

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 376/MP/2019

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

Date of Order: 10.6.2021

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 NERLDC Charges for the control period 01.04.2019-31.03.2024.

And in the matter of

North Eastern Regional Load Despatch Centre (NERLDC)
Power System Operation Corporation Limited (POSOCO),
Registered Office: B-9, Qutub Institutional Area, 1st Floor,
Katwaria Sarai, New Delhi- 110016

....Petitioner

Versus

Users of North Eastern Regional Load Despatch Centre (NERLDC):

Users under the category of Distribution Licensees and Buyers

1. Chairman, APDCL, Bijuli Bhavan, Paltan Bazar, Guwahati-781001
2. Chairman & Managing Director, MePDCL, Meter Factory Area, Short Round Road, Integrated Office Complex, Shillong- 793001
3. Chairman & Managing Director, TSECL, Bidyut Bhavan, North Banamalipur, Agartala- 799001.
4. Chief Engineer Chairman & Managing Director, TSECL, Bidyut Bhavan, North Banamalipur, Agartala- 799001.
5. Engineer-in-Chief, P & E Dept., Govt, of Mizoram, Khatla, Aizawl- 796001.
6. Chief Engineer (Power), Dept, of Power, Govt, of Nagaland, Kohima- 797001.
7. Managing Director, MSPDCL, 3rd Floor, New Directorate Building, Near 2 MR Gate, Imphal - Dimapur Road, Imphal- 795001, Manipur
8. Addl. General Manager, Power Grid Corporation of India Ltd, 800 kV HVDC Converter Station, Biswanath Chariali, Vill- Niz Baghmari, P.O.- Burigang, Assam-784176



Users under the category of Generating Stations and Sellers

9. General Manager, Doyang HEP, NEEPCO, Wokha, Nagaland
10. General Manager, Ranganadi HEP, NEEPCO, P.O. Ranganadi Proj. Dist. Subansiri, Arunachal Pradesh-791121
11. General Manager, AGBPP, NEEPCO, Kathalguri, Tinsukia, Assam-786191
12. General Manager, AGTCCP, NEEPCO, Ramchandranagar, Agartala, Tripura-799008
13. General Manager, KHANDONG HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
14. General Manager, KOPILI HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
15. General Manager, KOPILI-2 HEP, NEEPCO, Umrangsoo, N.C.Hills, Assam
16. General Manager, Pare HEP, NEEPCO, Daimukh, Arunachal Pradesh-791112
17. Chief Engineer, NHPC Loktak HEP, Leimatak-795124, Manipur
18. Managing Director, ONGC Tripura Power Company Ltd, 6th Floor, A Wing, IFCI Tower- 61, Nehru Place, New Delhi-110019
19. AGM, NTPC Ltd., BgTPP, Salakati (P), Dist: Kokrajhar (BTAD), Assam-783369.

Users under the category of Inter State Transmission Licensees

20. Executive Director, NERTS, Power Grid Corporation of India Ltd., Lapalang, Shillong- 793006, Meghalaya.
21. The Managing Director, North Eastern Transmission Company Ltd, D-21, 3rd Floor-2C, 217 Corporate Park, DMRC Building, Sector-21, Dwarka, 110077
22. Vice President-Corporate Affairs & BD, ENICL, Sterlite Grid Limited, F-I, The Mira Corporate Suite, Ishwar Nagar, Mathura Road, New Delhi- 110065.

...Respondents

Parties present: Shri Shiv Kumar Sharma, NLDC
Shri Rakesh Kumar, NLDC
Shri Nishdeep Singh, NLDC
Shri Ankit Jain, NERLDC
Ms.Himani Dutta, NERLDC

ORDER

The instant petition has been filed by the Petitioner, North Eastern Regional Load Despatch Centre (NERLDC) 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 NERLDC for the control period from 1.4.2019 to 31.3.2024.

2. The Petitioner has made following prayers:

- “1. Approve the charges for NERLDC, as per para-5 above, for control period 1.4.2019 to 31.03.2024.
2. Approve the CAPEX/ REPEX Plan as mentioned in Annex-IV.
3. Approve the level wise manpower as indicated in Annex-II.
4. 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.
5. 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. The North Eastern Regional Load Despatch Centre (NERLDC) is a statutory body set up under Section 27 of the Electricity Act, 2003 (hereinafter referred to as “the Act”) and performs the functions specified in Section 28 of the Act. NLDC and RLDCs are being operated by Power System Operation Corporation Limited (POSOCO) w.e.f. 1.10.2010 in accordance with the Gazette Notification dated 27.9.2010 and 19.12.2016 notified by the Ministry of Power, Government of India. The working/ functions of the North Eastern Regional Load Despatch Centre are governed by the Act and Regulations of the Central Electricity Regulatory Commission and of the Central Electricity Authority issued and amended from time to time.

b. In exercise of powers conferred under Section 178 read with Section 28(4) of the Act, the Commission vide notification dated 5th April 2019 specified the 2019 RLDC Regulations that are applicable for determination of fees and charges of NLDC and RLDCs for the control period 2019-24.

c. The Commission vide order dated 05.04.2021 in Petition No. 433/MP/2019, has approved the trued-up fees and charges of NERLDC for the period 2014-19.

d. In accordance with Regulation 10(1) of the 2019 RLDC Regulations, NERLDC 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 annual charges of NERLDC 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 annual charges and Corporate Office expenses and Interest on working capital (IWC).

5. The summary of annual charges claimed by the Petitioner in the instant petition for the control period 2019-24 is as follows:

(In Rs. lakh)

Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	Return on Equity	28.77	94.83	194.72	308.49	382.29	1009.10
2	Interest on Loan Capital	-	-	-	-	-	-
3	Depreciation	61.93	110.75	242.97	347.62	436.29	1199.56
4	O&M Expenses excluding Human Resource	495.13	764.58	784.95	806.31	828.67	3679.64
5	Human Resource Expenses including HRD	1762.13	1981.99	2361.11	2672.51	3086.34	11864.09
6	OPEX	35.00	90.00	95.00	107.00	114.00	441.00
7	NLDC Charges and Corporate office expenses	81.63	94.25	119.50	130.86	144.56	570.80
8	Interest on Working Capital	64.13	80.17	95.23	108.04	122.70	470.27
	Total	2528.72	3216.57	3893.49	4480.83	5114.85	19234.46

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 Commission admitted the Petition and directed the Petitioner to serve copy of the Petition on the Respondents. The Petitioner was further directed to submit certain information during the hearing and the same has been furnished by the Petitioner vide affidavit dated 13.3.2020. The Petitioner has also served the copy of the petition upon the respondents.



8. The hearing in the matter was again held on 29.5.2020 through video conferencing and the order was reserved. The Petitioner was directed to submit certain information during the hearing and the same has been furnished by the Petitioner vide affidavit dated 23.6.2020.

9. This order has been issued after considering the main petition dated 4.10.2019, submission of additional information by the Petitioner vide affidavits dated 13.3.2020 and 23.6.2020.

10. Having heard the representatives of the Petitioner and Respondents present at the hearing and having perused the material on record, we proceed to dispose of the instant petition.

DETERMINATION OF ANNUAL CHARGES FOR 2019-24 PERIOD

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

Capital Cost

12. 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 de-capitalized 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.”

13. The capital cost of Rs. 256.38 lakh as on 31.3.2019 was admitted by the Commission vide order dated 5.4.2021 in Petition No. 433/MP/2019. Same capital cost of Rs. 256.38 lakh has been considered as opening capital cost as on 1.4.2019 for NERLDC to determine annual charges in accordance with Regulation 14 of the 2019 RLDC Regulations.

Capital Expenditure (CAPEX) and Replacement Expenditure (REPEX)

14. 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 upto 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.

(3) In relation to any consolidated schemes of CAPEX and REPEX involving one or more RLDCs and/or NLDC, the capital expenditure chargeable to each RLDC and NLDC shall be segregated and considered as a part of capital expenditure of RLDC concerned and NLDC, as the case may be”

15. Total projected capital expenditure (CAPEX) and replacement expenditure (REPEX) submitted by the Petitioner for 2019-24 is Rs.6017.73 lakh (Rs.5883.73 lakh towards CAPEX including CAPEX for backup NERLDC and Rs.134.00 lakh towards REPEX). Further, the Petitioner has submitted that major items are as below:

a) Rs. 1315.77 lakh towards procurement of IT systems (hardware and software). IT systems include general IT infrastructure for main control centre and backup control centre such as DBMS software, servers, storage system, DR, desktops and accessories, CCTV, access system, other software for grid operation, analysis and market management etc.

b) The CAPEX also includes setting up of back up control centre at Guwahati at cost of Rs. 5085.46 lakh towards civil works, electrical works, air conditioning, IT infrastructure and other equipment.

c) The matter regarding setting up of back up control centre for NERLDC at Guwahati was approved by POSOCO Board in its 39th meeting held on 29.1.2015 and following resolution was passed by the Board:

“Resolved that the setting-up of Back-up NERLDC at Guwahati in and around SLDC Assam and procurement of 3.024 Bighas (4044 Sqm.) of land with estimated cost of Rs. 5 Crores for construction of permanent structure there be and is hereby approved.”

“Resolved further that pending construction of permanent structure, suitable temporary space in AEGCL complex or in NPTI complex may be acquired for commissioning of upcoming backup of NERLDC SCADA/EMS system.”

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



CAPEX and REPEX Claimed

(In Rs. lakh)

Description	2019-20	2020-21	2021-22	2022-23	2023-24	Total
CAPEX (Main NERLDC)	380.60	196.20	100.97	47.00	73.50	798.27
CAPEX (Back-up NERLDC)	1.00	1450.76	1406.58	2107.12	120.00	5085.46
REPEX	40.00	64.00	-	-	30.00	134.00
Total	421.60	1710.96	1507.55	2154.12	223.5	6017.73

CAPEX

17. The Petitioner has submitted following CAPEX Plan for main control centre of NERLDC for 2019-24 with estimates of each scheme:

(In Rs. lakh)

Sr. No	Name of the work	Depreciation rate (%)	2019-20	2020-21	2021-22	2022-23	2023-24	Total
2	SCADA/WAMS System							
2a	Hardware							
b	Terminal Server to be installed at Badarpur station	15.00	4.00	-	-	-	-	4.00
c	Portable WAMS	15.00	-	40.00	-	-	-	40.00
	Sub Total 2		4.00	40.00	-	-	-	44.00
3	IT Systems							
3a	Hardware							
a	IT Infrastructure for Disaster Recovery Site Implementation	15.00	-	10.00	-	-	-	10.00
b	IT Infrastructure Upgradation at RLDC (Servers etc)	15.00	203.00	-	-	-	-	203.00
c	Network equipment /LAN Upgradation/ Replacement	15.00	-	15.00	-	-	-	15.00
e	Purchase of Desktops, Laptops and Wireless Presentation System including miscellaneous IT accessories	15.00	32.00	5.00	5.00	5.00	5.00	52.00
g	Video Conference system (Main NERLDC to Backup NERLDC)	15.00	5.00	-	-	-	-	5.00
h	Desktop VC system implementation	15.00	-	5.00	-	-	-	5.00
i	Biometric and Graded Access control for Server Rooms (Integration with Fire Alarm System)	15.00	-	10.00	-	-	-	10.00
j	Procurement of	15.00	6.00	-	-	-	-	6.00



Sr. No	Name of the work	Depreciation rate (%)	2019-20	2020-21	2021-22	2022-23	2023-24	Total
	smart LED/LFD displays							
	Sub Total		246.00	45.00	5.00	5.00	5.00	306.00
3b	Software							
c	Development of web-site and Intranet	15.00	20.00				20.00	40.00
e	Development of Metered Data Processing (MDP - 5 min.)	15.00	5.00					5.00
f	Upgradation of existing software due to regulation changes (WBES, Reporting, MDP, STOA, etc.)	15.00	-	5.00	5.00	5.00	5.00	20.00
g	Development of FTC software	15.00	7.20	-	-	-	-	7.20
h	Visitor Management System	15.00	5.00	-	-	-	-	5.00
i	Software development for DSM, Logbook, Relay Reading, Reporting Software, Fees and Charge , Metering, MIS Software, New Regulation in STOA, Security Desk Reports, Control Room Software like dashboard, Monitoring, Transient Analysis etc, Assets Management System, etc.	15.00	-	-	5.00	5.00	5.00	15.00
	Sub Total		37.20	5.00	10.00	10.00	30.00	92.20
3c	Software License							
c	Acrobat Pro 2017 Perpetual License	15.00	2.50	-	-	-	-	2.50
d	Implementation of MS-Office 365 (subscription-based)	15.00	-	2.50	-	-	-	2.50
e	AutoCAD Licenses	15.00	3.00	-	-	3.00	-	6.00
f	MS Visual Studio Professional 2017	15.00	-	-	0.37	-	-	0.37
g	Vulnerability Assessment software (such as NESSUS, etc.)	15.00	-	-	2.40	-	-	2.40
i	TOAD for ORACLE Sys DBA	15.00	-	-	1.20	-	-	1.20
m	MATLAB	15.00	0.40	8.70	-	-	9.50	18.60
n	Product Support & Software Update Charges for Oracle/ Database Software	15.00	-	-	-	-	-	-



Sr. No	Name of the work	Depreciation rate (%)	2019-20	2020-21	2021-22	2022-23	2023-24	Total
	License, DBMS Admin Services							
	Sub Total		5.90	11.20	3.97	3.00	9.50	33.57
3d	Cyber Security							
a	DR site set Up	15.00	-	10.00	-	-	-	10.00
b	Firewall Licenses	15.00	-	-	-	-	-	-
c	Centralized patch management system	15.00	-	-	-	-	-	-
d	Anti-APT Box for SCADA	15.00	-	12.00	-	-	-	12.00
e	Anti-APT Box for IT	15.00	12.00	-	-	-	-	12.00
f	NAC, WAF, Application whitelisting implementation	15.00	-	25.00	-	-	-	25.00
g	SIEM (IBM Q.RADER or equivalent)	15.00	-	-	50.00	-	-	50.00
	Sub Total		12.00	47.00	50.00	0.00	0.00	109.00
3e	Advanced Software Development							
a	R&D projects on - Block Chain implementation, Artificial Intelligence, Advanced Data Analytics, Office Automation etc.	15.00	-	25.00	25.00	25.00	25.00	100.00
	Sub Total		0.00	25.00	25.00	25.00	25.00	100.00
	Sub Total 3		301.10	133.20	93.97	43.00	69.50	640.77
4	Other Infrastructure							
4a	Safety Equipment							
a	Physical safety equipment such as DFMD, HHMD, luggage scanner, etc. as per IB recommendations	6.33%	15.00	-	-	-	-	15.00
b	Security Cabin as per IB recommendations	6.33%	2.00	-	-	-	-	2.00
c	Fire Suppression System for IT and SCADA server rooms	6.33%	12.00	8.00	-	-	-	20.00
d	Fire Alarm/ Fighting System Up-gradation	6.33%	-	-	2.00	-	-	2.00
	Sub Total		29.00	8.00	2.00	0.00	0.00	39.00
4b	Renovation works							
a	Furniture Procurement	6.33%	22.00	-	-	-	-	22.00
b	Partitioning Work at Main NERLDC	6.33%	17.00	5.00	2.00	2.00	2.00	28.00
c	Water Cooler/Purifier, Canteen equipment	6.33%	1.00	1.00	-	-	-	2.00
d	Library System	6.33%	1.00	1.00	1.00	1.00	1.00	5.00
e	Fitness/ Music/	6.33%	3.00	2.00	1.00	-	-	6.00



Sr. No	Name of the work	Depreciation rate (%)	2019-20	2020-21	2021-22	2022-23	2023-24	Total
	Games equipment, etc.							
	Sub Total		44.00	9.00	4.00	3.00	3.00	63.00
4c	Air-Conditioning							
a	Air-Conditioning Systems	5.28	-	5.00	-	-	-	5.00
	Sub Total		0.00	5.00	-	-	-	5.00
	Sub Total 4		73.00	22.00	6.00	3.00	3.00	107.00
5	Civil works							
a	Civil works in premises	3.33	-	-	-	-	-	-
	Sub Total 5		-	-	-	-	-	-
6	Power Supply							
a	Electrical works/battery replacement for NERLDC	15.00	2.00	0.50	0.50	0.50	0.50	4.00
	Sub-Total 6		2.00	0.50	0.50	0.50	0.50	4.00
7	Communication System							
a	Phones/Mobiles, Other Communication Devices, EPBAX, etc.	6.33	0.50	0.50	0.50	0.50	0.50	2.50
(ii)	Telephone Handset	6.33	-	-	-	-	-	-
	Sub Total 7		0.50	0.50	0.50	0.50	0.50	2.50
	Total (1 to 7)		380.60	196.20	100.97	47.00	73.50	798.27

18. The Petitioner has submitted following CAPEX Plan for back up control centre for NERLDC for 2019-24 with estimates of each scheme:

(In Rs. lakh)

Sr. No	Name of the work	Depreciation rate (%)	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	SCADA systems for Back-up RLDC							
1a	Hardware							
(i)	Commissioning of new Visual Display Unit at new building	15.00	-	-	100.00	-	-	100.00
1b	Software							
2	IT Systems							
2a	Hardware (Category C (M) of Annex-III of Regulations)							
(i)	Office IT Infrastructure of Back-up NERLDC (Desktop, Laptop, Printer, Server, Storage, network, Display etc.)	15.00	-	-	100.00	100.00	10.00	210.00
(ii)	VC system, Voice recording systems,	15.00	-	-	30.00	10.00	-	40.00



Sr. No	Name of the work	Depreciation rate (%)	2019-20	2020-21	2021-22	2022-23	2023-24	Total
	PA systems etc for Back-up RLDC							
(iii)	Building management system/ Advanced Access control and security system for Back-up	15.00	-	5.00	15.00	10.00	-	30.00
(iv)	Cyber Security Measures	15.00	-	-	-	50.00	-	50.00
2b	Software (Category C(N) of Annex-III of Regulations)							
(i)	Utility Software	15.00	-	-	15.00	5.00	5.00	25.00
(ii)	Business Logistics/New Development/DBMS/ Other Software	15.00	-	-	100.00	15.00	5.00	120.00
(iii)	Cyber Security Measures	15.00	-	-	50.00	50.00	-	100.00
	Total on IT & Scada		-	5.00	410.00	240.00	20.00	675.00
3	Power Supply (Category C(C) of Annex-III of Regulations)							
(i)	Electrical works for Back-up RLDC	5.28	-	-	163.08	118.23	-	281.31
(ii)	DG Set for Back-up RLDC	5.28	-	40.00	40.00	-	-	80.00
(iii)	Solar system (500 KWp) for Back-up RLDC	5.28	-	-	-	325.00	-	325.00
	Total on Power Supply		-	40.00	203.08	443.23	-	686.31
4	Civil Works(Category C(A)of Annex-III of Regulations)							
(i)	Office Building 1st phase construction	3.34	-	1317.37	-	-	-	1317.37
(ii)	Interiors like Tiles, marbles, wooden fittings for acoustic system of auditorium/conference rooms, partition glass works, partitions without brickwork, other decorative works etc.	3.34	-	-	200.00	-	100.00	300.00
(iii)	Office Building 3rd & 4th Floor construction	3.34	-	-	-	1100.02	--	1100.02
(iv)	Office Building, consultancy to CPWD @ 4.25 % of total cost	3.34	-	55.99	21.87	13.95		91.81
(v)	Office Building, consultancy to AEC (inclusive of taxes)	3.34	-	32.40	-	-	-	32.40



Sr. No	Name of the work	Depreciation rate (%)	2019-20	2020-21	2021-22	2022-23	2023-24	Total
	Total on Civil Works		-	1405.76	221.87	1113.97	100.00	2841.60
5	Air conditioning System (Category C(l) of Annex-III of Regulations)							
(i)	Air Conditioning Static	5.28	1.00	-	151.62	109.93	-	262.55
6	Other Infrastructure, including Equipment (Category C(j) of Annex-III of Regulations)							
(i)	Furnitures for Back-up RLDC	6.33	-	-	400.00	200.00	-	600.00
(ii)	Fitness/ Music/ Games Equipment, etc.	6.33	-	-	10.00	-	-	10.00
(iii)	Fire-fighting/ Additional Safety System	6.33	-	-	10.00	-	-	10.00
	Total on Other Infrastructure		-	-	420.00	200.00	-	620.00
	Total On Back-up RLDC (Excluding IT & SCADA)		1.00	1445.76	996.58	1867.12	100.00	4410.46
	Grand Total on Back-up RLDC		1.00	1450.76	1406.58	2107.12	120.00	5085.46

19. The Petitioner has submitted following REPEX Plan of NERLDC for 2019-24 with estimates of each scheme:

(In Rs. lakh)

Sr. No	Name of the work	Depreciation rate (%)	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	IT Systems							
1a	Hardware							
a	Network equipment /LAN Upgradation/Replacement	15.00	-	30.00	-	-	-	30.00
b	Purchase of Desktops, Laptops and Wireless Presentation System including miscellaneous IT accessories	15.00	5.00	-	-	-	30.00	35.00
c	CCTV & Surveillance system	15.00	30.00	-	-	-	-	30.00
	Sub Total 1		35.00	30.00	-	-	30.00	95.00
2	Other Infrastructure							
2a	Safety Equipment							
a	Fire Alarm/ Fighting System Upgradation	6.33	3.00	-	-	-	-	3.00
	Sub Total		3.00	-	-	-	-	3.00
2b	Air-Conditioning							



a	Air-Conditioning Systems	5.28	2.00	34.00	-	-	-	36.00
	Sub Total		2.00	34.00	-	-	-	36.00
	Sub Total 2		5.00	34.00	-	-	-	39.00
	Total (1 to 2)		40.00	64.00	-	-	30.00	134.00

20. Regulation 10(5) 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. We have perused the submissions of the Petitioner regarding CAPEX and REPEX and the same are analyzed below.

CAPEX for Main control centre of NERLDC

22. The Petitioner has proposed CAPEX of Rs. 44 lakh for ‘Terminal server at Badarpur Station’ and ‘Portable WAMS’ under SCADA/WAMS system (hardware) head. The Petitioner has proposed Rs.306 lakh for IT infrastructure up-gradation at RLDC (servers etc.), network equipment/ LAN up-gradation/ replacement, video conferencing systems, biometric and graded access control for server rooms etc. under IT systems (hardware).

23. The Petitioner has proposed CAPEX of Rs. 92.20 lakh for development of website and intranet, development of metered data processing, development of FTC software, visitor management system, software development for DSM, logbook, relay reading, reporting software, MIS software, security desk reports, control room software like dashboard monitoring, transient analysis, assets management system etc. under IT systems (software). The Petitioner has also proposed CAPEX of Rs. 33.57 lakh for different software licenses such as Acrobat pro 2017 perpetual



license, AutoCAD license, implementation of MS-Office 365 (subscription-based), MS Visual Studio, MATLAB etc.

24. Under 'Cyber Security' sub-head, the Petitioner has proposed Rs 109 lakh for DR site setup, anti-APT box for SCADA, anti-APT box for IT, NAC, WAF, application whitelisting implementation and SIEM (IBM QRADER or equivalent). For advanced software development, the Petitioner has proposed R&D projects on blockchain implementation, artificial intelligence, advanced data analytics, office automation etc. for Rs 100 lakh.

25. The Petitioner has also proposed Rs 39 lakh in sub-head 'Safety Equipment', Rs. 63 lakh under sub-head 'Renovation works' under head 'Other Infrastructure'. The Petitioner has proposed Rs 5 lakh for air conditioning and Rs. 4 lakh for electrical works/ battery replacement for NERLDC and Rs. 2.5 lakh for communication.

26. It is observed that the Petitioner has taken 15% depreciation for CAPEX of Rs 4 lakh in electrical works/ replacement of battery of NERLDC which is the depreciation rate for batteries as per Appendix-III of the 2019 RLDC Regulations. Therefore, it is construed that the Petitioner is proposing this expenditure for replacement of battery. The expenditure of Rs 4 lakh is not allowed under CAPEX and rather is considered in REPEX.

27. We observe that the Petitioner has submitted resolution of the Board of POSOCO for approved 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 for 2019-24 period. IT software, hardware and communication system being crucial elements for functioning of NERLDC and the



same having been justified by the Petitioner along with their costing details, we allow these expenditures on projection basis subject to true-up.

28. Based on the above, we allow following CAPEX for main control centre of NERLDC for the control period 2019-24:

(In Rs. lakh)

Year	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Claimed	380.60	196.20	100.97	47.00	73.50	798.27
Not allowed* (Electrical works/ Replacement of Batteries)	20	0.50	0.50	0.50	0.50	4.00
Allowed	378.60	195.70	100.47	46.50	73.00	794.27

*Shifted to REPEX

CAPEX for Back up control centre of NERLDC

29. The Petitioner has submitted separate CAPEX requirement for back up control centre of NERLDC. The Petitioner has proposed CAPEX of Rs. 675 lakh on IT and SCADA systems for 'Commissioning of new Visual Display Unit', office IT Infrastructure of back up control centre of NERLDC (desktop, laptop, printer, server, storage etc.), VC system, voice recording, PA system, building management system (BMS) and cyber security measures.

30. The Petitioner has proposed CAPEX of Rs. 686.31 lakh under 'Power Supply' head for electrical works, DG (diesel generator) set and solar system (500 kWp).

31. Under 'Civil Works' head, the Petitioner has proposed Rs. 1317.37 lakh for 'Office Building 1st phase construction' in FY 2020-21 and Rs 300 lakh for interiors like tiles, marble etc. The Petitioner has also proposed CAPEX of Rs. 1100.02 lakh for 'Office Building 3rd and 4th Floor construction' in FY 2022-23. The Petitioner has proposed CAPEX of Rs. 91.81 lakh for 'Office Building consultancy to CPWD



@4.24% of total cost' and Rs. 32.40 lakh for 'Office Building consultancy to AEC (inclusive of taxes)'.

32. The Petitioner has proposed Rs. 262.5 lakh for 'Air Conditioning Static' and Rs 620 lakh for furniture of back up control centre of NERLDC, fitness equipment and fire fighting/ additional safety system.

33. The Petitioner has submitted matter regarding setting up of Back-Up NERLDC at Guwahati was approved by POSOCO Board in its 39th meeting held on 29th January, 2015 and the interim back-up NERLDC in a temporary space in AEGCL (Assam Electricity Grid Corporation Ltd.) complex was made operational on 11.11.2016. Parallel action commenced for the permanent building and initial tentative cost of the same was included in the CAPEX plan for control period 2014-19. Acquisition of land was completed on 31.03.2017. However, in view of delay in the process of obtaining various permissions/ clearances from different authorities of the State Government, the construction of permanent building could not be done during the previous control period and the backup control centre continued to be operated from the temporary office setup at AEGCL complex. The permanent structure is envisaged to be completed during 2019-24 control period. MoU (Memorandum of Understanding) for construction of permanent structure has been signed with CPWD (Central Public Works Department) dated 16.2.2018 and first phase of the project is scheduled to be completed by 2020-21.

34. We observe that the Petitioner was allowed CAPEX for construction of back up control centre of NERLDC in previous control period i.e. 2014-19. The Petitioner has purchased land but delay in construction of building was due to delay in various clearances and the Petitioner couldn't utilize the CAPEX allowed. Therefore, there



was deviation in CAPEX in previous Control Period i.e. 2014-19 for which the Petitioner had provided reasons and justification in Petition No. 433/MP/2019.

35. We observe that the Petitioner has submitted resolution of the Board of POSOCO for approved CAPEX Plan for back up control centre of NERLDC. 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. SCADA system, IT software and hardware and building related civil works being crucial elements for functioning of back up control centre of NERLDC and the same having been justified by the Petitioner along with their costing details, we allow these expenditures on projection basis subject to true-up. We direct the Petitioner to submit details of expenses against office building consultancy to CPWD and AEC, along with justification at the time of truing up.

36. Based on the above analysis, we allow following CAPEX for back up control centre of NERLDC:

(In Rs. lakh)

Year	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
CAPEX Claimed for back up control centre of NERLDC	1.00	1450.76	1406.58	2107.12	120.00	5085.46
CAPEX Allowed for back up control centre of NERLDC	1.00	1450.76	1406.58	2107.12	120.00	5085.46

REPEX

37. The Petitioner has proposed REPEX of Rs. 95 lakh for network equipment/ LAN up-gradation/ replacement, purchase of desktops, laptops and wireless presentation system including miscellaneous IT accessories and CCTV & surveillance system under IT hardware. The Petitioner has also proposed Rs 39



lakh for 'Fire Fighting System' and 'Air Conditioning'. Thus, a total REPEX of Rs. 134 lakh for the control period 2019-24 has been claimed.

38. As per Regulation 8(2)(b) of the 2019 RLDC Regulations, the Petitioner is required to submit details of completion of life of existing asset, cumulative depreciation recovered, date of replacement, cumulative repayment of loan up to the 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 REPEX. We observe that the Petitioner has submitted Resolution of Board of POSOCO for REPEX Plan. However, the Petitioner has not provided other details i.e. completion of life of existing asset, cumulative depreciation recovered, date of replacement, cumulative repayment of loan up to the date of replacement, writing off of the gross value of the original assets from the original fixed assets.

39. The proposed expenditure under REPEX for Control Period 2019-24 is allowed with a direction to submit the details as stated above at the time of true up along with justification and due diligence taken at the time of procurement in each scheme. The Petitioner is also directed to submit the background note approved by the Board which includes the approved projected figures along with true up petition.

40. As per the above discussion, allowed REPEX for the control period 2019-24 is as follows:

(In Rs. lakh)

Year	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
REPEX Claimed	40.00	64.00	-	-	30.00	134.00
REPEX allowed in view of dis-allowed (Electrical works/	2.00	0.50	0.50	0.50	0.50	4.00



Replacement of Batteries)						
Total REPEX Allowed	42.00	64.50	0.50	0.50	30.50	138.00

41. Summary of CAPEX and REPEX allowed for Control Period 2019-24 are as below:

(in Rs. lakh)

Year	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
CAPEX Allowed for Main ERLDC	378.60	195.70	100.47	46.50	73.00	794.27
CAPEX Allowed for Back-up ERLDC	1.00	1450.76	1406.58	2107.12	120.00	5085.46
REPEX allowed	42.00	64.50	0.50	0.50	30.50	138.00
Total Allowed	421.60	1710.96	1507.55	2154.12	223.50	6017.73

42. 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 Regulations 10(5) read with Regulation 12 and Regulation 8(2)(b) of the 2019 RLDC Regulations at the time of true up.

De-capitalisation

43. 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.”

44. The Petitioner has submitted the relevant Forms and as per Form ‘Calculation of Annual Depreciation’, details of de-capitalization is submitted as below:



(in Rs. lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24	TOTAL
De-capitalization	2.94	3.53	-	-	2.41	8.88

Net Additional Capitalisation

45. 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:

(in Rs. lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24	TOTAL
Net Additional capitalization	418.66	1707.43	1507.55	2154.12	221.09	6008.85

Debt-Equity Ratio

46. 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 Southern Regional 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.”

47. The Commission vide order dated 5.4.2021 in Petition No. 433/MP/2019 has trued up the fees and charges for the period 2014-19 and admitted debt-equity ratio of 70.32:29.68 as on 31.3.2019. The same debt-equity ratio has been considered as on 1.4.2019.

48. 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 CAPEX and REPEX shall be funded through debt (from LDCD funds) and 30% of CAPEX and REPEX shall be funded through equity capital. The Petitioner, vide Form 3C, has submitted that de-capitalisation during 2019-24 period is in debt-equity ratio of 70.32:29.68. Therefore, we have considered debt-equity ratio for the additional capitalisation and de-capitalisation in the ratio of 70:30 and 70.32:29.68 respectively for 2019-24 control period.

49. After removing the debt and equity in respect of the de-capitalised assets from the respective debt and equity of the CAPEX and REPEX, the equity of the net addcap was restricted to 30% as per clause 3 of Regulation 16 of the 2019 RLDC Regulations.

50. The details of the debt and equity considered as on 1.4.2019 and 31.3.2024 for the purpose of annual charges of NERLDC for the 2019-24 period is as follows:

(in Rs. lakh)

Particular	Capital cost as on 1.4.2019		Capital cost as on 31.3.2024	
	Amount	%	Amount	%
Debt	180.28	70.32	4386.46	70.01
Equity	76.09	29.68	1878.77	29.99



Total	256.38	100.00	6265.22	100
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Return on Equity (ROE)

51. Regulation 19 of the 2019 RLDC Regulations provides as follows:

“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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

52. The Petitioner has submitted that 30% of the capital cost for the period 2019-24 shall be met 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%.

53. Regulation 27(6) of 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”



54. 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, year-wise ROE allowed has been worked out as per the 2019 RLDC Regulations as follows:

(Rs. In lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	76.09	201.69	713.93	1166.20	1812.43
Addition due to Additional Capitalization after considering de-capitalisation	125.60	512.24	452.26	646.24	66.33
Closing Equity	201.69	713.93	1166.20	1812.43	1878.77
Average Equity	138.89	457.81	940.06	1489.31	1845.60
Return on Equity (Base Rate) %	15.50%	15.50%	15.50%	15.50%	15.50%
Effective Tax rate %	25.170%	25.170%	25.170%	25.170%	25.170%
Rate of Return on Equity (Pre-tax) %	20.714%	20.714%	20.714%	20.714%	20.714%
Return on Equity (Pre-tax)	28.77	94.83	194.72	308.50	382.30

55. 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)

56. The Petitioner has submitted that as per the Regulation 20 of the 2019 RLDC Regulations, Interest on Loan is to be calculated on the loan component of the capital cost and normative loan outstanding as on 1.4.2019. There is no Interest of Loan component for control period 2019-24 as funding of loan portion of the capital is proposed from the LDCD Fund and there is no loan outstanding of the previous control period.

57. Accordingly, Interest on Loan component of Annual Charges is nil.

Depreciation



58. The Petitioner has submitted that depreciation has been calculated 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.

59. Regulations 21 of the 2019 RLDC Regulations provides as follows:

“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 Southern Regional 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.”

60. 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 is as follows:

(Rs. in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	256.38	675.04	2382.47	3890.01	6044.13
Additional Capital expenditure/reduction due to decapitalisation during 2019-24	418.66	1707.43	1507.55	2154.12	221.09
Closing Gross Block	675.04	2382.47	3890.01	6044.13	6265.22
Average Gross Block	465.71	1528.75	3136.24	4967.07	6154.68
Average Gross Block of 90% Depreciable assets	71.82	863.77	2116.80	3554.15	4541.71
Average Gross Block of 100% Depreciable assets	393.88	664.98	1019.44	1412.92	1612.97
Weighted Average Rate of Depreciation (%)	13.4359%	8.5767%	7.5502%	7.2871%	7.0406%
Depreciable Value (excluding IT equipment and software)	64.64	777.39	1905.12	3198.74	4087.54
Depreciable value of IT equipment and software	393.88	664.98	1019.44	1412.92	1612.97
Total Depreciable Value	458.52	1442.37	2924.56	4611.66	5700.51
Remaining Depreciable Value	194.83	1113.09	2460.53	3910.83	4637.73
Depreciation	62.57	131.12	236.79	361.95	433.32
Cumulative Depreciation/ Advance against Depreciation	329.29	464.03	700.83	1062.78	1498.58

Operation and Maintenance Expenses (O&M Expenses)

61. The Petitioner has submitted that O&M charges have been calculated as per Regulation 22 of the Fees and Charges Regulations 2019. Normalized O&M expenses of 2014-19 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 which is escalated at 4.77% to arrive at the O&M expenses for the year 2019-20. 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 i.e. FY 2018-19 of the control period 2014-19. Thereafter, the head-wise O&M expenses for the FY 2019-20 have been escalated at 4.77% to arrive at the O&M expenses for subsequent years.

62. The Petitioner has submitted that SCADA/AMC charges have been added on the basis of LOAs awarded and amendments under process, on account of increase in scope of work in supply contract, in accordance with the Regulation 22(5) of the 2019 RLDC Regulations. Other than the above, as per Government guidelines CISF needs to be deployed at NERLDC Shillong Office for security reasons. The preliminary survey has been conducted by CISF and as per initial estimate, the additional expenses on account of deployment of CISF has been considered as a part of O&M expenditure. Accordingly, a sum of Rs. 2.5 crore per annum for FY 2020-21 to FY 2023-24 has been added as additional expenditure towards watch and ward.

63. The summary of Operation and Maintenance expenses (O&M Expenses) as claimed by the Petitioner for the period 2019-24 is as follows:

(In Rs Lakh)ITEMS	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Repairs & Maintenance Expenses (R&M Expenses)	163.44	167.06	170.87	174.85	179.02	855.24
Administrative and General Expenses (A&G Expenses)	331.69	597.51	614.09	631.45	649.65	2824.40
Total	495.13	764.58	784.95	806.31	828.67	3679.64

64. Break-up of R&M Expenses claimed by the Petitioner is as under:

	(In Rs lakh)					
Account Head	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Consumption of Stores and Spares	1.74	1.82	1.91	2.00	2.10	9.58
Plant and Machinery Repairs and	0.01	0.01	0.01	0.01	0.01	0.04



Maintenance						
Civil Works repairs and maintenance	52.16	54.65	57.25	59.98	62.85	286.89
Others(Specify)	22.18	23.24	24.34	25.51	26.72	121.99
Sub-Total	76.09	79.71	83.52	87.5	91.67	418.49
AMC SCADA	87.35	87.35	87.35	87.35	87.35	436.75
Total	163.44	167.06	170.87	174.85	179.02	855.24

65. Break-up of A&G Expenses claimed by the Petitioner is as under:

(In Rs lakh)

Account Head	2019-20	2020-21	2021-22	2022-23	2023-24	Total
PROPERTY RELATED EXPENSES						
Rent	3.34	3.50	3.67	3.85	4.03	18.39
Rates and Taxes	0.07	0.08	0.08	0.08	0.09	0.40
Insurance	0.44	0.46	0.48	0.50	0.53	2.40
Sub Total	3.85	4.04	4.23	4.43	4.64	21.20
COMMUNICATION						
Telephone and Trunk Call	6.02	6.31	6.61	6.93	7.26	33.13
Postage and Telegram	0.55	0.58	0.60	0.63	0.66	3.03
Courier Charges	0.05	0.05	0.05	0.06	0.06	0.27
Other (Internet Leased Line Charges)	15.02	15.73	16.48	17.27	18.09	82.60
Sub Total	21.64	22.67	23.75	24.89	26.07	119.02
PROFESSIONAL CHARGES						
Consultancy Charges	2.65	2.77	2.91	3.04	3.19	14.56
Technical Fees	4.74	4.96	5.20	5.45	5.71	26.05
Audit Fees	1.82	1.91	2.00	2.09	2.19	10.02
Other Charges	0.87	0.92	0.96	1.01	1.05	4.81
Sub Total	10.08	10.56	11.06	11.59	12.14	55.44
CONVEYANCE AND TRAVELLING						
Conveyance Charges	20.94	21.94	22.99	24.09	25.23	115.19
Travelling Charges	60.85	63.75	66.79	69.98	73.31	334.67
Hire Charges of Vehicle	7.04	7.38	7.73	8.10	8.49	38.74
Sub Total	88.83	93.07	97.51	102.16	107.03	488.61
OTHER EXPENSES						
Electricity Charges	44.21	46.32	48.53	50.84	53.27	243.17
Fees and Subscription	0.16	0.17	0.18	0.19	0.20	0.89
Books and Periodicals	0.57	0.59	0.62	0.65	0.68	3.12
Printing and Stationery	4.46	4.67	4.90	5.13	5.37	24.54



Account Head	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Advertisement	2.63	2.76	2.89	3.03	3.17	14.47
Entertainment	1.47	1.54	1.61	1.69	1.77	8.06
Watch and Ward	75.65	329.25	333.03	336.99	341.14	1416.06
Miscellaneous	57.24	59.97	62.84	65.83	68.97	314.86
Organisational Development Expenses	14.52	15.22	15.94	16.70	17.50	79.88
Sub Total	200.91	460.49	470.53	481.05	492.07	2105.04
ADDITIONAL EXPENSES						
EDP Expenditure	6.38	6.68	7.00	7.34	7.69	35.09
Sub Total	6.38	6.68	7.00	7.34	7.69	35.09
Total	331.69	597.51	614.09	631.45	649.65	2824.40

66. The Petitioner in compliance of RoP (record of proceedings) of hearing dated 25.2.2020 has submitted details of actual R&M Expenses and A&G Expenses of 1st six months of FY 2019-20 and expected R&M Expenses and A&G Expenses for balance six months of FY 2019-20.

67. The Petitioner in compliance of RoP of hearing dated 29.05.2020 has submitted that expenses on other heads such as donation, loss-in-inventory, claims and advances written-off, provisions, etc. been 'NIL' during the control period 2014-19. The Petitioner also submitted that provision for bad loans of Rs. 8.75 lakh is excluded in O&M expenses of 2014-19 period before using them for calculation of O&M cost for 2019-24.

68. Regulation 22 of 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.”

69. Further, Regulation 24(10) of the 2019 RLDC Regulations states following:

“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.”

70. Regulation 22(2) of the 2019 RLDC Regulations provides for normalisation of O&M expenses for the period 2014-2019. The Petitioner has stated that provision for bad loans is not included in the O&M expenditure and is already excluded in the Auditor Certificate. The Petitioner had also excluded cost of AMC of SCADA from the figures of O&M expenses as per Auditor Certificate for 2014-19 period. The O&M expenses for period 2014-19 have been normalised considering disallowed expenditure in order dated 5.4.2021 in Petition No. 433/MP/2019 (true-up petition of NERLDC fees and charges for the period 2014-19) such as rebate to customer. The



expenditure claimed under organizational development and training expenses in Petition No. 433/MP/2019 have also been excluded, as these expenses shall be considered under HRD expenses during the 2019-24 control period. 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.

71. From the data submitted for actual R&M expenses and A&G expenses of 1st 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 training or organisational development under HRD Expenses and not in O&M Expenses.

AMC of SCADA

72. The Petitioner has projected expenses on AMC of SCADA as under:

						(in Rs lakh)
Items	2019-20	2020-21	2021-22	2022-23	2023-24	Total
AMC of SCADA	87.35	87.35	87.35	87.35	87.35	436.75

73. The Petitioner has submitted that AMC of SCADA have been added on the basis of LOAs awarded in accordance with the Regulation 22(5) of the 2019 RLDC Regulations. Although the Petitioner has not submitted documentary proof of the same, we observe that expenses on AMC of new SCADA in FY 2018-19 of 2014-19 Control Period was Rs. 91.44 lakh and the Petitioner has projected Rs. 87.35 lakh/annum as expenses on AMC of SCADA for 2019-24 period. The Petitioner has also submitted that expenses on AMC of SCADA for the first six months of 2019-20



was Rs. 21.97 lakh and the same expected for balance six months of 2019-20 is Rs. 33.27 lakh. This translates to Rs. 55.24 lakh for FY 2019-20, which is lower than as projected by the Petitioner for 2019-20. Therefore, we allow Rs. 55.24 lakh for FY 2019-20 and Rs. 87.35 lakh/annum for rest of the Control Period as follows subject to truing up and submission of details by the Petitioner at the time of true-up:

(In Rs Lakh)

Items	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Allowed AMC of SCADA	55.24	87.35	87.35	87.35	87.35	404.64

74. As per Regulation 22(4) of the 2019 RLDC Regulations, escalation rate is to be worked out considering compounded growth rate, inflation rate and rationalization of O&M expenses. We observe that compounded annual growth rate (CAGR) of normalized O&M expenses for the control period 2014-19 works out as 21.73% whereas the Petitioner has considered escalation rate of 4.77% to arrive at the O&M expenses of FY 2019-20. Considering CAGR of 21.73% for previous control period, it would not be prudent to consider escalation rate as 4.77% to arrive at the O&M expenses of FY 2019-20. Further, considering that POSOCO has come into existence only in 2017 and is a growing organisation, escalation of 21.73% has been considered to arrive at O&M Expenses for the FY 2019-20.

75. The above arrived O&M 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 2020-2024.

76. We observe that the Petitioner has claimed Rs 250 lakh/annum for FY 2020-21 to FY 2023-24 for expenses on CISF in watch & ward sub-head of A&G



Expenses. The Petitioner has stated that as per Government guidelines, CISF needs to be deployed at NERLDC Shillong Office for security reasons. Preliminary survey has been conducted by CISF and as per initial estimates, the additional expenses on account of deployment of CISF has been considered as a part of O&M expenditure. Although, we are satisfied by the justification given by the Petitioner for these additional expenses, the Petitioner has not indicated whether any expenses on CISF security were part of A&G expenses in previous control period. Therefore, assuming that the Petitioner had not incurred such expenses in previous control period i.e. 2014-19 under O&M Expenses, we have added these additional expenses to the expenses under 'Watch and Ward' sub-head derived from normalized A&G expenses of previous control period i.e. 2014-19. The Petitioner is directed to submit details of security expenses towards CISF deployed and actually incurred along with justifications at the time of truing up. Accordingly, O&M expenses allowed are calculated as under:

(In Rs lakh)

Year	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
O&M Expenses excluding AMC of SCADA and CISF expenses	423.2	443.38	464.53	486.69	509.91	2327.71
CISF Expenses in watch and ward	-	250.00	250.00	250.00	250.00	1000.00
AMC of SCADA	55.24	87.35	87.35	87.35	87.35	404.64
Total O&M Expenses 2019-24	478.44	780.73	801.88	824.04	847.26	3732.35

77. Head-wise break up of allowed R&M Expenses and A&G Expenses for Control Period 2019-24 are as follows:

(In Rs. lakh)

Repairs and Maintenance Expenses proposed to be allowed for Control Period 2019-24						
Account Head	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Total R&M excluding AMC SCADA	88.46	92.68	97.10	101.73	106.59	486.57
AMC SCADA	55.24	87.35	87.35	87.35	87.35	404.64



Total	143.70	180.03	184.45	189.08	193.94	891.21
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Administrative and General Expenses proposed to be allowed for Control Period 2019-24						
Account Head	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
PROPERTY RELATED EXPENSES	4.18	4.38	4.58	4.80	5.03	22.97
COMMUNICATION	24.76	25.94	27.17	28.47	29.83	136.16
PROFESSIONAL CHARGES	11.53	12.08	12.66	13.26	13.89	63.42
CONVEYANCE AND TRAVELLING	101.62	106.47	111.55	116.87	122.45	558.96
OTHER EXPENSES	192.65	451.84	461.47	471.55	482.12	2059.62
Total	334.73	600.70	617.43	634.96	653.32	2841.14

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

(In Rs. lakh)

Allowed O&M Expenses 2019-24						
ITEMS	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Repairs and maintenance Expenses (R&M)	143.70	180.03	184.45	189.08	193.94	891.21
Administrative and general Expenses (A&G)	334.73	600.70	617.43	634.96	653.32	2841.14
TOTAL	478.44	780.73	801.88	824.04	847.26	3732.35

79. The Petitioner is directed to submit the details of O&M Expenses incurred including details of actual AMC of SCADA and security expenses on CISF during 2019-24 at the time of true up. Further, it is observed that since additional manpower for 2019-24 is not being approved in this order which shall be approved separately, O&M expenses may undergo change depending on the actual manpower in the control period. Therefore, O&M Expenses are allowed, subject to true up.

Operational Expenditure (OPEX)

80. The Petitioner has submitted OPEX expenditure plan for 2019-24 as under:

(In Rs. lakh)



Sl. No.	Name of the Work	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
1	SCADA/WAMS systems						
1a	Software						
	Sub-Total 1	-	-	-	-	-	-
2	IT Systems						
2a	Software						
c	Leased Lines (internet) of Main & Back Up NERLDC	25.00	35.00	35.00	45.00	45.00	185.00
d	Forecasting Services	-	5.00	5.00	5.00	5.00	20.00
e	Weather Data Services	-	5.00	5.00	5.00	5.00	20.00
	Sub Total	25.00	45.00	45.00	55.00	55.00	225.00
2b	Software License						
a	Product Support & Software Update Charges for Oracle/ Database Software License, DBMS Admin Services	-	25.00	25.00	27.00	29.00	106.00
b	Other Licensee Fees (Office 365, Antivirus/end point protection, business messenger service) including digital library subscriptions	5.00	5.00	5.00	10	10	35.00
	Sub Total	5.00	30.00	30.00	37.00	39.00	141.00
2c	Cyber Security						
a	Firewall Licenses	-	10.00	15.00	-	-	25.00
b	Cyber security services	5.00	5.00	5.00	15.00	20.00	50.00
	Sub Total	5.00	15.00	20.00	15.00	20.00	75.00
	Sub Total 2	35.00	90.00	95.00	107.00	114.00	441.00
	Total (1 to 2)	35.00	90.00	95.00	107.00	114.00	441.00

81. Regulation 23 of the 2019 RLDC Regulations provides as under:

“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.”

82. The Petitioner has submitted as under:

- (a) Rs. 185 lakh for “Leased Lines (internet) of Main & Back-up NERLDC”: Internet lease lines are critical for operation of IT infrastructure as many critical applications for grid operation are web-based and needs internet for operation. Considering the criticality of NERLDC IT infrastructure, process to establish



dual redundant internet lease lines for Main control centre and back up control centre of NERLDC has been planned. After establishment of permanent building infrastructure at Guwahati, the dual redundant internet lease lines for back up control centre of NERLDC shall also be required and the same has been considered under OPEX. NERLDC has also proposed Rs 20 lakh each for Weather Data Services, Forecasting Services.

(b) Rs. 106 lakh for “Product Support & Software Update Charges for Oracle/ Database Software License, DBMS Admin Services” and Rs 35 lakh for “Other Licensee Fees (Office 365, Antivirus/end point protection, business messenger service) including digital library subscriptions”: NERLDC IT infrastructure is using enterprise versions of Oracle, MySQL etc. databases for many critical applications. Databases of all these applications need maintenance and administration. Thus, product support, license fees and DBA charges for database management software has been considered. Other than the above, License fee for other software, tools for knowledge up-gradation including charges for digital library subscriptions have also been considered for OPEX plan of 2019-24.

(c) Rs. 25 lakh for “Firewall Licenses” and Rs. 50 lakh for “Cyber security services”: Strengthening of cyber security is a continual process and cyber security services such as security information management service, license fees towards firewall and advanced threat protection etc. expenditure have been envisaged during the control period.

83. 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 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 proof of actual expenditures along with justification and due diligence taken in procurement of services at the time of true up. OPEX allowed is as under:

(In Rs. lakh)

FY	2019-20	2020-21	2021-22	2022-23	2023-24	Total
OPEX	35.00	90.00	95.00	107.00	114.00	441.00

Human Resource Expenses (HR Expenses)

84. Regulation 24 of the 2019 RLDC Regulation provides following:

“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.”

85. The Summary of HR Expenses claimed by the Petitioner for period 2019-24 is as follows:

(In Rs. lakh)

Account Head	2019-20	2020-21	2021-22	2022-23	2023-24	2019-24
HR Expenses	1678.22	1887.61	2248.68	2545.25	2939.37	11299.14
Human Resource Development (HRD)	83.91	94.38	112.43	127.26	146.97	564.96
Total including HRD	1762.13	1981.99	2361.11	2672.51	3086.34	11864.10

86. The Petitioner has submitted that costs under provisions for Certificate Linked Incentive (CLI) 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. The Petitioner has further requested that the impact of IND AS adjustments, under “Staff Welfare” head, inadvertently excluded in the 2014-19 period, may be considered for arriving at the expenses of 2019-24 period. The Petitioner has submitted that expenses on heads like ex-gratia, 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.



87. The Petitioner has submitted that normalized HR expenses of 2017-18 and 2018-19 have been escalated at the rate of 4.77% and then averaged to arrive at the normalized average HR expenses at 2018-19 level. Same escalation rate has been considered for escalating the average normalized HR expenses of 2018-19 level to arrive at the HR expenses for the year 2019-20. 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. 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 2020-24 considering escalation rate of 4.77% and projected manpower.

88. The Petitioner has submitted that Human Resource Development (HRD) expenses have been considered as 5% of HR expenses in line with Regulation 24(10) of the 2019 RLDC Regulations.

89. The broad reasons submitted by the Petitioner for increase in the projected manpower are 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. Also, increasing thrust on renewables and their integration to the grid will require additional manpower.

(c) Additional Manpower is required for additional works/ responsibilities including establishing Renewable Energy Management Centres, which are scheduled to come up in Southern Regional Load Despatch Centre, Northern Regional Load Despatch Centre, Western Regional Load Despatch Centre, and the National Load Despatch Centre.

(d) As per POSOCO's manpower philosophy, recruitment is generally carried out at trainee level and apart from immediate requirement in the current year, vacancies at higher levels are largely envisaged to be filled through internal career progression.

90. The Petitioner has submitted that actual manpower of NERLDC as on 31.03.2019 was 70 and the manpower projected as on 31.03.2024 is 122. Projected manpower as submitted by the Petitioner for NERLDC is as follows:

Manpower Projections			
NERLDC	Executive	Non-Executive	Total
Total Manpower as on 31.3.2019 (Petition No. 344/MP/2018)	61	9	70
FY 2019-20	72	13	85
FY 2020-21	78	13	91
FY 2021-22	90	13	103
FY 2022-23	98	13	111
FY 2023-24	109	13	122

91. 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.”

92. 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.

93. 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. Normalized HR expenses of FY 2017-18 and FY 2018-19 have been considered by excluding disallowed expenses on Certificate Linked Incentive (CLI) in order dated 5.4.2021 in Petition No. 433/MP/2019. However, liberty is granted to the Petitioner to book expenses for payment of Certificate Retainer-ship amount as part of HR Expenses based on actuals at the time of true up.

94. HR Expenses are segregated in two categories - executive and non-executive. The audited HR Expenses against each category for FY 2017-18 and FY 2018-19 are taken as basis of calculation. 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 years.

95. As per Regulation 24(4) of the 2019 RLDC Regulations, 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.

96. Regulations 24(6), 24(7) and 24(8) of the 2019 RLDC Regulations provide that the escalation rate for arriving at expenses of 2019-20 and subsequent years of 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 NERLDC is not being approved in the instant order, HR expenses are allowed on provisional basis based on actual manpower of 2018-19 as submitted by the Petitioner and with an escalation rate of 4.77%, to arrive at HR Expenses for each of the year of the control period of 2019-24.

97. 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.

98. As per Regulation 24(10) of the 2019 RLDC Regulations, Human Resource Development (HRD) expenses are being considered @5% of HR expenses subject to true up.

99. Accordingly allowed HR Expenses worked out for Petitioner for Control Period 2019-24 are as follows:

(In Rs. lakh)

HR Expenses allowed provisionally for 2019-24					
FY	2019-20	2020-21	2021-22	2022-23	2023-24
HR Expenses allowed with escalation @4.77%	1514.88	1587.14	1662.85	1742.17	1825.27
HRD Expenses Allowable @ 5% of Total HR Expenses	75.74	79.36	83.14	87.11	91.26
Total HR Expenses allowed	1590.63	1666.50	1745.99	1829.28	1916.53

NLDC Charges & its Apportionment

100. NLDC charges have been apportioned as under vide Order dated 16.4.2021 in Petition No. 375/MP/2019:

“(In Rs. lakh)”



Region	Peak demand met (%)	2019-20	2020-21	2021-22	2022-23	2023-24
NRLDC	32.04%	2012.76	2268.20	2721.79	2851.01	2843.00
WRLDC	28.97%	1819.90	2050.87	2461.00	2577.83	2570.59
ERLDC	11.80%	741.28	835.35	1002.41	1050.00	1047.05
SRLDC	25.71%	1615.10	1820.08	2184.06	2287.75	2281.32
NERLDC	1.48%	92.97	104.77	125.73	131.69	131.32
Total		6282.01	7079.28	8494.99	8898.29	8873.29

Accordingly, the above shall be considered for NERLDC.

Interest on Working Capital

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

“25. Interest on Working Capital

(1) The working capital shall cover:

- (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 on 1.4.2019 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.”

102. 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 recommended 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 worked out on the basis 45 days of 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.

103. The Petitioner vide Form-8 has considered rate of interest on working capital as 12.55% for the 2019-24 period.

104. Interest on working capital worked out for the 2019-24 period is as follows:

(In Rs. lakh)					
Description	2019-2020	2020-21	2021-22	2022-23	2023-24
One month NLDC Charges	7.75	8.73	10.48	10.97	10.94
One month O & M Expenses Excluding Human Resource Expenses	39.87	65.06	66.82	68.67	70.61
One month Human Resource Expenses	132.55	138.88	145.50	152.44	159.71
Receivables (1.5 months of Annual charges)	293.48	366.64	408.90	454.97	488.35
Total Working Capital	473.65	579.31	631.70	687.05	729.61
Rate of Interest on Working Capital	12.05%	11.25%	11.25%	11.25%	11.25%
Interest on Working Capital	57.04	65.17	71.07	77.29	82.08

Annual Charges

105. The details of Annual Charges allowed for NERLDC as per the 2019 RLDC Regulation for control period 2019-24 is summarized below:

(In Rs. lakh)					
Annual Charges	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	62.57	131.12	236.79	361.95	433.32
Interest on Loan	-	-	-	-	-
Return on Equity	28.77	94.83	194.72	308.50	382.30



Interest on Working Capital	57.04	65.17	71.07	77.29	82.08
O & M Expenses excluding HR Expenses	478.44	780.73	801.88	824.04	847.26
Human Resource expenses	1590.63	1666.50	1745.99	1829.28	1916.53
NLDC Charges and corporate office expenses	92.97	104.77	125.73	131.69	131.32
OPEX	35.00	90.00	95.00	107.00	114.00
Total	2345.42	2933.12	3271.18	3639.76	3906.82

Filing Fee and Publication Expenses

106. 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.

Billing and Payment of Charges

107. 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.

108. 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 1st April of the respective year, shall be recovered or refunded by RLDC or Users, as the case may be, in six equal monthly instalments.

109. Annexure-1 appended herewith is part of this order.

110. This order disposes of Petition No. 376/MP/2019.

Sd/
(Arun Goyal)
Member

Sd/
(I. S. Jha)
Member

Sd/
(P. K. Pujari)
Chairperson



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

NERLDC

NERLDC (2019-24)	Admitted Capital Cost as on 1.4.2019 (Approved by the Commission vide order dated 5.4.2021 in petition no.433/MP/2019)	Net Additional capitalisation	Projected Capital Cost as on 31.3.2024	Rate of Depreciation as per Regulation	Annual Depreciation as per Regulation				
					2019-20	2020-21	2021-22	2022-23	2023-24
Capital Expenditures as on 1.04.2019					2019-20	2020-21	2021-22	2022-23	2023-24
Freehold Land	-	-	-	0.00%	-	-	-	-	-
Leasehold Land	-	-	-	3.34%	-	-	-	-	-
Building & Other Civil Works	3.78	2904.60	2908.38	3.34%	0.86	25.22	52.62	75.05	95.42
Auxiliary Power System and power supply	23.64	690.31	713.95	5.28%	1.30	2.42	8.87	25.96	37.68
Air Conditioning Systems -Static	-	303.28	303.28	5.28%	0.08	1.18	6.21	13.11	16.01
Air Conditioning Systems-Portable	-	-	-	9.50%	-	-	-	-	-
Office Furniture and other infrastructure equipment (including Communication Equipment)	2.58	664.40	666.98	6.33%	1.19	2.48	16.12	35.84	42.20
Others	1.12	0.00	1.12	5.28%	0.06	0.06	0.06	0.06	0.06
SCADA and IT Hardware	47.21	1111.49	1158.70	15.00%	28.24	58.16	98.04	147.54	169.86
SCADA and IT Software	178.04	334.77	512.81	15.00%	30.84	41.59	54.87	64.40	72.08
Total	256.38	6008.85	6265.22		62.57	131.12	236.79	361.95	433.32
Weighted Average Rate of Depreciation					13.4359 %	8.5767%	7.5502 %	7.2871 %	7.0406 %

