

**Record note of the Review Meeting on Performance of OPTCL for the period from April 2022 to September, 2022 (FY2022-23)**

Date of Review : 28.12.2022 at 03:00 PM  
 Period of Review : FY 2022-23 (April 2022 to September 2022)  
 Representative of OPTCL Present : As per list enclosed as Annexure-I.

The Commission had conducted a meeting on virtual mode to review the Performance of OPTCL for the first half of FY 2022-23 on 28.12.2022. The MD of OPTCL made the presentation on the performance of OPTCL as on 2<sup>nd</sup> quarter of the FY 2022-23. During the review, financial status, status of completed/ongoing/upcoming projects, major O&M activities, status of telecom projects and steps being taken by IT &HRD wing of OPTCL were discussed. The summary of presentation and discussion during the meeting are as follows :

1. The present status of the transmission assets available with OPTCL is as follows:

	<b>As on 31.03.2022</b>	<b>Addition during April, 2022 to September 2022</b>	<b>As on 30.09.2022</b>
No. of grid S/S	177	07[one 132 kV switching station (ABREL), one 220 kV WGSS at Godishahi and 5 nos of 132 kV s/s at Biramaharajpur, Hinjili, Bahugram, Chandipur & Bamara]	184
EHT Line ckt.KM	15707.454	163.394(91.138 ckt.KM at 220 kV level &72.256 ckt.KM at 132 kV level)	15316.451
Transformation Capacity (MVA)	24403.5	393.5MVA (47.5 MVA augmentation in 3nos of existing + 346 MVA in 7nos of new s/s)	24797 MVA

2. OPTCL has submitted that 8 nos. of projects (7nos of substations, one transmission lines) have been completed during the period under review at a total investment of about Rs.263.34Crores. OPTCL further submitted the present status of 32 nos. of ongoing projects, which includes one 400 kV S/S, 11 nos. of 220 kV S/S, 10 nos. of 132 kV S/S and 10 nos. of other projects (primarily transmission lines). Total expenditure of Rs.1195.64 cr. has already been made out of the total project cost of Rs.1883.05 cr. Out of the above projects, one 400 kV s/s at Meramundali B is expected to be completed by December, 2023; 220/33 kV s/s at Kalimela has been charged in November, 2022 and 5 nos. of 220 kV sub-stations & 4 nos. of 132 kV sub-stations are likely to be completed during FY 2022-23.
3. Augmentation work has been completed at 3nos of existing S/Ss with addition of 47.5 MVA transformation capacity at an investment of Rs.10.29 Crores in TPSODL area (Ganjams/s: 12.5 MVA Podagadas/s: 20 MVA) and in TPNODL area (Dhenkikotes/s:

20 MVA).The LILO work of New Bolangir-Sonepur132 kV line and Akhusingh–Paralakhemundi 132 kV line at Gunupurat an investment of Rs.9.17 cr. are under progress. Although there are RoW issues but both the projects are expected to be completed by July, 2023.

4. As a part of major technical works under O&M wing, OPTCL has placed work order for procurement of Automated Fault Analysis System (AFAS)&Remote Accessibility System (RAS), Nitrogen Injection Type Fire Prevention & Extinguishing System (NIFPES) and 18 nos. of 400 kV ERS towers at a cost of Rs.41.14 cr. In the meantime, OPTCL has received 220 kV surge arrestors, Porcelain Long Rod Insulators etc., the materials such as battery chargers, ABT compliant trivector energy meter, control cables etc. are expected to be received very soon. OPTCL has conductor replacement plan for 132 kV Kendrapara-Paradip Ckt.1 & II (35 KMs.) line &Berhmapur-Digapahandi132 kV line (34 K.Ms), uprating of 220 kV Bisra-Tarkera D/C line (70 KMs)by replacing ACSR Zebra conductor by HTLS conductor and uprating of 132 kV Joda-Barbil line by replacing ACSR Panther conductor by HTLS conductor.
5. OPTCL has submitted that the following power system development works were taken up under the assistance from Power Supply Development Fund (PSDF).
  - Completion of installation of 125 MVAR Bus Reactor along with associated bay Mendhasal, Meramundali and New Duburi400 kV substations for reactive compensation.
  - Completion of Automatic Demand Management System (ADMS) work in 88 nos of grid s/s under supervision of SLDC.
  - Completion of Substation Automation Scheme (SAS) in 18 nos. of substations (Brajrajnagar, Karanjia, Basta, Anandpur, Argul, Shamuka, Kuchinda, Rayagada, Laxmipur, Bhawanipatna, Jajpur, Kendrapara, Aska, Banki, Chainpal, Dhenkanal, Phulnakhar & Kharagprasad).  
SAS work in progress in 8 nos. of s/sat Bhubaneswar, Nayagarh, Khurda, Rairangpur, Puri, Sunabeda, Ranasinghpur, Khajurikanta.
  - Work order for implementation of SAS in 7 nos. of s/s namely Balasore, Bidanasi, Budhipadar, Katapali, Narendrapur, New Bolangir and Paradeep. (SoC April 2023)

6. SCADA interface work at vital 132 kV substations by laying 1745 KMs of OPGW has been taken up at an estimated cost of Rs.48 cr. (LOA– Rs.52.54 post GST) and the expenditure is Rs.43.12 cr. as on 30.09.2022. The Proposal for 40.2 kms of OPGW work has been deleted from the scope of work as the execution of OPGW stringing in Jayanagar – Sunabeda line could not be taken up. The establishment of fiber optic based communication link of about 2289 kms along with terminal equipments in different substations are in progress. The Letter of Award has been issued on 28.02.2019 for works to the tune of Rs.58.21 crore, out of which Rs.23.04 crores has been received by OPTCL from PSDF. The laying of 2120 kms of OPGW has been completed as on 30.09.2022 at an expenditure of Rs.42.2 crores. The strong fibre optic communication network has resulted in revenue earning of about Rs.5.30Cr. per annum by way of leasing unused fibers to Powergrid, BSNL, LWTP, Airtel, Rail TEL & Tata Communication. The status of laying of OPGW is as follows :

<b>Voltage level</b>	<b>Total OPGW laid as on 31.03.2021(in KM)</b>	<b>Total OPGW laid Apr, 21 – Sep, 21 (in KM)</b>	<b>Total OPGW laid as on 30.09.2021 (in KM)</b>
132 KV	2766	192	2958
220 kV	2529	0	2529
400 kV	441	0	441
Total	5736	192	5928

7. The ISO certified data centre with full proof security against cyber attack is in place Mo-Vidyut platform developed by OPTCL and hosted by Government of Odisha is in use by the consumers of the state.
8. OPTCL has decided to go for D/C configuration for all new transmission lines and to convert existing S/C line to D/C configuration (wherever feasible) to enhance reliability of supply and to address RoW issues. PGCIL has been engaged as the consultant for development of Odisha Asset Management Centre and Survey work has already been completed for the purpose. OPTCL will approach the Commission with detail proposal for approval.
9. OPTCL has established the Primary Data Centre (PDC) to cover OPTCL, GRIDCO, SLDC and DISCOM utilities. The project is under O&M phase for 5 years. OPTCL has conducted VAPT (Vulnerability Assessment and Penetration Testing) from 22.06.2022 to 27.06.2022. The report submitted by the firm has been forwarded to the

concerned departments for immediate action. The CII (Critical Information Infrastructure) of SLDC has been identified and approved by NCIIPC & CERT-In are to be accepted by Department of Energy, Government of Odisha. OPTCL has mandated the use of e-office application in all field offices and headquarter from 01.10.2022.

10. OPTCL has submitted that about 2715 nos. of executive & non-executive posts are vacant (as on 30.09.2022) against the sanctioned strength of 5342nos.
11. OPTCL has submitted that 17,717.41 MU of energy transaction has taken place over the OPTCL's transmission network against OERC approval of 14,855MU(prorated) during the first six months of that FY 2022-23 and revenue of Rs.496.09 crore has been earned against OERC's approval of Rs.415.94(prorated).The detailed comparative statement is presented in table below:

**Revenue Approved (Prorated) vis-à-vis Actual for first half of FY 2021-22**

Source	ESTIMATE BY OERC FOR FY 2022-23(Prorated)			ACTUAL FOR FIRST HALF OF FY 2022-23		
	Energy handled (MU)	Rate P/U	Amount Billed (Rs.Cr)	Energy (MU)	Rate P/U	Amount Billed (Rs Cr.)
TPCODL	4895		137.06	5607.86		157.02
TPNODL	3010		84.28	3342.59		93.59
TPWODL	4650		130.20	6223.48		174.26
TPSODL	2195		61.46	2240.95		62.75
Less energy handled in DISCOMs network						
<b>TOTAL DISCOMS</b>	<b>14600</b>		<b>408.8</b>	<b>17414.88</b>	<b>28.00</b>	<b>487.62</b>
CGPS Wheeling	255.00		7.14	302.53	28.00	8.47
Sale to CPP						
<b>SUB TOTAL</b>			<b>7.14</b>			<b>8.47</b>
<b>GRAND TOTAL</b>	<b>14855.00</b>		<b>415.94</b>	<b>17717.41</b>		<b>496.09</b>

12. The Commission in their concluding remarks appreciated the good initiatives taken by OPTCL and opined that OPTCL should come-up with various innovative proposals to make the system more robust, reliable with reduced transmission loss.
13. Apart from the above discussions/observations, the Commission issues following directives.
  - (i) The Commission has expressed its concern about the delay in execution of projects primarily due to RoW issues and directs OPTCL to pursue the matter with the concerned departments for early resolution of RoW issues and forest clearances etc. for timely completion of the transmission projects in order to avoid cost and time overrun.

- (ii) It is observed that many of EHV substations and transmission lines are under loaded and many of 33 kV bays are idle in the Grid s/s. OPTCL should coordinate with DISCOMs for utilization of idle bays and development of downstream in matching time frame for efficient & optimum use of transmission assets.
- (iii) OPTCL should go for long term transmission planning (10-15 years time frame) for future expansion of transmission network focusing on optimum utilization of transmission assets and effort should be for reduction of transmission charges for the benefit of the consumers of the state.
- (iv) The CAPEX proposal of OPTCL shall be based on transmission system planning at intra-state level for a long time frame of 10-15 years for which load flow study shall be carried out considering the projected load growth, other system constraints and requirement of distribution system. It is understood during discussion that PRDC has been engaged by OPTCL for such study. The proposal of DISCOMs for creation of 29 nos of grid substations to cater to the additional load growth expected due to upcoming industries, large scale integration of RE and the proposed green hydrogen project in Paradeep & Gopalpur area.
- (v) Justification for establishment of the Kiakata 220 /132/33 kV substation with single 20 MVA transformer without any provision to meet the contingency condition.
- (vi) The concept of dynamic line ratings may be considered during planning to accommodate additional power flow during night peak hours, when ambient temperature is lower than day time temperature. Further, the requirement of additional transmission network for meeting GNA requirement as per plan of CEA, CERC (Connectivity and General Network Access to the Inter-state Transmission System) Regulations and Generation Resource Adequacy plan of CEA need to be taken into account, while planning the transmission system of the state.
- (vii) OPTCL should furnish the action taken/compliance report on the observation of the Commission made during the last performance review held on dt.23.06.2022 without further delay.

- (viii) The Commission opined that performance review of OPTCL should include performance indicators like availability of transmission system, failure rate of line & major substation equipments, innovative steps/actions taken to reduce forced outage, improvement of various performance indices.
- (ix) OPTCL should carry out protection Audit regularly and take appropriate steps for provision of adequate spares to meet the contingency situations like cyclone or breakdown etc.
- (x) OPTCL should submit the list of AIS & GIS substations and associated transmission lines, in its transmission system and maximum loading (in MW/MVA and percentage) of the substations corresponding to the date & time of maximum demand achieved during the FY 2022-23.
- (xi) OPTCL may approach the Government of Odisha to provide financial assistance for the projects required for socio economic development activities in the state but such project(s) may not be financially viable. The Commission also desires to know the action taken by OPTCL on the observation of the Commission in this connection in Case No.60/2016.
- (xii) OPTCL is now managing its operation with 50% of the HR strength. Reassessment of requirement of Human Resources considering the retirement and adoption of automation in a big way is essential and accordingly recruitment plan & capacity building programme should be taken up.
- (xiii) OPTCL should carry out Residual Life Assessment (RLA) Study since many lines and s/s have crossed their useful service life. The study would help in future planning and expansion of transmission network. Action taken in this regard and any study carried out so far may be shared with the Commission for perusal.
- (xiv) The statement on the receipt of additional revenue due to increase in open access transmission charges for Renewable Energy for the FY 2022-23.
- (xv) It was observed from the loan statement that the loan availed i.e. Rs. 149.25 Crs during the period against the loan approved in ARR i.e. Rs.110.29 Crs. OPTCL need to clarify the reason for enhancement in debt/loan.
- (xvi) It is observed that there is no break up of principal and interest in the provisional loan position statement and whether it matches with audited

accounts or not. OPTCL may also clarify about the State Govt. loan (CRF) which is not reflected in the audited accounts. OPTCL may clarify on above observations and submit the revised statement.

- (xvii) It is observed that there is a mismatch in amount of loan repayment made and figures appearing in repayment statement and cash flow statement which need clarification and submission of the revised statement.
- (xviii) The details of Misc. Income and Misc. Receipts need to be provided for the FY up to September 2022.
- (xix) The details of cash outflow on account of terminal benefit need to be provided for the FY up to September 2022.

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**Representatives of OPTCL**

1. Sri Sanjay Kumar Mishra, IRTS,CMD
2. Sri U.K.Pati, Director (Operation)
3. Sri B.B.Meheta, CLD(SLDC)
4. Sri R.N. Pratihari, Director (HRD)