

NAME OF RLDC/NLDC: Western Regional Load Dispatch Center

Capital Expenditure (CAPEX) Plan of WRLDC for Control Period 2019-24 (Information as per Regulation 8 of RLDC Fees and Charges Regulations 2019)

All figures in Lacs (Rs.)

S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
A	Land under full ownership (Freehold)	0.00%	0	0	0	0	0	0.00
	Sub-Total of A		0	0	0	0	0	0.00
B	Land under lease	0.00%	0	0	0	0	0	0.00
(a)	For investment in Land	3.34%	0	0	0	0	0	0.00
(b)	For cost of clearing the site	3.34%	0	0	0	0	0	0.00
	Sub-Total of B		0	0	0	0	0	0.00
C	Other Assets							
A	Building & Civil Engineering works							
(i)	Offices and Residential	0.0334	0	322.71	0	0	0	322.71
(ii)	Containing plant and Equipment	3.34%	0	0	0	0	0	0
(iii)	Temporary Structure such as wooden structures	100.00%	0	0	0	0	0	0
(iv)	Roads other tha Kutch Road	3.34%	0	0	0	0	0	0
(v)	Others							0
a.	Boundary wall / Fencing	3.34%	15	0	0	0	0	15
b.	Construction of new Toilet and bathroom block	3.34%	7	0	0	0	0	7
B	Transformers, Kiosks, sub-station equipments & Other fixed apparatus (including plant Foundation)	5.28%	0	0	0	50	0	50
c.	Water Supply System (Piping from overrooft tank to various parts of building and internal in building)	5.28%	0.00	0.00	0.00	0.00	15.00	15
(i)	Transformers including foundation shaving rating of 100 KVA	5.28%	0.00	0.00	0.00	0.00	0.00	0
(ii)	Others	5.28%	0.00	0.00	0.00	0.00	0.00	0

All figures in Lacs (Rs.)

S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
a.	Transformers including foundation having rating of 500 KVA and over	5.28%	0.00	0.00	32.00	32.00	0.00	64
C	Solar Panels/Wind Mills							
	Sub-Total of C		22.00	322.71	32.00	82.00	15.00	473.71
D	Lightning arrestor							
(i)	Station type	5.28%	0	0	0	0	0	0.00
(ii)	Pole type	5.28%	0	0	0	0	0	0.00
(iii)	Synchronous condenser	5.28%	0	0	0	0	0	0.00
	Sub-Total of D		0	0	0	0	0	0.00
E	Batteries							
(i)	Underground cable including joint boxes and disconnected	5.28%	0	0	0	0	0	0.00
(ii)	Cable duct system	3.34%	0	0	0	0	0	0.00
	Sub-Total of E		0	0	0	0	0	0.00
F	Overhead lines including cable support systems							
(i)	Lines on fabricated steel operating at terminal voltages higher than 66 KV	3.34%	0	0	0	0	0	0.00
(ii)	Lines on fabricated steel operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV	5.28%	0	0	0	0	0	0.00
(iii)	Lines on steel on reinforced concrete support	5.28%	0	0	0	0	0	0.00
(iv)	Lines on treated wood support	5.28%	0	0	0	0	0	0.00
	Sub-Total of F		0	0	0	0	0	0
G	Meters	5.28%	0	0	0	0	0	0.00

All figures in Lacs (Rs.)

S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
	Sub-Total of G		0	0	0	0	0	0
H	Self propelled vehicles	9.50%	0	0	0	0	0	0.00
	Sub-Total of H		0	0	0	0	0	0
I	Air conditioning Plants							
(i)	Static	5.28%	0	0	0	0	0	0.00
(ii)	Portable	9.50%	0	0	0	0	0	0.00
	Sub-Total of I		0	0	0	0	0	0
J	Office furniture and Furnishing							
(i)	Office furniture and Furnishing	6.33%	0	0	0	0	0	0.00
(ii)	Office Equipments	6.33%	0	0	0	0	0	0.00
a	Sliding Gate at entrance including motor (Only Motor and Gear are to be replaced)	6.33%	4	0	0	0	0	4.00
(iii)	Internal Wiring including fittings and apparatus	6.33	5	4	4	3	2	18.00
(iv)	Street Light Fittings	6.33%	0	0	0	0	0	0.00
	Sub-Total of J		9	4	4	3	2	22.00
K	Apparatus let on hire							
i	Other than motors	9.50%	0	0	0	0	0	0.00
ii	Motors	6.33%	0	0	0	0	0	0.00
	Sub-Total of K		0	0	0	0	0	0
L	Communication equipment							
i	Radio & high frequency carrier system	6.33%	0	0	0	0	0	0.00

All figures in Lacs (Rs.)

S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
ii	Telephone lines and telephones	6.33%	0	0	0	0	10	10.00
	Total of L		0	0	0	0	10	10.00
M	IT Equipments							
M.1	SCADA systems Hardware							
i	SCADA Hardware Upgradation/Replacement	3.34%	0.00	0.00	0.00	0.00	0.00	0.00
ii	Dynamic Security Assessment (DSA) hardware	15.00%	0.00	0.00	36.00	0.00	0.00	36.00
iii	WAMS based real time analytics	15.00%	0.00	0.00	20.00	20.00	0.00	40.00
iv	Enhanced Operator Facilities							0.00
(a)	Decision Support Systems for Real Time Operator	15.00%	0.00	0.00	20.00	20.00	0.00	40.00
(b)	Smart operation Infrastructure for control room for integration of SCADA/EMS, URTDSM, REMC, WBES, Outage Management System, POSOCO mail service, etc.	15.00%	0.00	0.00	20.00	80.00	0.00	100.00
v	Communication Network Infrastructure	15.00%	10.00	5.00	0.00	5.00	5.00	25.00
vi	Automatic Generation Control System	15.00%	0.00	30.00	0.00	0.00	0.00	30.00
	Sub-Total of M.1		10.00	35.00	96.00	125.00	5.00	271.00
M.2	IT Hardware Other than SCADA System							
i	IT Infrastructure for Disaster Recovery	15.00%	15.00	0.00	0.00	0.00	0.00	15.00
ii	IT Infrastructure Upgradation at WRLDC (Servers, Routers, Switches, etc.)-	15.00%	0.00	0.00	0.00	50.00	0.00	50.00
iii	Video Conference system	15.00%	5.00	0.00	0.00	0.00	24.7	29.7
iv	Mics. Items (Interactive White Board, WiFi presentation System etc.)	15.00%	2.59	2.59	3.00	3.00	3.00	14.18
	Sub-Total of M.2		22.6	2.6	3.0	53.0	27.7	108.9
	Sub-Total of M		32.6	37.6	99.0	178.0	32.7	379.9
N	Software							
N.1	SCADA systems							
i	SCADA Upgradation/Replacement	15.00%	0.00	0.00	0.00	0.00	0.00	0.00



All figures in Lacs (Rs.)

S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
ii	DSA software	15.00%	0.00	0.00	0.00	15.00	0.00	15.00
iii	WAMS based real time analytics		0.00	0.00	70.00	30.00	0.00	100.00
iv	Enhanced Operator Facilities							0.00
(a)	Decision Support Systems for Real Time Operator	15.00%	0.00	0.00	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.	15.00%	0.00	0.00	0.00	100.00	0.00	100.00
v	Communication Network Infrastructure	15.00%	0.00	0.00	0.00	0.00	0.00	0.00
vi	Automatic Generation Control System	15.00%	0.00	15.00	0.00	0.00	0.00	15.00
Sub-Total of N.1			0.00	15.00	90.00	165.00	20.00	290.00
N.2	IT Software except 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	15.00%	39.75	20.00	20.00	20.00	20.00	119.75
ii	Software for Server Virtualization	15.00%	0	0	0	50	0	50.00
iii	Software for Disaster Recovery	15.00%	35.00	0.00	0.00	0.00	0.00	35.00
Sub-Total of N.2			74.75	20	20	70	20	204.75
Sub-Total of N			74.8	35.0	110.0	235.0	40.0	494.8
O	Any other assets not covered above							
(i)	Smart Storage System	5.28%	8.1	0.0	0.0	0.0	0.0	8.1
Sub-Total of O			8.1	0.0	0.0	0.0	0.0	8.1
Grand Total (A to O)			146.4	399.3	245.0	498.0	99.7	1388.4

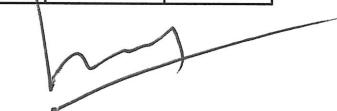
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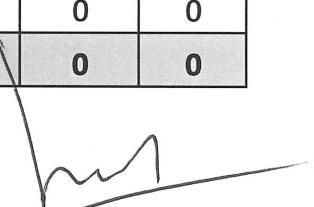
Replacement Expenditure (REPEX) Plan of WRLDC for Control Period 2019-24 (Information as per Regulation 8 of RLDC Fees and Charges Regulations 2019)

All figures in Lacs (Rs.)

S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
A	Land under full ownership (Freehold)	0	0	0	0	0	0	0
	Sub-Total of A		0	0	0	0	0	0
B	Land under lease	0	0	0	0	0	0	0
(a)	For investment in Land	0.0334	0	0	0	0	0	0
(b)	For cost of clearing the site	0.0334	0	0	0	0	0	0
	Sub-Total of B		0	0	0	0	0	0
c	Other Assets							
A	Building & Civil Engineering works							
(i)	Offices and Residential	0.0334	0	0	0	0	0	0
(ii)	Containing plant and Equipment							
(iii)	Temporary Structure such as wooden structures	1	0	0	0	0	0	0
(iv)	Roads other than Kutch Road	0.0334	0	0	0	0	0	0
(v)	Others							
a.	Boundary wall / Fencing	0.0334	0	0	0	0	0	0
b.	Construction of new Toilet and bathroom block	0.0334	0	0	0	0	0	0
B	Transformers, KIOSK, Substation equipment, & other equipment & other fixed apparatus (including plant foundation) : Other equipments only	5.28	0	0	0	0	0	0
(i)	Transformers including foundation shaving rating of 100 KVA and over	5.28	0	0	0	0	0	0



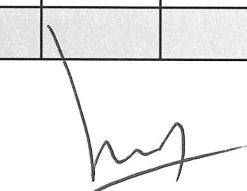
S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
(ii)	Others							
C	Solar Panels/Wind Mills	5.28	0	0	0	0	0	0
	Sub-Total of C		0	0	0	0	0	0
D	Lightning arrestor							
(i)	Station type	0.0528	0	0	0	0	0	0
(ii)	Pole type	0.0528	0	0	0	0	0	0
(iii)	Synchronous condenser	0.0528	0	0	0	0	0	0
	Sub-Total of D		0	0	0	0	0	0
E	Batteries	15	0	0	24	0	0	24
	Underground cable including joint boxes and disconnected boxes (UPS Input/Output ACDB)	5.28	0	0		10	0	10
(i)	Cable duct system	3.3400	0	0	0	0	0	0
	Sub-Total of E		0	0	24	10	0	34
F	Overhead lines including cable support systems							
	Lines on fabricated steel operating at terminal voltages higher than 66 KV	3.3400	0	0	0	0	0	0
(i)	Lines on fabricated steel operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV	5.2800	0	0	0	0	0	0
(ii)	Lines on steel on reinforced concrete support	5.2800	0	0	0	0	0	0
(iv)	Lines on treated wood support	5.2800	0	0	0	0	0	0
	Sub-Total of F		0	0	0	0	0	0



S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
G	Meters	5.2800	0	0	0	0	0	0
	Sub-Total of G		0	0	0	0	0	0
H	Self propelled vehicles	9.5000	0	0	0	0	0	0
	Sub-Total of H		0	0	0	0	0	0
I	Air conditioning Plants							
(i)	Static	5.28	53.1	5	5	5	30	98.1
(ii)	Portable	9.5	0	0	0	0	0	0
	Sub-Total of I		53.1	5	5	5	30	98.1
J	Office furniture and Furnishing							
(i)	Office furniture and Furnishing	6.33	0	0	0	0	0	0
(ii)	Office Equipments		0	0	0	0	0	0
(iii)	Internal Wiring including fittings and apparatus	6.33	0	0	0	0	0	0
(iv)	Street Light Fittings	6.33	0	0	0	0	0	0
	Sub-Total of J		0	0	0	0	0	0
K	Apparatus let on hire							
i	Other than motors	9.5	0	0	0	0	0	0
ii	Motors	6.33	0	0	0	0	0	0
	Sub-Total of K		0	0	0	0	0	0



S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
L	Communication equipment							0
i	Radio & high frequency carrier system	6.33	0	0	0	0	0	0
ii	Telephone lines and telephones	6.33	0	0	0	0	0	0
	Total of L		0	0	0	0	0	0
M	IT Equipments							
M.1	SCADA systems Hardware							
(i)	Upgradation/Replacement of SCADA System	15	0.0	0.0	0.0	0.0	0.0	0.0
	Sub-Total of M.1		0.0	0.0	0.0	0.0	0.0	0.0
M.2	IT Systems other than SCADA							
(i)	Back-up storage(Storage Area Network SAN), NAS (Network Array Storage) Box etc.	15	0.0	0.0	0.0	45.0	0.0	45.0
(ii)	Office Computing System:- (It involves Computers, Laptops, Printers, Scanners etc.)	15	24.0	4.0	4.0	36.5	4.0	72.5
(iii)	Conference Audio System	15	26.9	0.0	0.0	26.9	0.0	53.8
(iv)	Communication LAN infrastructure	15	21.2	0.0	0.0	0.0	0.0	21.2
(v)	Cyber Security (Firewall Replacement)	15	0.0	0.0	15.0	0.0	0.0	15.0
(vi)	Video Conferencing System	15	0.0	0.0	0.0	0.0	12.4	12.4
(vii)	CCTV & Surveillance system	15	0.0	0.0	5.0	0.0	0.0	5.0
	Sub-Total of M.2		72.1	4.0	24.0	108.4	16.4	224.9
	Sub-Total of M		72.1	4.0	24.0	108.4	16.4	224.9
N	Software							



S.No.	Name of the Work	Itemwise Depreciation rate as per Annex-III of	Estimated Expenditure in Financial Year					Total
			2019-20	2020-21	2021-22	2022-23	2023-24	
N.1	SCADA systems Software							
(i)	Upgradation/Replacement of SCADA System	15	0.0	0.0	0.0	0.0	0.0	0.0
	Sub Total of N.1		0.0	0.0	0.0	0.0	0.0	0.0
N.2	Softwares for IT Systems other than SCADA							
(i)	Website & Intranet for WRLDC	15	0.0	0.0	18.4	0.0	0.0	18.4
(ii)	WBES upgradation (Regulation Changes)	15.00%	0.0	0.0	152.5	0.0	0.0	152.5
	Sub-Total of N.2		0.0	0.0	170.9	0.0	0.0	170.9
	Sub-Total of N		0.0	0.0	170.9	0.0	0.0	170.9
O	Any other assets not covered above							
(i)	Fire alarm/fighting system	6.33	16.0	14.0	0.0	0.0	0.0	30.0
(ii)	Fitness equipments	6.33	0.0	0.0	0.0	0.0	4.0	4.0
	Sub-Total of O		16.0	14.0	0.0	0.0	4.0	34.0
	Grand Total (A to O)		141.2	23.0	223.9	123.4	50.4	561.9

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FORM :7

NAME OF RLDC/NLDC: Western Regional Load Dispatch Center

Details of Operational Expenditure (OPEX)

S.No.	Name of the Work	Estimated Expenditure in Financial Year					Rs. in Lakh Total
		2019-20	2020-21	2021-22	2022-23	2023-24	
	Data/ Process Services:						
1.1	Cloud Computing services	0.0	0.0	0.0	0.0	0.0	0.0
1.2	Data Storage services	0.0	0.0	0.0	0.0	0.0	0.0
1.3	Data centre (services) hiring charges	0.0	0.0	0.0	0.0	0.0	0.0
1.4	Big data analytic tools	2.5	2.5	2.5	2.5	2.5	12.5
1.5	Advanced data visualization tool (with GIS interfacing)	0.0	0.0	0.0	0.0	0.0	0.0
1.6	Satellite services	0.0	0.0	0.0	0.0	0.0	0.0
1.7	Weather data services	0.0	0.0	0.0	0.0	2.2	2.2
1.8	WebnetUse	0.0	0.0	0.0	0.0	0.0	0.0
1.9	Forecasting Servcies	0.0	0.0	0.0	0.0	4.9	4.9
1.10	Tools for Knowledge Ugradation or training of DICs	0.0	0.0	0.0	0.0	0.0	0.0
1.11	Any other OPEX services	0.0	0.0	0.0	0.0	0.0	0.0
	Sub Total of 1	2.5	2.5	2.5	2.5	9.6	19.6
	2 IT Systems Licenses:						
2.1	Firewall License	4.0	4.0	4.0	4.0	4.0	20.0
2.2	Anti Virus License	0.7	0.7	0.7	1.1	1.1	4.2
2.3	Licenses for MS Office	12.2	0.0	0.0	18.5	0.0	30.7
2.4	License for Mail Server for web applications	6.4	6.4	6.4	6.4	6.4	31.8
	Sub total of 2	23.2	11.1	11.1	29.9	11.4	86.7
	Grand Total of OPEX (1 to 2)	25.7	13.6	13.6	32.4	21.0	106.3

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