50       | 2.50      | 2.50       | 9.62          | 19.62  |
| II  | IT Systems Licenses                          |         |            | I         |            |               | l      |
| (1) | Firewall License                             | 4.00    | 4.00       | 4.00      | 4.00       | 4.00          | 20.00  |
| (2) | Anti-Virus License                           | 0.70    | 0.70       | 0.70      | 1.06       | 1.06          | 4.22   |
| (3) | Licenses for MS Office                       | 12.17   | -          | -         | 18.50      | -             | 30.67  |
| (4) | License for Mail Server for web applications | 6.36    | 6.36       | 6.36      | 6.36       | 6.36          | 31.8   |
|     | Subtotal of II                               | 23.23   | 11.06      | 11.06     | 29.93      | 11.42         | 86.69  |
|     | Total of OPEX (I & II)                       | 25.73   | 13.56      | 13.56     | 32.43      | 21.04         | 106.31 |

- 77. Regulation 23 of the 2019 RLDC Regulations is reproduced below:
  - "23. Operational Expenditure (OPEX)

OPEX shall include services like Cloud Computing, Data Storage, Data Centre, Big Data Analytics tools, Advanced data visualization tool (with GIS interfacing), Satellite Services, Weather Data Services, WebNetUse, Forecasting Services, Licensee Fee for software, tools for knowledge upgradation or training of DICs etc. NLDC may



procure software of transmission cost allocation centrally, if required, for use by respective DICs under OPEX.

Actual expenditure towards engaging of services under OPEX shall be considered, after prudence check during 2019-20 to 2023-24."

78. The Petitioner has submitted as under as regards proposed claims under OPEX:

### (i) <u>Software Licenses & Anti-Virus</u>

Most of the works by POSOCO employees are being done using computer. It is required to have various software licenses for day to day work like MS office, pdf reader, writer etc. It is also necessary to have antivirus installed at all computers & servers.

# (ii) SSL certificate for WRLDC web applications

WRLDC is hosting website and other web applications such as energy scheduling, control room daily report, short term open access etc. which is being accessed by Western Region constituents. To encrypt the data transaction over web applications, it is recommended by various security agencies like third party CERT-In-Certified auditor & ISMS auditor during audit to use https instead of http. SSL certificate is required for implementation of https for this application.

# (iii) Oracle Database Administrator

WRLDC has much critical software installed for the effectively carrying out Western grid operations. Several critical real-time applications are running on 24x7 basis such as energy scheduling, control room daily report, short term open access, fees & charges and metering applications that use Oracle as back-end database. These software are important for the well-regulated operation of WR Grid. The backbone of these software are Oracle Database. Thus, having Oracle Database up and running on 24x7 basis is critical activity for the WRLDC's IT system. Further, considering the day-to-day increment of Oracle transactions and criticalities of the applications running on the referred instance, it is of utmost importance to have proper support partner for regular

DBA activity, backups, periodic and breakdown maintenance requirement. This includes regular system software level cleaning of logs, re-do log, temporary DB, archival log etc. for suitable operation of Oracle DB with desired performance levels. It is, therefore, prudent to engage suitable agency which may provide DBA having Oracle technical knowhow.

# (iv) Weather Forecasting & Power Forecasting

Annual maintenance charges for WRLDC REMC (for a period of seven years) and Forecast Services (for a period of 4 years) has been provisioned for WRLDC in the "Maintenance Services Contract Agreement" for WRLDC REMC project. As per clause 2.1 of AMC contract, all the payments to the contractor shall be made by employer strictly out of the fund to be provided by Ministry of Power through Gross Budgetary Support. Further, it was clarified vide minutes of meeting held under the chairmanship of Joint Secretary, Ministry of Power dated 27<sup>th</sup> May 2016 that forecasting cost for future pooling stations is to be paid by respective user as and when it happens. 5 ISTS pooling stations are envisaged under the project with a possibility of 100% expansion as per appendix L of technical specifications of WRLDC REMC project. Thus, forecasting services (power & weather) beyond 10 ISTS pooling stations reporting to WRLDC REMC need to be paid by WRLDC. 15 ISTS pooling stations for 2021-23 and 20 ISTS pooling stations for 2023-25 respectively have been considered for calculating the requirement of forecasting services. OPEX rates have been planned based on the rates quoted for Power & weather forecasts in the REMC maintenance contract.

#### (v) <u>Data Analytics</u>

WRLDC is handling voluminous data in various fields of operations like scheduling, metering, deviation settlement, forecasting etc. LDCs need to analyse various parameters of grid and take necessary action for economic and efficient system operation. WRLDC has been providing feedback on behaviour of regional entities to various statutory organizations and forums like CERC, RPC/ NPC etc. Hence, it is required to engage a service provider for analyzing big data available with WRLDC over the years.

79. We have considered the submissions made by the Petitioner. We observe that the Petitioner has submitted the Board resolution for the OPEX plan and has provided detailed justification of the expenses proposed to be incurred under OPEX. Regulation 23 of the 2019 RLDC Fees Regulations provides that actual expenditure towards engaging of services under OPEX shall be considered, after prudence checks during 2019-20 to 2023-24. Therefore, we allow the following expenditure estimated by the Petitioner under OPEX subject to true up. We direct the Petitioner to submit the proofs of actual expenditure along with justification and due diligence taken in procurement of services at the time of true up. The Petitioner is also directed to submit the DPR and/ or maintenance contract of REMC at the time of true-up. Accordingly, OPEX allowed is as follows:

(Rs. in lakh)

| FY   | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total  |
|------|---------|---------|---------|---------|---------|--------|
| OPEX | 25.73   | 13.56   | 13.56   | 32.43   | 21.04   | 106.31 |

## **Human Resource Expenses (HR Expenses)**

80. Regulation 24 of the 2019 RLDC Regulations is as follows:

#### "24. Human Resource Expenses

- (1) Human resource expenses shall be derived on the basis of actual human resource expenses for the years 2017-18 to 2018-19 based on the audited balance sheets. The human resource expenses shall be normalized by excluding abnormal Human resource expenses ex-gratia, VRS expenses, PRP/incentive, prior-period adjustments, claims and advances written-off, provisions, etc., if any, after prudence check by the Commission:
- (2) The expenses towards payment of Certificate Retainer-ship amount would be a part of the Human Resource Expenses.
- (3) Performance related pay computed in accordance with DPE /other applicable guidelines shall be met from the incentive allowed in accordance with Regulation 32 of these Regulations.

Provided that in case of any surplus in the incentive collected as per provisions of Regulation 32 after payment of performance related pay in accordance with DPE guidelines, such surplus amount shall be maintained separately to be used in subsequent years in case of shortfall of funds for payment of performance related pay as per DPE guidelines.

Provided further that in case shortfall in the funds as per Regulation 32 for distribution of performance related pay in accordance with DPE guidelines still persists, the shortfall shall be met from the LDC development Fund

- (4) The normalized human resource expenses, after prudence check, for the year 2017-18 to 2018- 19, shall be escalated at the rate of 4.77% to arrive at the normalized human resource expenses at the 2018-19 price level respectively and then averaged to arrive at normalized average human resource expenses for the 2017-18 to 2018-19 at 2018-19 price level.
- (5) The manpower approved during the year 2018-19 shall be the basis for computation of the HR expenses for 2019-20. Thereafter, for the subsequent years, the HR expenses shall be escalated at the annual escalation rate.
- (6) The average normalized human resource expenses of 2018-19 price level shall be escalated at the escalation rate as worked out in accordance with clause (8) of this Regulation to arrive the HR expenses for the year 2019-20.
- (7) The human resource expenses for the year 2019-20 shall be escalated further at the annual escalation rate as worked out in accordance with clause (8) this Regulation to arrive at permissible human resource expenses for the subsequent years of the control period:
- (8) The escalation rate shall be worked out by considering the compound annual growth rate, inflation rate, rationalization of human resource and other factors, if any.
- (9) The cost of anticipated increase in the manpower of each year of the control period shall also be considered after prudence check. The strength of manpower required for effective functioning of LDC will be as approved by the Commission while specifying the fees and charges.
- (10) Human Resource Development (HRD) expenses, incurred by the NLDC or RLDCS shall be a part of HR Expenses from FY 2019-20 onwards. In addition to the capacity building of the employees of NLDC or RLDCs, capacity building workshops and training programs organized for other stakeholders will also form part of the HRD expenses. Projected annual HRD expenses will be at least 5% of the HR expenses arrived based on the methodology defined above. However, if the actual utilization towards HRD expenditure exceeds the 5% of HR expenses of any year, it shall be allowed at the time of truing up by the Commission after prudence check. In case of less than 5% utilization, it shall be refunded at the time of annual truing up. All efforts shall be made to ensure that minimum seven days training per employee per annum is imparted as per the National Training Policy."
- 81. The summary of HR expenses claimed by the Petitioner for period 2019-24 is as follows:

(Rs. in lakh)

| Financial Year | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total    |
|----------------|---------|---------|---------|---------|---------|----------|
| HR Expenses    | 2582.29 | 2882.10 | 3327.99 | 3842.18 | 4533.27 | 17167.82 |
| HRD Expenses   | 129.11  | 144.10  | 166.40  | 192.11  | 226.66  | 858.39   |



| Total HR | 2711.40 | 3026.20 | 3494.39 | 4034.29 | 4759.93 | 18026.21 |
|----------|---------|---------|---------|---------|---------|----------|
| Expenses | 2711.40 | 3020.20 | 3494.39 | 4034.29 | 4759.95 | 10020.21 |

82. In addition to above HR expenses, the Petitioner has also claimed expenses against Corporate leasing of accommodation under HR Expenses for 2019-24 period which are as below:

(Rs. in Lakh)

| Year                  | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|-----------------------|---------|---------|---------|---------|---------|---------|
| Total number of Flats | 40      | 51      | 61      | 72      | 87      |         |
| Total Expenditure     | 260.4   | 342.2   | 432.3   | 574.5   | 780.5   | 2389.93 |

- 83. The Petitioner has submitted that costs under provisions of Performance Related Expenses (PLI/ PRP) expenses and IND AS adjustment expenses have already been excluded from the HR expenses of the 2014-19 period before using them for projecting HR cost for the 2019-24 period. However, the Petitioner has requested that the impact of IND AS adjustments under "Staff Welfare" head, inadvertently excluded in the 2014-19 petition, may be considered for arriving at the HR expenses of 2019-24 period.
- 84. The Petitioner has also submitted that expenses on other heads like exgratia, VRS expenses, prior-period adjustments (for previous control period), claims and advances written-off, provisions, etc. have been Nil during the control period 2014-19.
- 85. The Petitioner has submitted that as per Regulation 24 of the 2019 RLDC Regulations, normalized HR expenses of FY 2017-18 have been escalated at the rate of 4.77% to arrive at FY 2018-19 price level and then averaged with FY 2018-19 HR expenses to arrive at the normalized average HR expenses at FY 2018-19 level. This has been escalated at 4.77% each year to arrive at HR expenses for the year 2019-20 and further for each year of 2020-2024 period. The Petitioner in the

calculation sheets submitted along with Petition has multiplied escalated per employee expense for 2019-20 with projected manpower for 2019-20. Similarly projected HR expense has been calculated by the Petitioner for subsequent years of 20-24 considering escalation rate of 4.77% and projected manpower.

- 86. The Petitioner has further submitted that for arriving at the head-wise HR expenses for the control period 2019-24, the total expenses arrived for the year FY 2019-20 have been allocated head wise in the ratio of actual head wise expenses incurred during the last year of the control period 2014-19 i.e. FY 2018-19. Thereafter, the head-wise HR expenses for the FY 2019-20 have been escalated further at the same rate i.e. 4.77% to arrive at the HR expenses for subsequent years of control period 2019-24.
- 87. The Petitioner has submitted that Human Resource Development (HRD) expenses have been considered as 5% of HR expenses in line with the clause 10 of Regulation 24 of the 2019 RLDC Regulations.
- 88. The Petitioner has submitted that the actual manpower of WRLDC as on 31.03.2019 was 87 and the manpower projected as on 31.03.2024 is 141. Projected manpower details at WRLDC are as follows:

| WRLDC         | As on 31.3.2019 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---------------|-----------------|---------|---------|---------|---------|---------|
| Executive     | 55              | 73      | 79      | 89      | 100     | 115     |
| Non-Executive | 32              | 26      | 26      | 26      | 26      | 26      |
| TOTAL         | 87              | 99      | 105     | 115     | 126     | 141     |

89. The Petitioner has submitted the broad reasons for projected increase in manpower as under:

- a) POSOCO is a knowledge-based control centre organization and Human Resource is its main asset.
- b) There is an ever-increasing complexity of electricity market, number of participating entities, energy volumes, number of transactions etc. which will require adequate manpower.
- c) Additional Manpower is required for additional works/ responsibilities including establishing Renewable Energy Management Centres, which are scheduled to come up in Northern Regional Load Despatch Centre, Western Regional Load Despatch Centre, Southern Regional Load Despatch Centre and the National Load Despatch Centre.
- d) Increasing thrust on Renewables and their integration in the grid, will require additional manpower.
- e) Electricity markets are growing more complex with increase in number of users, use and application of Big data and Automation are envisaged to bring pivotal change in processes and create forward and backward linkages that will improve security, reliability and economy in the grid. Also, proportionate increase in manpower in Management Functions will also be required.
- 90. We have considered the submissions of the Petitioner and observe that although the Petitioner has submitted reasons for increase in manpower for the 2019-24 period, proposed increase in manpower vis-à-vis current manpower for POSOCO as a whole is required to be looked into in detail and needs more deliberations. In this regard following has been observed by the Commission vide order dated 16.4.2021 in Petition No 375/MP/2019:
  - "84. The Petitioner has submitted reasons for increase in manpower for the 2019-24 period. However, the commission is of the view that proposed increase in manpower vis-à-vis current manpower for POSOCO as a whole is required to be looked into in detail and needs more deliberations. The Petitioner is required to do functional mapping of all posts and justify increase in posts particularly at higher levels. Therefore, the Petitioner is directed to file a consolidated petition projecting manpower for POSOCO as a whole for the Control Period 2019-24 along with detailed justifications and grade wise functional mapping. At present, HR Expenses for the control period 2019-24 have been worked out as per Regulation 24 of the 2019 RLDC Regulations without considering any increase in manpower."

- 91. Accordingly, in line with the above observation of the Commission, in the instant case, the HR Expenses for the control period 2019-24 have been worked out as per Regulation 24 of the 2019 RLDC Regulations without considering any increase in manpower.
- 92. The Petitioner has submitted that the "direct corporate leasing accommodation" has commenced for the Petitioner's employees from FY 2018-19 w.e.f. February 2019 and an amount of Rs. 37.20 lakh has been booked in FY 2018-19, in the head "Reimbursement of House Rent/Lease" under HR expenses in the books and the same has been considered with escalation for period 2019-24 under HR expenses.
- 93. We observe that the Petitioner has claimed the aforementioned "direct corporate leasing accommodation" expenses separately over and above HR expenses for 2019-24 period.
- 94. Regulation 24(2) of the 2019 RLDC Regulations provides that payment of Certificate Retainer-ship amount would be a part of the Human Resource Expenses. The normalized HR expenses of FY 2017-18 and FY 2018-19 have been worked out by excluding disallowed expenses of Certificate Linked Incentive (CLI) as in order dated 26.03.2021 in Petition No. 434/MP/2019. However, liberty is granted to the Petitioner to claim expenses towards actual payment of Certificate Retainer-ship amount as part of HR Expenses at the time of true up.
- 95. The audited HR expenses for FY 2017-18 and FY 2018-19 have been segregated in two categories (executive and non-executive). While normalizing the said HR expenses, we have excluded expenditure of Rs. 37.20 lakh from FY 2018-

- 19 against corporate leasing expenses. After normalization, HR Expenses per employee in each category have been derived by dividing HR Expenses by actual manpower in each category for the corresponding year.
- 96. As per clause 4 of Regulation 24 of the 2019 RLDC Regulations, the escalation rate of 4.77% has been considered to arrive at normalized category wise HR Expenses per employee of 2017-18 at price level of 2018-19. The HR expenses per employee in each category thus arrived for 2017-18 and 2018-19 are averaged to arrive at average normalised HR Expenses per employee at 2018-19 price level.
- 97. We observe that Petitioner has claimed expenditure for 40 flats under "direct corporate leasing" for FY 2019-20 and has projected increase in such flats under corporate lease from FY 2020-21 onwards. Since expenses under "Reimbursement of House Rent/Lease" for 40 employees shall be considered under "direct corporate leasing" head in Control Period 2019-24, average normalised HR expenses for period 2017-19 have further been normalised to the extent of HRA/lease expenses for 40 executives.
- 98. Clauses 6, 7 and 8 of Regulations 24 of the 2019 RLDC Regulations provide that the escalation rate for arriving at expenses of 2019-20 and further in the control period 2019-24 shall be worked out after considering the compounded annual growth rate, inflation rate, rationalization of human resources and other factors, if any. We observe that the Petitioner has considered escalation rate as 4.77% for arriving at HR Expenses for FY 2019-20 and for further years of the period 2020-24. As additional manpower of WRLDC is not being approved in the instant order, HR expenses shall be allowed on provisional basis based on actual manpower as on

- 31.3.2019 as submitted by the Petitioner and escalation rate of 4.77% to arrive at HR Expenses for each of the year of the control period of 2019-24.
- 99. Any impact on HR Expenses due to additional recruitment of manpower as approved later by the Commission, shall be considered on filing separate petition by the Petitioner along with associated increase in O&M or HR expenses.
- 100. As per clause 10 of Regulation 24 of the 2019 RLDC Regulations, Human Resource Development (HRD) expenses are being considered @5% of HR expenses subject to true up.
- 101. As per the above discussion, the HR Expenses (without direct corporate leasing expenses) allowed for the control period 2019-24 are as follows:

| HR Expenses allowed provisionally for 2019-24    |         |         |         |         |         |  |  |  |  |
|--|---------|---------|---------|---------|---------|--|--|--|--|
|  | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |  |  |  |  |
| HR Expenses Allowed with an escalation of 4.77%  | 2055.25 | 2153.29 | 2256.00 | 2363.61 | 2476.35 |  |  |  |  |
| HRD Expenses Allowable @ 5% of Total HR Expenses | 102.76  | 107.66  | 112.80  | 118.18  | 123.82  |  |  |  |  |
| Total HR Expenses allowed                        | 2158.01 | 2260.95 | 2368.80 | 2481.79 | 2600.17 |  |  |  |  |

#### **Expenses for "Direct Corporate Leasing of Accommodation"**

102. In addition to the projected HR Expenses claimed for period 2019-24, the Petitioner has also claimed an amount of Rs. 2389.93 lakh for the period 2019-24 towards corporate leasing of accommodation. The Petitioner has stated that the same is claimed in line with the leasing practice prevalent in the other government organizations like Reserve Bank of India (RBI).

103. The Petitioner in support of its claim against corporate leasing has submitted the following details:

(a) The nature of control room functions require WRDLC staff to reside in the

vicinity of the office building and owing to extreme difficulty to find

accommodation near WRLDC within the company prescribed lease

entitlements due to higher rentals in Mumbai when compared to other metro

cities.

(b) In order to resolve the accommodation issue at Mumbai, corporate leasing

of 40 flats have been done by WRLDC, in line with the leasing practice

prevalent in other government organizations such as RBI. Similar approach

was recommended in CABIL (Capacity Building of Indian Load Despatch

Centres) report of the FOR Technical Committee sub-group. The Board

Resolution for the same has also been submitted by the Petitioner. The details

of the leased flats are as below:

Number of flats: 40 numbers.

Period of lease: 36 months.

Rent per month: Rs. 62,000/- per month per flat.

Hence per year expenditure for 40 flats: Rs. 2,97,60,000/-.

(c) As the leasing of flats commenced in the FY 2018-19 itself (February 2019

onwards) and an amount of Rs. 37.20 lakh has already been booked in FY

2018-19, the same amount is considered in the head "Reimbursement of

House Rent/ Lease" under HR expenses in the books and has been

considered under the head for years of control period 2019-24 with applicable

escalation.

(d) The balance amount of Rs. 260.40 lakh has been considered for the years

of 2019-20 and subsequent years of control period. As the leasing of 40 flats is

done for three years on a fixed rate, the amount up to FY 2021-22 has been

Rs. 260.40 lakh and subsequently, the estimated expenditure shall be Rs.

286.44 lakh (FY 2022-23) and Rs.315.08 lakh (FY 2023-24), which have been

worked out by application of 10% escalation on the estimated expenditures of

previous years. The total amount for 40 leased flats for control period 2019-24

comes to Rs. 1382.72 lakh. Summary of existing corporate leasing of accommodation under HR Expenses for WRLDC (2019-24) is shown below:

(Rs. in lakh)

|   | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|---|---------|---------|---------|---------|---------|---------|
| Expenditure for 40 leased accommodation | 260.40  | 260.40  | 260.40  | 286.44  | 315.084 | 1382.72 |

(e) As the executive manpower is planned to increase in future as per the projected manpower plan, the number of flats required to be leased shall also increase in the coming years. The requirement of the additional flats (other than 40 already leased) and expenditure shall be as below for control period 2019-24:

(Rs. in lakh)

| Year  | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|---|---------|---------|---------|---------|---------|---------|
| Additional leasing of flats (other than 40 numbers) to accommodate manpower | 0       | 11      | 21      | 32      | 47      |         |
| Expenditure   | 0.00    | 81.8    | 171.9   | 288.1   | 465.4   | 1007.20 |

(f) The total expenditure towards leasing of flats (existing plus projected) shall be as below for the control period 2019-24:

| Year                               | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|------------------------------------|---------|---------|---------|---------|---------|---------|
| Total number of leased flats       | 40      | 51      | 61      | 72      | 87      |         |
| Total expenditure<br>(Rs. in lakh) | 260.4   | 342.2   | 432.3   | 574.5   | 780.5   | 2389.93 |

104. We have considered the submissions of the Petitioner. We have excluded Rs 37.20 lakh from the HR Expenses of FY 2018-19 during normalization (as discussed in preceding paragraphs). The allowable HR Expenses worked out above do not include any amount related to "direct corporate leasing of accommodation". Therefore, the actual expense of the Petitioner for existing "corporate leasing of accommodation" for 40 flats would be as under:

| FY                         | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|----------------------------|---------|---------|---------|---------|---------|---------|
| Corporate leasing expenses | 297.60  | 297.60  | 297.60  | 327.36* | 327.36  | 1547.52 |

\*considered 10% escalation every three years.

- 105. We observe that the Petitioner has submitted a Board Resolution dated 1.10.2018 in support of the above-mentioned corporate leasing expenditure. Following is the brief of Board Resolution:
  - a) The Board has granted in-principle approval to the proposal of WRLDC regarding corporate hiring of residential accommodation and desired that the Tender Committee recommendations be approved by Chairman and Managing Director.
  - b) The Board has also desired that option of purchase of a separate land in and around WRLDC could also be explored for the purpose keeping in view the high rentals in Mumbai.
  - c) Considering severe shortage and dilapidated condition of existing quarters and high rentals in Mumbai, Board has granted approval for 40 Flats (2/3 BHK) in near vicinity of office in line with the process generally followed by RBI.
- 106. We observe that leasing of housing for officers in the Central Public Enterprises (CPSEs) is governed by Chapter VI (Wage Policy and Related Matters) of DPE Guidelines. DPE O.M. no. 2(38)/03-DPE (WC) GL-XXIV dated 29.10.2003 provides for certain set of guidelines to be adhered to by the Board of PSUs while they allow leased accommodation to their executives. The relevant extract are as follows:

#### "6. DPE/Guidelines/IV(c)/6

#### Leasing of Houses for officers in the Central Public Enterprises

Reference is invited to DPE O.M. No. 2(49)/98-DPE(WC) dated 25.6.99 in regard to pay revision for the board level and below board level executives of the Central Public Enterprises w.e.f. 1.1.97. Para 10 of the O.M. reads as under:-

"In respect of leased accommodation, the boards of public enterprises will have the

flexibility to review and provide for an adequate level of leased accommodation for the executives who are entitled to this facility."

- 2. It has come to the notice of the Government that there have been certain irregularities in the matter of allowing leased accommodation, payment of higher rental value of the leased accommodation, allowing leased accommodation to non-entitled officers, allowing bigger accommodation to relatively junior officers etc. Such practices have been seriously viewed by the Central Vigilance Commission.
- 3. Although the Boards of public enterprises have the flexibility to review and provide for an adequate level of leased accommodation to their executives, the Boards should exercise control meticulously in order to see that no undue advantage accrues to the concerned officers who may be getting their own houses/flats self-leased or even getting company houses/flats on lease basis. In this regard appropriate action on the following lines needs to be taken by the Boards of PSUs while allowing leased accommodation to their executives:-
- (a) The Boards of PSUs may identify the executives who are entitled to leased accommodation and notify the same;
- (b) In case the company's own quarters/flats are given to the executives, these should be of the entitled plinth area. Such entitlement would also need to be specified by the Board of Directors;
- (c) If any officer is allowed to get his own flat/house on self-lease basis, the payment of lease money should in no case be higher than the market rate keeping in view the area/location of the flat/house. The basic point to be seen is that self-leased accommodation should not become a source of additional income by the officer concerned.
- (d) If the company provides leased accommodation after obtaining it from any private owner on lease basis, such decision of taking the flats on lease basis may be taken after following the set procedures such as inviting quotations/opening quotations in the presence of others etc.
- (e) In all cases where the company provides leased accommodation to its executives or even allows self-leased accommodation to its executives, the Board of Directors must fix the plinth area and the ceiling in terms of value which such area might attract keeping in view the categories of the cities the executives are posted i.e. A,B,C & unclassified cities.
- 4. The administrative Ministries are requested to bring the above to the notice of the Central PSUs under their charge and the PSUs may be advised to follow the above scrupulously. The administrative Ministries may like to monitor the implementation of the above conditions in their periodic review."
- 107. The above-mentioned DPE guidelines on "Leasing of Houses for officers in the Central Public Enterprises" provide that although the Boards of public enterprises have the flexibility to review and provide for an adequate level of leased



accommodation to their executives, the Boards should exercise control meticulously in order to see that no undue advantage accrues to the concerned officers who may be getting their own houses/ flats self-leased or even getting company houses/ flats on lease basis.

108. These guidelines also provide that if a company provides leased accommodation after obtaining it from any private owner on lease basis, such decision of taking the flats on lease basis may be taken after following the set procedures such as inviting quotations/ opening quotations in the presence of others etc.

109. The Petitioner has submitted that the nature of control room functions requires staff to reside in the vicinity of the office building. We agree with the Petitioner's contention that staff of the control room should preferably reside in vicinity of their offices considering criticality of the functions of RLDCs. However, we observe that the Petitioner has not provided the modus operandi, procedure and criteria followed for hiring and allotment of the residential accommodation. Since the Board has already approved the leasing for 40 flats, the expenses against the same is allowed in the instant Petition.

110. The increase in number of flats under such leasing shall be considered on submission of detailed guidelines followed by the Petitioner while leasing such flats and the rationale for number of flats proposed under such arrangement is provided. The approval shall be considered on filing separate petition for O&M and HR expenses after approval of manpower for the control period 2019-24.

- 111. We observe that Board may exercise control meticulously including the rationale for number of flats required to be hired under corporate leasing where the flats are booked for rent higher than the entitlement.
- 112. As per the above discussion, following expenditure is allowed for 40 flats under "Direct Corporate Leasing of Accommodation" under HR Expenses:

| FY                  | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total   |
|---------------------|---------|---------|---------|---------|---------|---------|
| Expenses<br>Allowed | 297.60  | 297.60  | 297.60  | 327.36* | 327.36  | 1547.52 |

<sup>\*</sup>considering 10% escalation every three years

- 113. We direct the Petitioner to submit the documentary proofs of the procedure followed while the Petitioner hires and allots the flats for leasing of accommodation. We also direct the Petitioner to provide for the reasons and justification of number of flats hired for leasing of accommodation at the time of truing up.
- 114. We also direct the Petitioner to intimate the status of the existing staff quarters.
- 115. Therefore, the total HR Expenses (including direct corporate leasing expenses) allowed for WRLDC is as under:

(Rs. in lakh)

| FY  | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | Total    |
|---|---------|---------|---------|---------|---------|----------|
| HR Expenses                                     | 2055.25 | 2153.29 | 2256.00 | 2363.61 | 2476.35 | 11304.50 |
| HRD Expenses                                    | 102.76  | 107.66  | 112.80  | 118.18  | 123.82  | 565.22   |
| Direct Corporate<br>Leasing of<br>Accommodation | 297.60  | 297.60  | 297.60  | 327.36  | 327.36  | 1547.52  |
| Total   | 2455.61 | 2558.55 | 2666.40 | 2809.15 | 2927.53 | 13417.24 |

# **Apportioned NLDC Charges & Corporate Office expenses**

116. Regulation 11 of the 2019 RLDC Regulations provides as under:

"11. Determination of Fees and Charges The Fees and Charges shall be determined separately for each of the Regional Load Despatch Centres and National Load Despatch Centre;

Provided that the annual charges of NLDC including corporate office expenses for the control period shall be apportioned among Regional Load Despatch Centres on the basis of the peak met (in MW) in the respective region as indicated on CEA"s website for the preceding year."

117. Accordingly, the NLDC charges and Corporate Office expenses are to be apportioned among the Regional Load Despatch Centre on the basis of the peak demand served in the respective Region for the preceding year. The Commission vide order dated 16.4.2021 in Petition no. 375/MP/2019 (NLDC) has apportioned the NLDC charges and Corporate Office expenses based on the peak demand met during FY 2018-19 which is as follows:

"103. Accordingly, the allowed annual charges of NLDC and corporate office have been apportioned amongst the RLDCs as follows:

Peak demand met (%)/Total 2022-23 **NLDC Charges** 2019-20 2020-21 2021-22 2023-24 Total NLDC 6282.01 7079.28 8494.99 8898.29 8873.29 charges NRLDC 2843.00 32.04% 2012.76 2268.20 2721.79 2851.01 WRLDC 2050.87 2461.00 2570.59 28.97% 1819.90 2577.83 **ERLDC** 741.28 835.35 1002.41 1050.00 1047.05 11.80% SRLDC 25.71% 1615.10 1820.08 2184.06 2287.75 2281.32

131.32

(Rs. in Lakh)

131.69

Therefore, the apportionment of NLDC charges and corporate office expenses w.r.t the Petitioner for control period 2019-24 is as per above.

92.97

104.77

125.73

#### **Interest on Working Capital**

**NERLDC** 

118. Regulation 25 of the 2019 RLDC Regulations provide as under:-

## "25. Interest on Working Capital

(1) The working capital shall cover:

1.48%

- (i) Operation and maintenance expenses (excluding human resource expenses) for one month;
- (ii) Human resource expenses including Human Resource Development Expenses for one month;
- (iii)NLDC charges and Corporate Office for one month and
- (iv)Receivables equivalent to 45 days of annual charges as approved by the Commission.
- (2) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on1.4.2019 as per tariff Regulations.
- (3) Interest on working capital shall be payable on normative basis not withstanding that the Power System Operation Corporation Limited has not taken any loan for working capital from any outside agency."
- 119. Accordingly, following expenses have been worked out for determination of Interest on Working Capital:
  - a) O&M Expenses excluding human resource expenses have been considered for one month of the allowed O&M expenses.
  - b) Human Resource Expenses including HRD expenses have been considered for one month of the allowed HR Expenses.
  - c) NLDC charges and corporate office expenses for one month have been included.
  - d) The receivables have been considered on the basis of 45 days of allowed Annual charges.
  - e) Rate of interest on working capital has been considered as yearly MCLR of SBI issued from time to time Plus 350 bps i.e. as on 1.4.2019 (i.e. 8.55% plus 3.50% = 12.05%) and as on 1.4.2020 (i.e. 7.75% plus 3.50% = 11.25%). For the balance control period i.e. 2021-22 up to 2023-24 interest rates has been considered as 11.25% which is subject to true-up.
- 120. The Petitioner vide Form-8 has considered rate of interest on working capital as 12.55% for the complete 2019-24 period.
- 121. Interest on working capital worked out for the 2019-24 period is as follows:

| Description               | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---------------------------|---------|---------|---------|---------|---------|
| One month NLDC<br>Charges | 151.66  | 170.91  | 205.08  | 214.82  | 214.22  |



| One month O & M Expenses Excluding Human Resource Expenses | 51.69    | 53.91    | 56.25    | 58.69    | 61.25    |
|--|----------|----------|----------|----------|----------|
| One month Human<br>Resource Expenses                       | 204.63   | 213.21   | 222.20   | 234.10   | 243.96   |
| Receivables<br>(45 days of Annual<br>charges)              | 636.46   | 697.11   | 774.56   | 825.81   | 848.39   |
| Total  | 1,044.44 | 1,135.14 | 1,258.09 | 1,333.41 | 1,367.82 |
| Rate of Interest on Working Capital (%)                    | 12.05%   | 11.25%   | 11.25%   | 11.25%   | 11.25%   |
| Interest   | 125.86   | 127.70   | 141.53   | 150.01   | 153.88   |

# Annual charges

122. The details of annual charges allowed for WRLDC as per the 2019 RLDC Regulations for control period 2019-24 control period is summarized below:

(Rs. in lakh)

| Annual Charges  | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|---------|---------|---------|---------|---------|
| Depreciation  | 47.89   | 154.46  | 196.00  | 264.10  | 310.01  |
| Return on Equity  | 81.37   | 102.23  | 129.11  | 160.43  | 182.23  |
| Interest on Working Capital   | 125.86  | 127.70  | 141.53  | 150.01  | 153.88  |
| O & M Expenses (Excluding Human Resource Expenses)                                  | 620.22  | 646.94  | 674.94  | 704.27  | 735.00  |
| Human Resource Expenses<br>(Including direct corporate<br>leasing and HRD expenses) | 2455.61 | 2558.55 | 2666.40 | 2809.15 | 2927.53 |
| NLDC Charges and<br>Corporate Office Expenses                                       | 1819.90 | 2050.87 | 2461.00 | 2577.83 | 2570.59 |
| OPEX  | 25.73   | 13.56   | 13.56   | 32.43   | 21.04   |
| Total   | 5176.57 | 5654.31 | 6282.54 | 6698.22 | 6900.27 |

# Filing Fee and Publication Expenses

123. The Petitioner has sought reimbursement of expenditure towards publishing of notices in Newspapers and other expenditure (if any) in relation to the filing of Application as one time recovery. Since the expenditure has been incurred for

meeting a statutory requirement, we allow the direct reimbursement of these expenses by the Users/ beneficiaries on pro-rata basis.

124. As regards the Petitioner's prayer to allow to bill and adjust the impact of FERV, the same is allowed to be recovered from the beneficiaries directly as provided under Regulation 36 of the 2019 RLDC Regulations.

# **Billing and Payment of charges**

- 125. Billing and payment of charges allowed shall be governed by Regulation 34 of the 2019 RLDC Regulations. Accordingly, POSOCO will raise bills for these charges on monthly basis directly from the users as per the said Regulation.
- 126. Further, in terms of clause 8 of Regulations 10 read with clause 4 of Regulations 13 of the 2019 RLDC Regulations, the amount under-recovered or over-recovered by the RLDCs along with simple interest at the rate equal to the bank rate as on 1<sup>st</sup> April of the respective year, shall be recovered or refunded by RLDC or Users, as the case may be, in six equal monthly instalments.
- 127. Annexure-1 given hereinafter forms part of this order.
- 128. This order disposes of Petition No. 400/MP/2019.

Sd/ Sd/ Sd/
(Arun Goyal) (I. S. Jha) (P. K. Pujari)
Member Member Chairperson

# **ANNEXURE-1**

# DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD) FOR THE 2019-24 CONTROL PERIOD

# **WRLDC**

| WRLDC<br>(2019-24)  | Admitted Capital Cost as on 1.4.2019 (Approved by the Commission vide order dated 26.3.2021 in Petition No. 434/MP/2019) | Net Additional<br>capitalisation | Projected<br>Capital<br>Cost as<br>on<br>31.3.2024 | Rate of<br>Depreciation<br>as per<br>Regulation | Annual Depreciation as per Regulation |         |         |         |         |
|---|--|----------------------------------|--|---|---------------------------------------|---------|---------|---------|---------|
| Capital<br>Expenditures<br>as on<br>1.04.2019   |  |                                  |  |   | 2019-20                               | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Freehold Land   | 0.00   | 0.00                             | 0.00   | 0.00%   | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
| Leasehold<br>Land   | 0.00   | 0.00                             | 0.00   | 3.34%   | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
| Building &<br>Other Civil<br>Works  | 0.00   | 473.71                           | 473.71   | 3.34%   | 0.37                                  | 6.12    | 12.05   | 13.95   | 15.57   |
| Auxiliary Power System and Power supply   | 44.99  | 0.87                             | 45.86  | 5.28%   | 2.38                                  | 2.38    | 3.01    | 3.03    | 2.42    |
| Air conditioning system (Static)  | 0.00   | 98.10                            | 98.10  | 5.28%   | 1.40                                  | 2.94    | 3.20    | 3.46    | 4.39    |
| Air<br>conditioning<br>system<br>(Portable)   | 0.00   | 0.00                             | 0.00   | 9.50%   | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
| Office Furniture and other infrastructure equipment (including Communication Equipment) | 726.20   | 32.00                            | 758.20   | 6.33%   | 46.25                                 | 46.66   | 46.92   | 47.14   | 47.61   |
| Any other assets not categorised  | -13.93   | 34.65                            | 20.72  | 5.28%   | -0.10                                 | 0.91    | 1.28    | 1.28    | 1.18    |
| SCADA and IT<br>Hardware  | 241.49   | 513.76                           | 755.25   | 15.00%  | 41.39                                 | 49.46   | 59.86   | 86.86   | 109.82  |
| SCADA and IT Software   | 214.37   | 665.66                           | 880.03   | 15.00%  | 37.76                                 | 45.99   | 69.69   | 108.38  | 129.00  |
| Total   | 1213.12  | 1818.74                          | 3031.86  |   | 129.45                                | 154.46  | 196.00  | 264.10  | 310.01  |
| We  | eighted Avera  | ge Rate of De                    | preciation   |   | 9.67%                                 | 9.22%   | 9.30%   | 10.11%  | 10.47%  |