Summary of ARR & Fees and Charges for SLDC Filings

Submitted by

SLDC

For FY 2020-21

OPTCL'S PROPOSAL FOR ARR & LEVY OF ANNUAL FEES & CHARGES FOR SLDC FUNCTIONS FOR FY 2020-21

- The application for approval of Annual Revenue Requirement and Fees & Charges for SLDC for FY 2020-21 has been prepared by OPTCL in line with the provision mentioned in the CERC (Fees & Charges of RLDC & other related matters) Regulations, 2009, OERC (Fees & Charges of SLDC & other related matters) Regulations, 2010 and considering the following recommendation of the MOP Committee Report.
 - (a) SLDC is to be equipped suitably to play the pivotal role of an Independent System Operator (ISO).
 - (b) Power system operation is the core activity of LDCs. Efficient load dispatching also requires a deep understanding of Transmission, Generation and Distribution technology. In view of above, the executives shall be from electrical engineering discipline. Efforts need be made to supplement them with interdisciplinary learning and development.
- 2. As per the recommendation in the report of the task force committee on "Capital Expenditure and Issues related to Emoluments for Personnel in Load Despatch Centres", the assets pertaining to the Control Centre (SLDC) has to be handed over to the State Load Despatch Centres. Provision for recovery of the outstanding amount for investments made by the POWERGRID on ULDC project shall be kept in the ARR of SLDC.

Provision of CAPEX Plan

- 3. Commission has approved the CAPEX expenses amounting Rs. 717.99 lacs proposed by SLDC vide their order dated 23.03.2017. Phasing of expenditure for the building was Rs.135.00 lacs during FY-2016-17 and Rs. 315.00 lacs during the FY-2017-18.
- 4. OERC vide order dated 22.03.2018 in case No. 78 of 2017 has allowed for shifting of the CAPEX plan implementation by one year i.e. during FY 2017-18 and 2018-19. Construction of new building could not be completed due to modification of plan and site. The revised proposal along with estimate has been submitted to the Commission for approval.
- 5. Commission vide letter No. DIR(T)-351/08/1288 dated 10.09.2019 have approved Rs. 27.72 lacss towards procurement & installation of 16 numbers of AC machines and computers & peripherals. The status of CAPEX is enclosed herewith as Annexure-I.
- 6. The expansion of VPS and up-gradation of VPS work is under progress and expected to be completed by December 2019.

Organizational structure and their Functions

7. OPTCL submitted that the man power structure given in the ARR is in line with the approved structure by the Government of Odisha. Total 67 nos. of executives / non-executives shall be deployed at SLDC.

Item wise Annual Revenue Requirement for SLDC operation as proposed by OPTCL for FY 2020-21

- 8. As per the OERC (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2010 the annual charges consist of the following components:
 - a. Return on Equity
 - b. Interest on Loan Capital
 - c. Depreciation
 - d. Operation & Maintenance Expenses Excluding Human Resource expenses
 - e. Human Resource Expenses
 - f. Interest on Working Capital
 - a. Return on Equity:

Since no equity has been invested by SLDC, item (a) is not considered in the ARR.

b. Interest on Loan capital:

Since there is no outstanding loan on SLDC item (b) is not considered in the ARR.

c. Depreciation:

Depreciation for the assets in the Unified Load Despatch Center and offices in SLDC has been computed as Rs. 38.388 lacs as per CERC Regulation. The major amount of depreciation charges is for recovering the depreciation cost for computers & peripherals for SLDC data centre, procured during FY 2017-18 / 2018-19 amounting Rs. 26.505 lacs and depreciation cost of VPS screen amounting Rs.5.6 lacs. Total depreciation amount is provided in table –1 below.

Table – 1: Statement of Depreciation (in Rs. Lacs)

Financial Year	2018-19	2019-	2020-21
		20	
1	2	3	4
Recovery of Capital Cost	0.000	0.000	0.000
(Amount to be recovered during			
the year)			
Depreciation on existing assets	58.528	44.650	38.388
TOTAL	58.528	44.650	38.388

d. Operation and Maintenance Expenses:

Operation and maintenance expenses excluding human resources expenses for FY 2020-21 has been computed as **Rs. 192.368 lacs** considering the R&M expenditure proposed to be incurred for Facility Management Services (FMS), Website charges, AMC charges for SCADA/EMS equipment, IT equipment and Electrical maintenance of office building and colony quarters etc and A&G expenses.

The O & M expenses have been projected considering actual expenditure to be incurred during FY 2020-21.

Table - 2: Statement of O&M Expenses Excluding Human Resource Expenses

(in Rs. Lacs)

SL No.	ITEMS	2018-19 (Actual)	2019-20 (Approved)	2019-20 (Actual up to Sept19)	2020-21 (Proposed)
1	2	3	4	5	6
1	Repairs and maintenance expenses	53.377	50.750	7.788	57.020
2	Administrati ve and general expenses, etc	118.010	116.740	49.161	135.348
	Total	171.387	167.490	56.949	192.368

c. Human Resources Expenses:

Human resources expenses have been computed as **Rs. 801.309 lacs** considering the existing employees including 5 numbers of Telecommunication personnel working at SLDC control centre. In addition to the above, salary for 2 numbers of contractual / outsourcing staffs, engaged at SLDC as on date has been considered. The salary of staffs for FY 2020-21 has been computed considering implementation of 7th Pay Commission Report. Payment of 60% arrear amounting **Rs. 103.877 lacss** on implementation of 7th Pay commission report has also been considered.

d. Interest on Working Capital:

The interest on working capital (amounting **Rs 260.040 lacss**) is computed as **Rs. 31.335 lacss** as per OERC Regulation considering 12.05 % rate of interest (SBI base rate 9.05% plus 300 basis points). Even though SLDC has not taken loan to meet the working expenses, the provision has been kept due to non-receipt of SLDC charges from the user for two months from the commencement of financial year. The loss of

interest for the above amount is being recovered as interest on working capital. The details on working capital requirement and interest on it is given in table–3 below.

Table – 3: Statement of Interest on Working Capital

(in Rs. Lacs)

Sl. No.	Particulars	Amount Lacs
1	2	3
1	O & M expenses for one month excluding human resource expenses	16.031
2	Human resource expenses for one month	66.776
3	Receivables (2 months of SOC & MOC)	177.233
4	Total Working Capital	260.040
5	Rate of Interest	12.05%
6	Interest on Working Capital	31.335

9. Expenses proposed for FY 2020-21 is given in table – 4 below.

Table – 4: Abstract of Expenses Proposed for FY 2020-21

(in Rs. Lacs)

Sl. No.	Particulars	Amount
1	Return on Equity	0.000
2	Interest on Loan Capital	0.000
3	Depreciation	38.388
4.	O&M Expenses excluding human resource expenses	192.368
5.	Human Resource expenses	801.309
6.	Interest on Working Capital	31.335
	Total expenses	1063.400

Certificate of LDC Personnel:

10. The committee on "Manpower, Certification and Incentives for System Operation and Ring fencing Load Despatch Centres" recommended compensation structure, innovative incentive schemes for higher learning and monetary incentives based on the ratings of the employees. For imparting training to the executives, the expenditure for Training & Certification of LDC personnel has been projected as **Rs 9.568 lacs** for FY 2020-21.

SLDC Assets:

11. Most of the assets of SLDC along with sub-SLDC have been identified and presently being exclusively used by SLDC personnel awaiting for transfer as per the direction of the Commission.

Determination of Annual Charges for SLDC:

12. The Annual Charges for SLDC have been computed as per provision in Regulation17, 18, 19, 20, 21 & 22 of OERC Regulation as detailed below:

Annual charges: Annual charges computed shall comprise of

- a) System Operation Charges (SOC) i.e. 80% of Annual charge
- b) Market Operation Charges (MOC) i.e. 20% of Annual charge
- System Operation Charges (SOC) shall be collected from the users in the following ratio
 - ➤ Intra State Transmission Licensee 10% on the basis of Ckt-KMs
 - ➤ Generating Company & Seller 45% on the basis of installed capacity
 - ➤ Distribution Licensee and Buyers 45% on the basis of allocation
- Market Operation Charges (MOC) shall be collected equally from the DISCOMs and Generating Companies apportioning to the entitlement and installed capacity respectively.
 - As per the proposed maintenance program, the installed capacity of OHPC stations has been considered as 1700 MW as per the availability projection made by OHPC considering the R&M programme. (Annexure –II)
 - For the purpose of determination of the above charges for CGPs, the maximum MW scheduled during April to October 2019 has been considered. In the absence of approved injection schedule for some of the CGPs during FY 2019-20 (up to October 2019), the approved schedule quantum for previous year has been considered.
 - Further, it has been proposed to collect SLDC charges from industries which are importing power through intra / inter-state open access only for the month of their transaction basing on the maximum scheduled quantum.

Table - 5: Abstract of Collection of SLDC Charges Proposed for FY 2020-21 (in Rs. lacs)

Annual charges (AFC)	1063.400
System Operation Charges (SOC) (80% of the AFC)	850.720
Intra State Transmission Licensee @10% of SOC	85.072
Generating Station & Sellers @45% of SOC	382.824
Distribution Licensees & Buyers@45% of SOC	382.824
Market Operation Charges (MOC) (20% of the AFC)	212.680

Generating Station & Sellers @50% of MOC	106.340
Distribution Licensees & Buyers@50% of MOC	106.340

Registration Fee:

13. Besides the above charges, provision for collection of registration fee @ Rs1.00 lacs from all users has been made as per OERC Regulation.

Application Fee and Scheduling Charges:

14. Application fee and scheduling charges of Rs 5000/- per application and Rs.2000/- per day or part thereof respectively shall be paid by the short term open access customers as per CERC Regulation.

Prayer

Considering the submission made above, OPTCL prays Hon'ble Commission to approve the Annual Revenue Requirement of **Rs. 1063.400 lacs** for FY 2020-21 towards State Load Dispatch Centre (SLDC) function separately and kindly allow recovering the same from the users.

Proposed Levy and Collection of Fees and Charges by OPTCL for SLDC operation for FY 2020-21

LEVY AND COLLECTION OF FEES & CHARGES (Rs. in Lacs)

Annual charges	1063.400
Total Cost (Annual Fixed Cost)	1063.400
System Operation Charges (SOC) (80% of the AFC)	850.720
Market Operation Charges (MOC) (20% of the AFC)	212.680
System Operation Charges (SOC)	850.720
Intra State Transmission Licensee @10% of SOC	85.072
Generating Station & Sellers @45% of SOC	382.824
Distribution Licensees & Buyers@45% of SOC	382.824
(a) Intra State Transmission Licensee (SOC per month)	7.089

(b) Generating Station & Sellers @45% of SOC

382.824

(Rs. in Lacs)

Sl. No.	Generating Company / Sellers	Installed Capacity (MW)	Total amount	Total amount
1100			(Annual)	(Monthly)
A	State Generating Station			
1	OHPC	1700.00	106.624	8.885
2	OPGC Stage-I	420.00	26.342	2.195
3	OPGC Stage-II	1320.00	82.790	6.899
4	TTPS	460.00	28.851	2.404

Sl. No.	Generating Company / Sellers	Installed Capacity (MW)	Total amount	Total amount
			(Annual)	(Monthly)
В	Small Hydro & Bio-mass			
5	OPCL (Small Hydro)	20.00	1.254	0.105
	Meenakshi Power Ltd. (Small			
6	Hydro)	37.00	2.321	0.193
7	Shalivahana Green Energy Ltd	20.00	1.254	0.105
C	IPP			
8	GMR, Kamalanga	350.00	21.952	1.829
9	Vedanta Limited (IPP)	600.00	37.632	3.136
10	NBVL (IPP)	60.00	3.763	0.314
D	CGPs	Maximum Scheduled		
		(MW) (up to end		
		of October-2019)		
11	Aarti Steel Ltd	48.00	3.011	0.251
12	Aditya Aluminium Limited	2.00	0.125	0.010
13	Aryan Ispat & Power Pvt. Ltd.	2.61	0.164	0.014
14	Bhubaneshwar Power Pvt. Ltd.	119.00	7.464	0.622
	Bhusan Power & Steel			
15	Ltd.,Jharsuguda	30.00	1.882	0.157
	Tata Steel BSL Limited,			
16	Meramundali	79.90	5.011	0.418
17	ESSAR Power (Orissa) Ltd.	27.50	1.725	0.144
18	FACOR Power Ltd.	8.34	0.523	0.044
19	HINDALCO	16.08	1.009	0.084
20	IFFCO	10.00	0.627	0.052
21	IMFA	44.54	2.794	0.233
22	Jindal Stainless Limited, Duburi	57.37	3.598	0.300
	Jindal Steel & Power Ltd.,			
23	Angul	202.18	12.681	1.057
24	Maithan Ispat Limited	9.91	0.622	0.052
25	MGM Minerals Ltd.	3.96	0.248	0.021
26	NALCO, Angul	43.20	2.710	0.226
27	Narbheram Power & Steel (P)	2.00	0.100	0.016
27	Ltd	3.00	0.188	0.016
28	Nava Bharat Ventures Limited	52.00	3.261	0.272
29	Nilachal Ispat Nigam Limited Dalmia Cement (Bharat) Ltd.	4.91	0.308	0.026
20	` ,	12.66	0.704	0.066
30	[OCL] Pattanaik Steel & Alloys Limited	12.66 2.00	0.794 0.125	0.066
	RSP	4.00		
32			0.251	0.021
33	Shree Ganesh Metalicks Limited	1.05	0.066	0.005
34	Shyam Metalicks & Energy Limited	1.00	0.063	0.005
35	SMC Power generation	4.00	0.063	0.003
33	Tata Steel Long Product Limited	4.00	0.231	0.021
36	(TSIL)	23.00	1.443	0.120
37				
31	Vedanta Limited (Jharsuguda)	215.00	13.485	1.124

Sl.	Generating Company / Sellers	Installed Capacity (MW)	Total amount	Total amount
No.				
			(Annual)	(Monthly)
38	Vedanta Limited (Lanjigarh)	5.00	0.314	0.026
39	VISA Steel Limited	25.00	1.568	0.131
40	Yazdani Steel & Power Limited	2.00	0.125	0.010
	Solar Projects			
41	ACME, Odisha	25.00	1.568	0.131
42	AFTAB Solar	5.00	0.314	0.026
43	BEL SOLAR	7.50	0.470	0.039
44	GEDCOL	20.00	1.254	0.105
	Total	6103.71	382.824	31.902
(c)	Distribution Licensees & Buyers	: @45% of SOC	382.824	
		% share		
45	CESU	34.99	133.950	11.163
46	NESCO	22.67	86.786	7.232
47	WESCO	27.84	106.578	8.882
48	SOUTHCO	14.50	55.510	4.626
	Total	100	382.824	31.902

Market Operation Charges (MOC) (a) Generating Company @50% of MOC

212.680

106.340

(Rs. in Lacs)

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Sl.	Generating Company / Sellers	Installed Capacity (MW)	Total amount	Total amount
No.				
			(Annual)	(Monthly)
A	State Generating Station			
1	OHPC	1700.00	29.618	2.468
2	OPGC Stage-I	420.00	7.317	0.610
3	OPGC Stage-II	1320.00	22.997	1.916
4	TTPS	460.00	8.014	0.668
В	Small Hydro & Bio-mass			
5	OPCL (Small Hydro)	20.00	0.348	0.029
	Meenakshi Power Ltd. (Small			
6	Hydro)	37.00	0.645	0.054
7	Shalivahana Green Energy Ltd	20.00	0.348	0.029
C	IPP			
8	GMR, Kamalanga	350.00	6.098	0.508
9	Vedanta Limited (IPP)	600.00	10.453	0.871
10	NBVL (IPP)	60.00	1.045	0.087
D	CGPs	Maximum Scheduled		
		(MW) (up to end		
		of October-2019)		
11	Aarti Steel Ltd	48.00	0.836	0.070
12	Aditya Aluminium Limited	2.00	0.035	0.003
13	Aryan Ispat & Power Pvt. Ltd.	2.61	0.045	0.004
14	Bhubaneshwar Power Pvt. Ltd.	119.00	2.073	0.173

Sl.	Generating Company / Sellers	Installed Capacity (MW)	Total amount	Total amount
No.			(Annual)	(Monthly)
	Bhusan Power & Steel		,	• • • • • • • • • • • • • • • • • • • •
15	Ltd.,Jharsuguda	30.00	0.523	0.044
	Tata Steel BSL Limited,			
16	Meramundali	79.90	1.392	0.116
17	ESSAR Power (Orissa) Ltd.	27.50	0.479	0.040
18	FACOR Power Ltd.	8.34	0.145	0.012
19	HINDALCO	16.08	0.280	0.023
20	IFFCO	10.00	0.174	0.015
21	IMFA	44.54	0.776	0.065
22	Jindal Stainless Limited, Duburi	57.37	1.000	0.083
	Jindal Steel & Power Ltd.,			
23	Angul	202.18	3.522	0.294
24	Maithan Ispat Limited	9.91	0.173	0.014
25	MGM Minerals Ltd.	3.96	0.069	0.006
26	NALCO, Angul	43.20	0.753	0.063
	Narbheram Power & Steel (P)			
27	Ltd	3.00	0.052	0.004
28	Nava Bharat Ventures Limited	52.00	0.906	0.075
29	Nilachal Ispat Nigam Limited	4.91	0.086	0.007
	Dalmia Cement (Bharat) Ltd.			
30	[OCL]	12.66	0.221	0.018
31	Pattanaik Steel & Alloys Limited	2.00	0.035	0.003
32	RSP	4.00	0.070	0.006
33	Shree Ganesh Metalicks Limited	1.05	0.018	0.002
	Shyam Metalicks & Energy			
34	Limited	1.00	0.017	0.001
35	SMC Power generation	4.00	0.070	0.006
	Tata Steel Long Product Limited			
36	(TSIL)	23.00	0.401	0.033
37	Vedanta Limited (Jharsuguda)	215.00	3.746	0.312
38	Vedanta Limited (Lanjigarh)	5.00	0.087	0.007
39	VISA Steel Limited	25.00	0.436	0.036
40	Yazdani Steel & Power Limited	2.00	0.035	0.003
E	Solar Projects			
41	ACME, Odisha	25.00	0.436	0.036
42	AFTAB Solar	5.00	0.087	0.007
43	BEL SOLAR	7.50	0.131	0.011
44	GEDCOL	20.00	0.348	0.029
	Total	6103.71	106.340	8.862

(b) Distribution Licensees & Buyers @50% of MOC

106.340

Sl.		% share		
45	CESU	34.99	37.208	3.101
46	NESCO	22.67	24.107	2.009
47	WESCO	27.84	29.605	2.467
48	SOUTHCO	14.50	15.419	1.285

Sl.	Generating Company / Sellers	Installed Capacity (MW)	Total amount	Total amount
No.				
			(Annual)	(Monthly)
	Total	100	106.340	8.862

Annexure-I

	ed vide OERC Order dated 23.03.201	7 in Cas	e No. 47 of 2	016 and ord	ler dated i	22.03.2018 in	Case No. 78 of 2017	
				Fig	in Lacs			
SI. No.	Item	Quanity	Amount	FY 2017-18	FY 2018-19	Expenditure Incurred	Remarks	
1	Construction of New Building (excluding interiors) adjacent to the existing bulding at SLDC, Bhubaneswar for accommodation of staff (The detailed estimate furnished by IDCO is enclosed, 30% of estimated cost is to be paid to IDCO as advance to take up the work)	LS	450.00	135.00	315.00	6.040	Expenditure for approving plan by BMC.	
2	Procurement of computer & Peripherals for SLDC Data Centre	LS	222.00	222.00			*See Item 3, Table-2	
3	Procurement of computer & Peripherals, Laptops along with MS Office for use at SLDC. (Desktop=12nos, Laptops=12 nos., Printer = 2 nos)	26 nos	18.50	18.50	1	17.037	Assets acquired	
4	Procurement of computer tables for use at EASSC	10	1.02	1.02	i	1.018	Assets acquired	
5	0.5 kVA UPS for office desktop PC	12	0.222	0.222	1	1 272	Assets acquired	
	6.0 kVA UPS for EASSC	1	1.050	1.050	•	1.272	Assets acquired	
6	Software for countering the cyber attacks	1	20.00	20.00	-		Not Procured	
7	Colour Scanner	2 no.	0.20	0.20	-		Not Procured	
8	Furnitures & Fixtures for use of office staffs	LS	5.00	5.00	-	4.995	Assets acquired	
	TOTAL		717.99	402.99	315.00	30.36		
FABLE-: Approv	2 ed vide letter DIR (T)-351/08/1520 da	ted 27.10	0.2017					
				Fig	in Lacs			
SI. No.	ltem	Quanity	Amount	FY 2017-18	FY 2018-19	Expenditure Incurred	Remarks	
1	Remote Visual Display Unit for Machhakund	1	13.36573	13.36573	-	12.714		
2	Furnitures & Fixtures for use of office staffs	LS	6.05000	6.05000	-	5.580	* Assets acquired	
3	Procurement of computer & Peripherals for SLDC Data Centre	LS	22.570060	22.570060		244.570	Assets acquired	
4	Expansion of Visual Pojection System (VPS)	1	160.73000	160.73000			Installation is under progress	
5	Upgradation of Visual Pojection System (VPS)	1	106.39000	106.39000			Work completed	
	TOTAL		309.10579	309.10579	0.00	262.86		
TABLE-	3 ed vide letter No. DIR(T)-351/08/128	R dated 1	n na 201a					
1	Procurement & Installation of AC machines in SLDC control room	16 no.	12.00	-	-	12.00	Assets acquired	
2	Procurement of computer and peripherals for SLDC control room &	-	15.72	-	-	15.72	Assets acquired	
	office							

<u>Annexure – II</u> Computation of Installed Capacity of OHPC Stations for FY 2020-21

Power station	Units	Capaci ty (MW)	Zero Date of R&M	Tentative Date of Commercial Operation	Days unavailab le	Days Availabl e	Per day average MW availabil ity
внер	1 (under R&M)	60	05.08.16 24.06.2020		85	280	46
	2 (under R&M)	60	20.11.17	30.04.2020	30	335	55
	(program ming for R&M)	60	31.03.202	26.04.2021	365	0	0
	4 (program ming for R&M)	60	31.03.202	26.04.2021	365	0	0
	5	60	Annual mai	ntenance	23	342	56
	6	60	Annual maintenance Annual maintenance		26	339	55
	7	75			23	342	70
	8	75	Annual mai	ntenance	26	339	69
			Pei	r day average M	W availabilit	351	
ННЕР	1	49.5			0	365	49.5
	2	49.5	Annual mai	ntenance	28	337	45
	3	32	Annual maintenance Annual maintenance		30	335	29
	4	32			31	334	29
	5 (under R&M)	43.65	25.10.201 6	19.06.2020	80	365285	34
	6 (under	43.65	16.10.201 5	28.03.2020	0	365	43.65

Power station	Units	Capaci ty (MW)	Zero Date of R&M	Tentative Date of Commercial Operation	Days unavailab le	Days Availabl e	Per day average MW availabil ity		
	R&M)								
	7	37.5	Annual mai	ntenance	30	335	34		
			Per	day average M	W availabilit	y of HHEP	264		
CHEP	1	24	Capital maintenance		120	245	16		
	2	24	Annual mai	Annual maintenance 3		335	22		
	3 (under R&M)	34	15.10.201 5	31.10.2019	0	365	24		
	11001/12)		Peı	r day average M	u	v of CHEP	62		
RHEP	1	50	Annual mai		31	334	45		
	2	50	Annual maintenance Annual maintenance Annual maintenance		31	334	45		
	3	50			28	337	46		
	4	50			30	335	45		
	5	50			46	319	43		
			Per day average MW availability of RHEP				224		
UKHE	1	80	Annual maintenance		30	335	73		
P	2	80	Annual mai	ntenance	30	335	73		
	3	80	Annual mai	ntenance	30	335	73		
	4	80	Annual mai	ntenance	30	335	73		
			Per d	Per day average MW availability of UKHEP					
UIHE	1	150	Annual mai	ntenance	30	335	137		
P	2	150	Capital main	ntenance	136	229	94		
	3	150	Annual mai	ntenance	30	335	137		
	4	150	Annual mainstallation	ntenance of DVR/PSDF	30	335	137		
			Per	505					
Total OHPC	Per day average MW availability of OHPC						1698 say 1700		
