



ODISHA HYDRO POWER
CORPORATION LTD.

MEMORANDUM OF UNDERSTANDING

BETWEEN

DEPARTMENT OF ENERGY
GOVERNMENT OF ODISHA

AND

ODISHA HYDRO POWER
CORPORATION LTD.

FOR THE YEAR **2023-24**



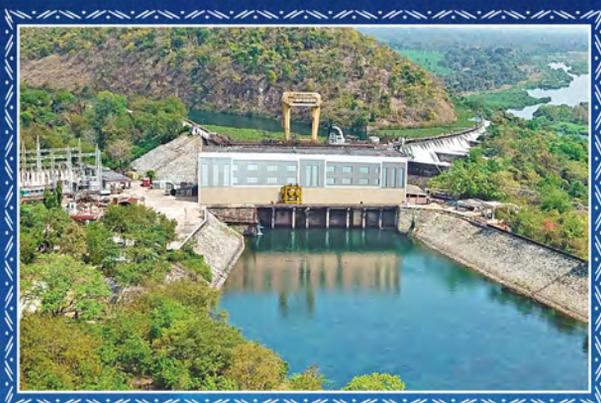
Balimela Hydro Electric Project, Balimela



Upper Indravati Hydro Electric Project,
Mukhiguda



Hirakud Hydro Electric Project, Burla



Chiplima Hydro Electric Project, Chipilima



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FOR THE YEAR **2023-24**

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MEMORANDUM OF UNDERSTANDING
BETWEEN
DEPARTMENT OF ENERGY
GOVERNMENT OF ODISHA
AND
ODISHA HYDRO POWER CORPORATION LTD
FOR THE FINANCIAL YEAR (2023-24)

PART -I

1. MANDATE

To develop Hydro Power resources in the state and to renovate, modernize and operate existing hydro power plants for providing cheap and reliable power to the state and foray into alternate sources of green energy for long term energy security of the State and energy transition.

2. VISION

To be a leading power utility in the energy sector through diversified energy portfolio with due care & concern to the environment.

3. MISSION

- (i) To augment hydro power generating capacity by setting up new hydro power projects.
- (ii) To adopt state of the art technology for up-gradation of the existing hydro power stations so as to achieve the highest level of efficiency.
- (iii) To professionalize the work force with modern management and technical know-how.

4. OVERALL GOAL AND OBJECTIVES

(A) DEVELOPMENTAL OBJECTIVE

- (i) To renovate and modernize the existing hydro power plant to improve efficiency and supply reliable and quality power to the State in a cost effective manner.
- (ii) To accelerate development of Hydroelectricity projects, Renewable Energy and Pumped Storage projects in the state for energy transition.

(B) COMMERCIAL OBJECTIVE FOR FY 2023-24

- (i) To achieve energy generation target of **5602.60 MU**.
- (ii) To achieve Net Profit (after tax) target of Rs. 207.10 Crore.
- (iii) To achieve weighted average plant availability factor of **85%**.
- (iv) To accelerate DPRs of Pumped Storage Projects with focus on early implementation of Upper Indravati PSP (600 MW).
- (v) To accelerate DPR of 63 MW Kharag Hydro Electric Project.
- (vi) To complete Renovation and Modernization of Unit 3 & 4 of Balimela Hydro Electric Project.

PART -II

A. EXERCISE OF AUTONOMY

OHPC, being a Gold rated PSU, has been empowered by Govt. of Odisha to take decision on capital investment up to Rs. 100 Crores. The activities undertaken are as follows:

(i) **Renovation, Modernization & Uprating of Power Stations are as below-**

(a) Unit-3(24MW) of CHEP, Chiplima

On completion of Renovation & Modernization work, Unit-3 of CHEP, Chiplima was put to commercial operation with effect from 21.01.2020.

(b) Unit-5 & 6(2*43.65MW) of HHEP, Burla

On completion of R, M & U work of Unit 5 & 6 of HHEP, Burla, the units were put to commercial operation with enhanced capacity with effect from 02.11.2021 & 09.01.2022 respectively.

(c) Unit -1 to 6(6*60MW) of BHEP, Balimela

- On completion of Renovation & Modernisation work of Unit 2 & 1 of BHEP, Balimela, the units were put to commercial operation with effect from 29.12.2021 & 15.04.2022 respectively.

- The erection of 20 MVA Station Transformer has been completed & likely to be commissioned by 30.06.2022. After commissioning of the 20 MVA Station Transformer, Unit 3 & 4 will be handed over to the contractor M/s BHEL for taking up the R & M works of the Units on 16.08.2022 and 10.08..2022 respectively.

(ii) **Projects in Pipeline & Status thereof:**

OHPC has taken initiative to develop 3 nos. Pumped Storage Projects and 02 nos. of Hydroelectric Projects. The DPR preparation work of following Projects are in progress. The

brief status of projects are mentioned below:

- **Upper Indravati Pumped Storage Project (4 x 150 MW):-**

Draft DPR of UIPSP has been prepared and sent to CEA & CWC for scrutiny. All pre- DPR clearances have been obtained except GSI and CSMRS. Interstate clearance has been received on 13.09.2022 from CWC. For geotechnical investigation, drilling and drifting works are under progress since February 2023.

- **Upper Kolab Pumped Storage Project (2 x 160 MW):-**

For preparation of DPR of UKPSP, Topographical survey has been completed. Hydrology chapter, General layout and Topographical survey report have been submitted to CWC for vetting. Geotechnical investigation will be taken up for further study.

- **Balimela Pumped Storage Project (2 x 250 MW):-**

For preparation of DPR of Balimela PSP, Topographical survey, Surface geological mapping have been completed. Clearance on Hydrology Chapter received on 12.04.2023 from CWC. Geotechnical investigation will be taken up for further study.

- **Kharag Hydro Electric Project (3 x 21 MW) :-**

For preparation of DPR of Kharag HEP Topographical survey, Hydrology, Power Potential study etc. have been completed. For geotechnical investigation drilling work is under progress from March 2023.

- **Salki Hydro Electric project (44 MW):-**

Layout finalisation and irrigation potential study is under progress.

PART -III
PERFORMANCE EVALUATION CRITERIA AND TARGET

Sl. No.	Particulars	Unit	Weight	2022-23 (Un-Audited)	2023-2024					2024-25
					Excellent	Very Good	Good	Fair	Poor	
1	STATIC PARAMETERS		50							
1.1	Financial Performance Indicators									
1.1.1	Cash Flow (Operational)	Rs. Crs.	12	264.43#	200.37	190.83	181.29	171.75	162.21	205.28
1.1.2	Turnover (Sale of Power)	Rs. Crs.	10	498.93	553.65	527.29	500.93	474.56	448.20	550.87
1.1.3	Net Profit	Rs. Crs.	12	443.60*	217.46	207.10	196.75	186.39	176.04	223.30
1.1.4	Return on Capital Employed	%	10	17.45	10.58	10.08	9.58	9.07	8.57	10.27
1.1.5	Net Turnover per Employee	Rs. in Lakhs	6	79.76	70.39	67.04	63.69	60.34	56.98	74.85
2	DYNAMIC PARAMETERS		35							
2.1.	Human Resource Development		03	Refer Annexure-1						
2.2.	Renovation & Modernisation of OHPC Power Station and Maintenance Activities in Power House		25	Refer Annexure-2						
2.3.	Project Implementation Status		07	Refer Annexure-3						
3	GENERAL MEASURES		15							
3.1.	Timely Approval of Financial Results	Time line	3	13.09.23	12.09.24	30.09.24	31.10.24	30.11.24	31.12.24	30.09.25
3.2.	Timely Submission of MoU	Time Line	3	20.10.22	15.05.23	15.06.23	15.07.23	15.08.23	15.09.23	12.06.24
3.3.	Introduction of IT in the business processes	Time Line	3	Introduced E-Office at C.O on 03.11.22	E-office for 03 three units by 30.11.23	31.12.23	31.01.24	29.02.24	31.03.24	Rest 03 units by 31.12.24
3.4.	Number of Questions Answered (State Legislature)	Nos	2	149	100%					100
3.5.	Number of Training Programmes Conducted	Nos	2	19	50	48	46	43	41	60
3.6.	No. of Pension Cases disbursed	Nos	2	130	105	100	95	90	85	100

Operating Cash Flow calculated based upon sales realisation from GRIDCO & CSPDCL and it's assume that GRIDCO will continue monthly payment towards sale of energy by taking 60 days credit.

*Net Profit for the FY 2022-23 includes the Profit on sale of investment in OPGC & OCPL for Rs.248.41 Crs. & Dividend received from OCPL for Rs.70.00 Crs.



Annexure-1

HUMAN RESOURCE DEVELOPMENT

SI No.	Particulars	Unit	Wt.	2022-23	2023-24	2024-25
1.	No. of Persons recruited during the year	Nos.	1	200	200	200
2.	No. of IR Paras raised/ resolved during the year	Nos.	0.5	Nil	-	-
3.	No. of RTI Questions answered during the year	Nos.	0.5	190	-	-
4.	No. of Man hour trained during the year	Hrs.	1	3050	4000	4500

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Part-(i) of Annexure-2

DYNAMIC PARAMETERS

RENOVATION & MODERNISATION OF OHPC POWER STATION FOR FY 2022-23

Sl No.	Milestones	2022-23 (Achievements)
A	RENOVATION & MODERNISATION OF UNIT 3 OF CHEP, CHIPLIMA	
a.	Final Take Over of the Unit	26.04.22
B.	RENOVATION & MODERNISATION OF 6 NOS. OF UNITS OF BHEP, BALIMELA	
a.	PG test of Unit -1 of BHEP, Balimela	21.03.23
b.	PG test of Unit -2 of BHEP, Balimela	21.03.23
c.	20 MVA station transformer commissioning	15.06.22
d.	Dismantling of Unit 3 & 4 of BHEP, Balimela	24.01.23
C.	RENOVATION & MODERNISATION OF UNITS 5 & 6 OF HHEP, Burla.	
a.	PG test of Unit 5 of HHEP, Burla	06.09.22
b.	Final Take Over of the Unit 5 & Unit-6 of HHEP, Burla	

RENOVATION & MODERNISATION OF OHPC POWER STATIONS FOR FY 2023-24

Sl. No.	Milestones	Wt. %	2023-24				
			Excellent	Very Good	Good	Fair	Poor
A.	Renovation & Modernization of Six Nos. of Units of BHEP	10					
1	Dry Commissioning of Unit 4	02	31.01.24	15.02.24	28.02.24	15.03.24	31.03.24
2	Spinning of Unit 4	02	07.02.24	15.02.24	28.02.24	15.03.24	31.03.24
3	Wet Commissioning of Unit 4	02	22.02.24	28.02.24	07.03.24	15.03.24	31.03.24
4	Dry commissioning of Unit-3	02	28.02.24	07.03.24	15.03.24	22.03.24	31.03.24
5	Spinning of Unit-3	02	07.03.24	15.03.24	20.03.24	25.03.24	31.03.24

RENOVATION & MODERNISATION OF OHPC POWER STATIONS FOR FY 2024-25

Sl. No.	FY 2024-25	
	Work to be Taken up	
1	Renovation & Modernization of Six Nos. of Units of BHEP	
	(a)	Weight commissioning of Unit-3
	(b)	Commercial operation of Unit-4
	(c)	Commercial operation of Unit-3
	(d)	Handing over of Unit-5 & 6
	(e)	Dismantling of Unit-5 & 6



Part-(ii) of Annexure-2

MAINTENANCE ACTIVITIES IN POWER HOUSES

SI No.	Milestones	Wt. %	2022-23	2023-24					2024-25
				Excellent	Very Good	Good	Fair	Poor	
A	Upper Kolab H.E. Project	1.5							
a.	Annual Maintenance of Units								
i.	First Unit	0.5	08.06.22	01.12.23	15.12.23	31.12.23	15.01.24	31.01.24	Will be carried out in scheduled date & time.
ii.	Second Unit	0.5	31.03.23	20.01.24	10.02.24	20.02.24	01.03.24	15.03.24	
iii.	Third Unit	0.5	27.02.23	31.01.24	15.02.24	20.02.24	15.03.24	31.03.24	
B.	Balimela H.E. Project	3.0							
a.	Annual Maintenance of Units								
i.	First Unit	1.0	Not taken	30.11.23	31.12.23	31.01.24	28.02.24	31.03.24	Will be carried out in scheduled date & time
ii.	Second Unit	1.0	Not taken	31.12.23	20.01.24	10.02.24	05.03.24	31.03.24	
iii.	Third Unit	1.0		31.01.24	15.02.24	28.02.24	15.03.24	31.03.24	
C.	Rengali H.E. Project	1.5							
a.	Annual Maintenance of Units								
i.	First Unit	0.5	05.07.22	01.12.23	10.12.23	31.12.23	10.01.24	21.01.24	Will be carried out in scheduled date & time
ii.	Second Unit	0.5	31.03.23	31.12.23	20.01.24	10.02.24	05.03.24	31.03.24	
iii.	Third Unit	0.5	Not taken	31.01.24	15.02.24	28.02.24	15.03.24	31.03.24	
D.	Upper Indravati H.E. Project	3							
a.	Annual Maintenance of Units								
i.	First Unit	1.5	07.06.22	15.10.23	15.11.23	15.12.23	15.01.24	15.02.24	Will be carried out in scheduled date & time
ii.	Second Unit	1.5	Not taken	15.12.23	10.01.24	05.02.24	03.03.24	31.03.24	
E.	Hirakud H.E. Project	4							

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a.	Annual Maintenance of Units								
i.	First Unit	1	22.06.22	30.04.23	31.05.23	30.06.23	31.07.23	31.08.23	Will be carried out in scheduled date & time
ii.	Second Unit	1	16.07.22	30.11.23	31.12.23	31.01.24	28.02.24	31.03.24	
iii.	Third Unit	1	21.12.22	31.12.23	20.01.24	10.02.24	05.03.24	31.03.24	
iv.	Forth Unit	1	16.01.23	31.01.24	15.02.24	28.02.24	15.03.24	31.03.24	
F.	Chiplima H.E. Project	2							
a.	Annual Maintenance of Units								
i.	First Unit	1	04.01.23	31.12.23	20.01.24	10.02.24	03.03.24	31.03.24	Will be carried out in scheduled date & time
ii.	Second Unit	1	27.02.23	28.02.24	05.03.24	10.03.24	15.03.24	31.03.24	

Annexure-3
PROJECT IMPLEMENTATION STATUS
New Hydro Projects & Pump Storage Projects 2022-23

(A)	Upper Indravati PSP: Interstate clearance received on 13.09.2022. Drafting work commenced at site from 14.02.2023. The drilling work for NIRM testing commenced at site from 31.03.2023.
(B)	Upper Kolab PSP: Topography Survey completed and layout finalised on 11.03.2023.
(C)	Balimela PSP: Compliance to the views of Govt. of Andhra Pradesh regarding Interstate clearance has submitted to DoWR, GoO on 18.07.2022.
(D)	Kharag HEP: Forest clearance to carryout geotechnical investing (drilling) obtained on 24.12.2022. Drilling work commenced at site from 03.03.2023. Drilling of two nos. of Bore hole out of 11 nos. completed.

New Hydro Projects & Pump Storage Projects 2023-24

Sl. No.	Milestones	Wt. %	2023-24				
			Excellent	Very Good	Good	Fair	Poor
A.	Upper Indravati PSP:	4					
i.	Techno Economic Clearance (TEC)	1.5	10.01.24	25.01.24	13.02.24	28.02.24	15.03.24
ii.	Drifting for 100 Mtr.	1.5	28.01.24	15.02.24	28.02.24	15.03.24	31.03.24
iii.	Preparation of Land schedule	1.0	10.01.24	25.01.24	13.02.24	28.02.24	15.03.24
B.	Upper Kolab PSP:	1.5					
i.	Completion of 50m drilling work for geotechnical investigation	1.5	28.01.24	15.02.24	28.02.24	15.03.24	31.03.24
C.	Kharag HEP:	1.5					
i.	Completion of Draft DPR	1.5	15.01.24	30.01.24	15.02.24	28.02.24	15.03.24

New Hydro Projects & Pump Storage Projects 2024-25

(A) Upper Indravati PSP:	
1.	Award of Contract Package (s).
2.	Forest clearance and environmental clearance.
(B) Upper Kolab PSP:	
1.	Completion of Draft DPR.
(C) Balimela PSP:	
1.	Completion of Draft DPR.
(D) Kharag HEP:	
1.	Forest clearance and environmental clearance.

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10/7/2023

MANAGING DIRECTOR
OHPC LTD

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10.7.2023

FA-CUM -ADDITIONAL
SECRETARY
TO GOVT OF ODISHA
ENERGY DEPARTMENT

PART -IV

COMMITMENTS/ ASSISTANCE FROM THE STATE GOVT.

- For Forest clearance, environmental clearance & interstate clearance for New Hydro Projects & Pump Storage Projects, Assistance/ Support from the State Government is required to expedite the projects.
- For financing New Hydro Projects & Pump Storage Projects, financial assistance from Financial institution may be required with Govt. of Odisha Guarantee, besides Viable Gap Funding, if required.
- Further, State Government intervention may be required for expedition of New Hydro Projects & Pump Storage Projects at ministry level, i.e. Ministry of Water Resources & Ministry of Power, Govt. of India for resolving interstate issues.
- Assistance of State Govt. is also required for acquisition of Land for setting of infrastructure including roads, buildings, bridges, culvert & new transmission line, etc.

DETAILS OF MOU

Sl No	Details of MoU	Unit	2022-23 (Un-Audited)		2023-24 (Estimated)		2024-25 (Proposed)	
1	Generation and Plant availability targets							
	(i) Energy Generation	MU	4915.51		5661.00		5661.00	
	(ii) Saleable Energy	MU	4802.39		5602.60		5602.60	
	(iii) Average Tariff of OHPC approved by OERC	P/U	89.28		93.49		97.70	
2	(a) Total Energy Sales	Rs. Cr.	498.93		527.29		550.87	
	(b) Other Income	Rs Cr	451.07		214.85		224.55	
	Total Turnover			950.00		742.14		775.42
3	Operation & Maintenance Expenses	Rs. Cr.	299.45		338.83		355.77	
4	Gross Margin (2-3)	Rs. Cr.		650.55		403.31		419.65
5	Depreciation	Rs. Cr.	67.21		63.85		60.66	
6	PBIT / Gross Profit	Rs. Cr.		583.34		339.46		358.99
7	Interest Payment	Rs. Cr.	64.82		62.71		60.59	
8	Profit Before Tax	Rs. Cr.		518.52		276.75		298.40
9	Tax @ 25.168%	Rs. Cr.	74.92		69.65		75.10	
10	Net Profit after tax (8-9)	Rs. Cr.		443.60		207.10		223.30
11	Capital Employed	Rs. Cr.	3342.49		3366.21		3497.15	
12	Return on capital employed (6/11)	%		17.45		10.08		10.27
13	No of employees	Nos	1191		1107		1036	
14	Turnover per employee (2/13)	Rs. lakhs		79.76		67.04		74.85
15	Contribution to State Exchequer	Rs. Cr.		61.47		170.13		79.64
i.	Electricity Duty	Rs. Cr.	5.45		5.72		6.01	
ii.	Water Cess	Rs. Cr.	8.33		8.75		9.18	
iii.	Dividend	Rs. Cr.	45.59		153.45 ^		62.13	
iv.	GST	Rs. Cr.	2.10		2.21		2.32	

^Dividend to be paid during the FY 2023-24 includes dividend for the FY 2021-22 of Rs.20.36 Crs. & dividend for the FY 2022-23 of Rs.133.08 Crs.,i.e. 30% of Post tax profit of Rs.443.60 Crs.



PART -V

Action plan for Implementing and Review of the MOU

- i. The generation target for FY 2023-24 has been prepared based on the nearest to actual basis as per availability of Machine, R&M & planned shutdown works & as per OERC approved ARR/ Tariff proposal.
- ii. The maintenance of power houses shall be undertaken as per schedule for ensuring normative availability of machines fixed by OERC for each of the power stations.
- iii. The management of the Power house shall be made more vigilant so that there will not be any setbacks during tendering and subsequent execution of works.
- iv. OHPC shall send quarterly performance report to Energy Deptt. for review and guidance.
- v. The final evaluation of performance for the year FY 2023-24 will be done after Audit of final Accounts.


10/7/2023

MANAGING DIRECTOR
OHPC LTD


10.7.2023

FA- CUM -ADDITIONAL
SECRETARY
TO GOVT OF ODISHA
ENERGY DEPARTMENT



PART -VI
DEFINITION OF VARIOUS FINANCIAL PARAMETERS

- i. **TURNOVER = SALE OF POWER (Energy Sales to GRIDCO & CSPDCL)**
- ii. **NET TURNOVER = SALE OF POWER + OTHER INCOME**
Excluding excise duty, sales tax, commission and discounts etc.
- iii. **GROSS PROFIT = Excess of Income over expenditure before providing for interest, taxes (including deferred taxes), extra ordinary items, prior period adjustments and appropriations to reserves.**
- iv. **NET PROFIT = Derived from gross profit after providing for depreciation, interest, taxes (including deferred taxes), extra ordinary items, prior period adjustments but before providing for appropriations to reserves.**
- v. **RETURN ON CAPITAL EMPLOYEED (ROCE) = Profit before interest and tax (PBIT) / Capital employed.**
- vi. **CAPITAL EMPLOYED = Equity Capital + Reserves and Surplus + Pref. Share Capital + Debentures and other long term Loans - Misc. Expenditure & Losses.**
- vii. **CONTRIBUTION TO STATE EXCHEQUER - Payment made to the State Government in the form of duties, taxes, cess, royalty and dividend etc.**



Upper Kolab Hydro Electric Project



Training Centre, OHPC



Rengali Hydro Electric Project



ODISHA HYDRO POWER CORPORATION LTD.

(A Gold Rated Govt. of Odisha Undertaking)

Red. Office: Odisha State Police Housing & Welfare Corporation Building,
Vanivihar Chowk, Janpath, Bhoinagar, Bhubaneswar - 751022

Tel: 91-0674-2542983, 2542802, 2542826, Fax-2542102, CIN: U40101OR1995SGC003963

www.ohpc@ltd.com | [ohpc.odisha](https://www.ohpc.odisha) | [ohpc_odisha](https://www.facebook.com/ohpc_odisha)