



# **MEMORANDUM OF UNDERSTANDING**

#### BETWEEN

# DEPARTMENT OF ENERGY, GOVERNMENT OF ODISHA

#### AND

ODISHA POWER TRANSMISSION CORPORATION LTD.

FOR THE FINANCIAL YEAR 2019- 2020





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#### PART-I

#### 1. PREFACE:

**ODISHA POWER TRANSMISSION CORPORATION LIMITED** (**OPTCL**), a wholly owned Govt. of Odisha Undertaking was incorporated on 29.3.2004 under the Companies Act, 1956. By virtue of the Odisha Electricity Reform (Transfer of Transmission and Related Activities) Scheme, 2005, the transmission undertaking of GRIDCO along with all assets and liabilities, personnel and proceedings were transferred and vested with OPTCL with effect from 1<sup>st</sup> April 2005. OPTCL is a Transmission Licensee and has been notified as the State Transmission Utility (STU) under section 39(1) of the Electricity Act, 2003.

Presently the Corporation is carrying on intra state transmission and wheeling of electricity and is also discharging the functions of State Load Despatch Centre. As nodal agency of the State Govt., the Corporation is executing some of the Distribution projects like, ODSSP, ODAFF, SCRIPS, DDUGJY, IPDS fully funded by the Govt. At present the Corporation owns Extra High Voltage Transmission system and operates about 14,241 Ckt. kms of transmission lines and 154 nos. of Grid Substations with transformation capacity of 20,356 MVA.

#### 2. MANDATE:

To build, maintain and operate an efficient, coordinated and economical intra State transmission system in the State for transmission of power from the generating stations to the load centre and wheeling of power to other states, undertake power system improvement by renovation, up-gradation and modernization of the existing network.

#### 3. VISION:

To make OPTCL one among the leading Transmission Utilities in India, transmitting quality, reliable and secured power with minimum transmission loss at a competitive price.

#### 4. MISSION:

- Transmission of power in large quantity with affordable price as per the expectation of customers, Government of Odisha and OERC
- Increase transmission network need based to meet the demand of the State
- Develop a portfolio of Intra-State and some Inter-State transmission assets in national market including business expansion for evacuation of power outside the state in collaboration with PGCIL and others

- Adoption of best Construction and O&M practices supported by system driven processes enabled by cutting edge IT solutions
- Diversification of business by providing consultancy in the areas of construction, maintenance of electricity transmission system and telecommunication so as to achieve optimum utilization of assets for generation of additional revenue
- Develop skilled and satisfied human resources, fostering a service-oriented attitude to its customers/ stake holders and becoming empowered to meet customer need in the changing scenario
- Building Research and Development wing for adoption of new technology
- Discharge the social responsibility with commitment on Environment Protection, Health, Safety, Energy conservation and Community Development
- Practise highest standard of corporate governance and be a financially sound company

#### 5. OBJECTIVES:

#### (A) DEVELOPMENTAL OBJECTIVE

As a State Transmission Utility, the Corporation has set the following objectives as per mandate given under the Electricity Act, 2003:

- 1. Undertake transmission of electricity through its Intra-State transmission network.
- Discharge all functions of planning and coordination relating to intra-State, inter-State transmission system with CTU, State Generating Companies, IPPs, Regional Power Committee, Authority, Licensees or other person notified by State Govt. in this behalf.
- 3. Ensure development of an efficient and economical intra state transmission system for smooth flow of electricity from generating stations to the load centers and to exercise supervision and control over the transmission system.
- 4. Efficient Operation & Maintenance of the Transmission systems.
- 5. Ensure restoration of power in quickest possible time in event of any natural disasters through Emergency Restoration System.
- 6. Efficiently operate State Load Despatch Centre to ensure optimum scheduling and despatch of electricity and to ensure integrated operation of power systems in the State.
- 7. Provide non-discriminatory open access for use by any licensee or generating company or any consumer on payment of charges.
- 8. Ensure implementation of Quality Management System in all functional areas in a phased manner.

- 9. Ensure timely implementation of Govt. funded distribution projects like ODSSP, ODAFFP, SCRIPS, DDUGJY, IPDS.
- 10. Ensure principles of reliability, security and economy matched with the rising expectation of the people for a clear, safer, healthier environment.
- 11. Setting superior standards in capital project management and operations for the industry and ourselves

### (B) COMMERCIAL OBJECTIVE

- 1. Achieve transmission target of 28270 MU during 2019-20.
- 2. Achieve system availability of 99.95 %
- 3. Achieve reduction of transmission loss to 3.00 %

#### (C) INNOVATION

- Achieving continuous improvements through innovation and state of- the-art technology
- 2. Uprating conductors from ACSR to HTLS in important EHT lines to avoid load flow constraints and to meet future load growth.
- 3. Installation of 33 KV Shunt Capacitor for improvement of voltage profile.
- 4. Conversion of S/C Lines in D/C Towers to D/C Lines to double the transmission capacity and better reliability of existing transmission system.
- 5. Conversion from Air Insulated Substation to Gas Insulated Substation with provisions of state-of-the-art system.
- 6. Implementation of Smart Grid projects to ensure reliable, efficient and cost effective transmission of electricity.
- 7. Energy Accounting through Automatic Meter Reading (AMR).
- 8. Implementation of Substation Automation System in all future Grids and existing important Grids.
- Commissioning of Advanced Metering Infrastructure (AMI) for timely flow of accurate energy data.
- Installation of Event Loggers and Bus Bar Protection for strengthening the stability of the system.
- 11. Use of Multi Circuit Towers for effective & economic utilization of RoW.
- 12. Implementation of Geographical Information System (GIS) to facilitate Outage Management System (OMS).
- 13. Digitization of Grid Substations.
- 14. Replacement of earth-wires by OPGW and renovation of Earthing system
- 15. Implementation of Automatic Demand Management System (ADMS).

### (D) HUMAN RESOURCE DEVELOPMENT

- 1. Inspiring, nurturing and empowering the next generation of Professionals
- 2. Ensure development of employees through systematic training and providing opportunities for developing new capabilities and introduce modern training policies and practices.
- 3. To facilitate planned management of organizational change and ensure top management commitment to drive changes, triggered by induction of new technology/implementation of IT-enabled ERP systems/new HR policy to achieve organizational objectives.
- 4. Committing to highest standards in health, safety, security & environment.
- 6. Harmonizing interdepartmental relationship and achieving industrial harmony and peace.

### (E) CUSTOMERS/STAKEHOLDERS

- 1. Ensure delivery of quality, reliable and secured power with minimum transmission loss at a competitive price.
- 2. Leveraging capabilities to consistently generate maximum value for all stakeholders in India and in emerging and growing economies
- 3. Discharge Corporate Social Responsibility through various initiatives having positive impact on the society at large and with commitment on cleaner, safer, healthier environment for people, conservation of energy and community development.
- 4. In line with its CSR Policy, the Corporation will focus on the following thrust areas in order of priority:
  - Strengthening skill building and imparting vocational training/need based training to improve employability of school/college dropouts in different trades in designated institutions as laid down in the policy on priority to meet the sectoral needs.
  - ii. Setting up of Micro Grids in villages along with livelihood options.
  - iii. Strengthening skill building for livelihood by helping women SHGs.





#### PART-II

# EXERCISE OF AUTONOMY AND DELEGATION OF FINANCIAL POWERS

- As per the financial power delegated by the State Government, the Corporation will continue to undertake new programme of capital investment project involving expenditure up to a limit of Rs.100 crore.
- ➤ The Corporation will borrow money from Financial Institutions/ Commercial Banks and raise bonds/debentures for timely implementation of various projects.
- ➤ The Corporation will streamline project execution and explore possibilities to have alliances with public and private organizations for technology adoption and business development, Telecommunication and IT infrastructures.





### PART - III

# PERFORMANCE EVALUATION PARAMETERS AND TARGETS

For the purpose of performance evaluation of the Corporation for the year 2019-20, the scale and weight assigned to various parameters are shown in the enclosed table.

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A STATIC PARAMETERS (45)           A1         Tumover         Rs.in.Cr.         10         931.00         886.36         842.00         753.00         878.11           A2         Gross Profit         Rs.in.Cr.         10         348.00         331.62         315.00         298.00         282.00         241.41           A3         Net Profit         Rs.in.Cr.         10         348.00         331.62         315.00         298.00         282.00         241.41           A4         Return on Capital         Rs.in.Cr.         5         3.62         3.00         2.36         1.70         1.07         5.13           A5         Tumover per employees         Rs.in.Cr.         5         3.62         3.00         2.36         1.70         1.07         5.13           A6         Courribution to State         Rs.in.Cr.         5         26.25         25.00         23.75         22.50         21.25         25.50           B6         Ovaribution to State         Rs.in.Cr.         5         735.00         23.75         22.50         21.05         25.50         25.50         25.50         25.50         25.50         25.50         25.50         25.50         25.50         25.50         25.5	Si. No.	Financial performance Indicators	Unit	Weight	Excellent (105%)	Very Good (100%)	Good (95%)	Fair (90%)	Poor (85%)	Actual as on 31.03.2019
1         Tumover         Rs.in Cr.         10         931.00         886.36         842.00         798.00         753.00           2         Gross Profit         Rs.in Cr.         10         348.00         331.62         315.00         298.00         282.00           3         Net Profit         Rs.in Cr.         10         40.93         27.33         15.52         (0.72)         (16.72)           4         Return on Capital         %         5         3.62         3.00         2.36         1.70         1.07           5         Tumover per employees         Rs.in Cr.         5         26.25         25.00         23.75         1.70         1.07           6         Contribution to State         Rs.in Cr.         5         26.25         25.00         23.75         22.50         21.25           9         Contribution to State         Rs.in Cr.         5         99.95         99.90         99.85         99.80         99.75           System Availability         %         5         735.00         700.00         665.00         50.00         10.25           System Availability         %         5         99.95         99.90         99.85         99.80         99.75	-	STATIC PARAMETE	RS (45)							
2         Gross Profit         Rs.in.Cr.         10         348.00         313.62         315.00         298.00         282.00           3         Net Profit         Rs.in.Cr.         10         40.93         27.33         13.52         (0.72)         (16.72)           4         Return on Capital         %         5         3.62         3.00         2.36         1.70         1.07           5         Turnover per employee         Rs.in Cr.         5         26.25         0.25         0.24         0.24         0.22           6         Contribution to State         Rs.in Cr.         5         26.25         25.00         23.75         22.50         21.25           9         Contribution to State         Rs.in Cr.         5         26.25         25.00         23.75         22.50         21.25           1         Contribution to State         Rs.in Cr.         5         99.95         99.96         99.86         99.80         99.75           1         Capital Expenditure         Rs.in Cr.         5         735.00         700.00         665.00         540         510           1         Transchissioning or ODSSP         WA         5         3.00         3.56         3.70 <td>11</td> <td>Turnover</td> <td>Rs.in Cr.</td> <td>10</td> <td>931.00</td> <td>886.36</td> <td>842.00</td> <td>798.00</td> <td>753.00</td> <td>878.11</td>	11	Turnover	Rs.in Cr.	10	931.00	886.36	842.00	798.00	753.00	878.11
3         Net Profit         Rs.in Cr.         10         40.93         27.33         13.52         (0.72)         (16.72)           4         Return on Capital         %         5         3.62         3.00         2.36         1.70         1.07           5         Turnover per employee         Rs.in Cr.         5         0.28         0.26         0.25         0.24         0.22           6         Contribution to State         Rs.in Cr.         5         26.25         25.00         23.75         22.50         21.25           9         Contribution to State         Rs.in Cr.         5         26.25         25.00         23.75         22.50         21.25           9         VNAMIC PARAMETERS (40)         5         700.00         665.00         650.00         57.0         21.25           1         Capital Expenditure         Rs.in Cr.         5         735.00         700.00         665.00         50.00         50.00           1         Transmission line capacity         MVA         5         2100         200         1900         1800         1700           1         Transmission Loss         %         5         3.00         3.25         3.50         3.70 <t< td=""><td>12</td><td>Gross Profit</td><td>Rs.in Cr.</td><td>10</td><td>348.00</td><td>331.62</td><td>315.00</td><td>298.00</td><td>282.00</td><td>241.41</td></t<>	12	Gross Profit	Rs.in Cr.	10	348.00	331.62	315.00	298.00	282.00	241.41
4 Return on Capital employed a (3550 employed)         85.         3.62         3.00         2.36         1.70         1.07           7 Untrover per employed (3350 employees)         Rs.in Cr.         5         0.28         0.26         0.25         0.24         0.22           5 Contribution to State exchequer         Portribution to State (40)         8.in Cr.         5         26.25         25.00         23.75         22.50         21.25           DVNAMIC PARAMETERS (40)         8         5         99.95         99.90         99.85         99.80         99.87           System Availability         %         5         735.00         700.00         665.00         630.00         560.00           Transmission line capacity         Ckt. Kms         5         630         600         570         540         510           Transformation capacity         MVA         5         2100         2000         1900         1800         1700           Transformation capacity         WA         5         2100         2000         1900         1800         1700           Transformation capacity         WA         5         200         190         180         170         160           S/S (balance nos. of S/S))	13	Net Profit	Rs.in Cr.	10	40.93	27.33	13.52	(0.72)	(16.72)	37.31
Funnover per employees   Rs.in Cr.   Saciation   Rs.in Cr.   Saciation   Sate   Saciation   Sate   Saciation   Sate   Saciation   Sate   Saciation   Sate   Saciation   Saciation	44	Return on Capital employed	%	vo	3.62	3.00	2.36	1.70	1.07	5.13
5 Contribution to State exchequer         Rs.in Cr         5         26.25         25.00         23.75         22.50         21.25           DYNAMIC PARAMETERS (40)           System Availability         %         5         99.95         99.85         99.80         99.75           Capital Expenditure         Rs.in Cr.         5         735.00         700.00         665.00         630.00         560.00           Transmission line capacity         MVA         5         630         600         570         540         510           Transmission Loss         %         5         2100         2000         1900         1800         1700           Transmission Loss         %         5         200         190         180         170         160           Commissioning of ODSSP         Ms.         5         200         190         180         170         160           S/S (balance nos. of S/S))         Ms.         5         3.00         7500         7000         6500         6000           Employee Training         Ms.         5         8000         7500         7000         6500         6000	13	Turnover per employee (3350 employees)	Rs.in Cr.	w	0.28	0.26	0.25	0.24	0.22	0.29
DYNAMIC PARAMETERS (40)           System Availability         %         5         99.95         99.85         99.80         99.875           Capital Expenditure         Rs.in Cr.         5         735.00         700.00         665.00         630.00         560.00           Transmission line capacity         Ckt. Kms         5         630         665.00         630.00         560.00           Transformation capacity         MVA         5         2100         2000         1900         1800         1700           Transmission Loss         %         5         3.00         3.25         3.50         3.70         3.80           Commissioning of ODSSP         No.         5         200         190         180         170         160           S/S (balance nos. of S/S))         Kms.         5         13.5         13         12.5         12         11.5           Employee Training         Man days         5         8000         7500         7000         6500         6000	9	Contribution to State exchequer	Rs.in Cr	w	26.25	25.00	23.75	22.50	21.25	25.97
System Availability         %         5         99.95         99.85         99.80         99.75           Capital Expenditure         Rs.in Cr.         5         735.00         700.00         665.00         530.00         560.00           Transmission line capacity         Ckt. Kms         5         630         600         570         540         510           Transformation capacity         MVA         5         2100         2000         1900         1800         1700           Transformation capacity         MVA         5         3.00         3.25         3.50         3.70         3.80           Commissioning of ODSSP         No.         5         3.00         190         180         170         160           S/S (balance nos. of S/S))         Kms.         5         13.5         13         12.5         11.5           Employee Training         Man days         5         8000         7500         7000         6500         6000		DYNAMIC PARAMET	ERS (40)							
Capital Expenditure         Rs.in Cr.         5         735.00         700.00         665.00         550.00         560.00           Transmission line capacity         Ckt. Kms         5         630         600         570         540         510           Transformation capacity         MVA         5         2100         2000         1900         1800         1700           Transmission Loss         %         5         3.00         3.25         3.50         3.70         3.80           Commissioning of ODSSP         No.         5         200         190         180         170         160           S/S (balance nos. of S/S))         Kms.         5         13.5         13         12.5         12         11.5           Employee Training         Man days         5         8000         7500         7000         6500         6000	1	System Availability	%	w	56.66	06.66	99.85	08.66	99.75	86.66
Transmission line capacity addition         CKt. Kms         5         630         600         570         540         510           Transformation capacity addition.         MVAA         5         2100         2000         1900         1800         1700           Transmission Loss         %         5         3.00         3.25         3.50         3.70         3.80           Commissioning of ODSSP         No.         5         200         190         180         170         160           S/S (balance nos. of S/S))         Kms.         5         13.5         12.5         12.5         11.5           Employee Training         Man days         5         8000         7500         7000         6500         6000	7	Capital Expenditure	Rs.in Cr.	w	735.00	700.00	665.00	630.00	260.00	927.00
Transformation capacity addition.         MVA         5         2100         2000         1900         1800         1700           Transmission Loss         %         5         3.00         3.25         3.50         3.70         3.80           Commissioning of ODSSP No.         No.         5         200         190         180         170         160           S/S (balance nos. of S/S))         Kms.         5         13.5         13         12.5         11.5           Laying of UG Cable under work)         Man days         5         8000         7500         6500         6500	23	Transmission line capacity addition	Ckt. Kms	w	630	009	570	540	510	523.29
Transmission Loss         %         5         3.00         3.25         3.50         3.70         3.80           Commissioning of ODSSP S/S (balance nos. of S/S))         No.         5         200         190         180         170         160           Laying of UG Cable under SCRIPS (balance work)         Kms.         5         13.5         13         12.5         12.5         11.5           Employee Training         Man days         5         8000         7500         7000         6500         6000	4	Transformation capacity addition.	MVA	ın	2100	2000	1900	1800	1700	1770
Commissioning of ODSSP S/S (balance nos. of S/S)         No.         5         200         190         180         170         160           Laying of UG Cable under SCRIPS (balance work)         Kms.         5         13.5         13         12.5         12.5         11.5           Employee Training         Man days         5         8000         7500         7000         6500         6000	10	Transmission Loss	%	20	3.00	3.25	3.50	3.70	3.80	3.28
Laying of UG Cable under SCRIPS (balance work)         Kms.         5         13.5         13         12.5         12.5         11.5           Employee Training         Man days         5         8000         7500         7000         6500         6000	<b>S</b>	Commissioning of ODSSP S/S (balance nos. of S/S))	No.	n	200	190	180	170	160	148
Employee Training Man days 5 8000 7500 7000 6500 6000	7	Laying of UG Cable under SCRIPS (balance work)	Kms.	w	13.5	13	12.5	12	11.5	89
	7	Employee Training	Man days	w	8000	7500	7000	0059	0009	6787

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	60	60	ĸ	7	62	1	1
(15)	Time	%	%	Time	Time	No.	No.
GENERAL MEASURES (15)	Recruitment of Employees Recruitment of Non- Executive (as approved by Govt.)	Attrition as % of total employees	CSR Exp. to the extent of budget allocation.	Approval of Financial Statement for FY 2018-19.	Updating Land Records (RoR/ Lease Deed/ Lease Sanction for new cases)	Fatal accident in work place	Loss of man-days due to Industrial conflict
)	ū	C	C3	C4	C5	C7	% C8





#### PART-IV

# OBLIGATIONS OF THE STATE GOVERNMENT

- ➤ GoO shall provide administrative support of revenue authorities for acquisition of private and Govt. land for construction of Grid Substations and other related establishments of OPTCL.
- GoO shall extend necessary help for resolving Right-of-Way (RoW) issues of transmission projects of OPTCL to facilitate their timely completion.
- GoO shall maintain law and order during execution of transmission project and provide safety to the Corporation's personnel as well as transmission system equipment particularly in the disturbed/ Maoist affected areas.
- ➤ GoO shall take up with the Ministry of Environment and Forest, Govt. of India for expeditious clearance of projects to avoid delay in timely execution of the projects.
- ➤ GoO shall provide guarantee in appropriate cases for obtaining loan from banks and financial institutions and for raising funds through debt instruments from the capital market for execution of new projects.
- ➤ GoO shall provide financial support in form of equity share capital to the extent of Rs.50.00 crore in favour of the Corporation during FY 2019-20 for execution of new Transmission projects.
- ➤ GoO shall provide funds along with supervision charges for timely execution of Govt. funded projects like ODSSP, ODAFF, SCRIPS etc.
- ➤ GoO shall facilitate for availing PSDF from Central Government in appropriate cases.
- GoO shall appoint Functional Directors in the Corporation against vacant posts.





#### PART - V

# ACTION PLAN FOR IMPLEMENTING AND REVIEW OF THE MOU

Performance evaluation will be done on half yearly/ yearly basis as may be decided by the Department of Public Enterprises, Govt. of Odisha as per the format for evaluation.

OPTCL Management will also ensure internal monitoring of the performance against MOU targets on quarterly basis.

DIRECTOR (PROJECT)
ODISHA POWER
TRANSMISSION CORPORATION
LIMITED

Special secretary to govt, DEPARTMENT OF ENERGY, GOVT. OF ODISHA

Date: 24/10/2019 Place: Bhubaneswar