

BEFORE

THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI

Petition No. ____ /TT/ ____

IN THE MATTER OF: Petition for determination of tariff under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 for 400 kV Itarsi-Khandwa-Dhule Link (400.67 kms) along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule under “**OPGW Installation on Itarsi-Dhule Transmission Line**”.

Power Grid Corporation of India Ltd

---PETITIONER

Registered office: B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi. 110 016.

Corporate Centre: SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

Vs

**Madhya Pradesh Power Management Company
Ltd.**

---RESPONDENTS

Shakti Bhawan, Rampur
Jabalpur - 482 008
Represented by Its MD
and Others

Place: Gurugram

Petitioner

Date: 27.06.2025

(Angaru Naresh Kumar)

Dy. General Manager (Commercial)

**ANGARU
NARESH
KUMAR**

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FILED BY
POWER GRID CORPORATION OF INDIA LTD.

Place: Gurugram

REPRESENTED BY

DATED: 27.06.2025

Angaru Naresh Kumar
Dy. General Manager (Commercial)

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Represented by Its MD

and Others

To

The Secretary

Central Electricity Regulatory Commission

New Delhi 110001

Sir,

The present tariff Petition is filed under Section 79 (1) (d) read with Section 62 of Electricity Act 2003, Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 for the determination of

Transmission tariff from DOCO to 31.03.2029 and same may be pleased to be registered and taken on record by the Hon'ble Commission.

Place: Gurugram

FILED BY

DATED: 27.06.2025

POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

Angaru Naresh Kumar
Dy. General Manager (Commercial)

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NARESH KUMAR

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MEMO OF PARTIES

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---PETITIONER

VERSUS

1. MADHYA PRADESH POWER MANAGEMENT COMPANY LTD.

SHAKTI BHAWAN, RAMPUR, JABALPUR - 482 008

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REPRESENTED BY ITS MD

2. **MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.**
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6. **CHHATTISGARH STATE POWER DISTRIBUTION COMPANY LIMITED**
P.O. SUNDER NAGAR, DANGANIA, RAIPUR, CHHATTISGARH-492 013
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CONTACT NO- 982618253
REPRESENTED BY ITS CHAIRMAN

FILED BY
POWER GRID CORPORATION OF INDIA LTD
REPRESENTED BY:

PLACE: Gurugram
DATE: 21.06.2025

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Jabalpur - 482 008

Represented by Its MD

and Others

MEMO OF APPEARANCE

POWER GRID CORPORATION OF INDIA LTD.

-- PETITIONER

1. Shri Dilip Nagesh Rozekar, Executive Director (Commercial & RC), POWERGRID
2. V.C. Sekhar, Senior General Manager, POWERGRID
3. **Shri Angaru Naresh Kumar, Dy. General Manager, POWERGRID**
4. Shri Vishal Sagar, Deputy General Manager, POWERGRID
5. Shri Arjun Malhotra, Manager (Law), POWERGRID

I, Angaru Naresh Kumar, the Petitioner above named do hereby nominate to act, plead and appear on my behalf in the aforesaid matter.

IN WITNESS WHEREOF I have set and subscribed my hands to this writing on this 27th day of June 2025.

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.

GURGAON
DATED: 27.06.2025

Angaru Naresh Kumar
Dy. General Manager (Commercial)

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NARESH
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and Others

---RESPONDENTS

A. Executive Summary of the Petition:

(i) Brief Background of the Petitioner

1. The Petitioner herein, Power Grid Corporation of India Ltd. (Hereinafter referred to as “**POWERGRID/Petitioner**”) is a Government Company within the meaning of the Companies Act, 2013. POWERGRID is deemed transmission licensee in terms of Section 14 of the Electricity Act, 2003. POWERGRID by virtue of a transmission licensee is required to inter-alia build, maintain and operate an efficient, coordinated and economical interstate transmission system (“**ISTS**”). POWERGRID operates and functions within the regulatory control of this Hon'ble Central Electricity Regulatory Commission (hereinafter referred to as “**Hon'ble Central Commission**”). Tariff for

the transmission system established by POWERGRID is required to be determined by this Hon'ble Central Commission in accordance with the Tariff Regulations as notified by this Hon'ble Central Commission in exercise of its powers under Section 178 of the Electricity Act, 2003.

(ii) Brief background of the Respondent(s):

POWERGRID has impleaded distribution licensees and Government department of the respective states which are engaged in distribution of electricity in Western Region of India. The respondents are also 'Designated Inter State Transmission Customer' (hereinafter referred to as 'DICS') in terms of the 2020 Sharing Regulations from Western Region.

(iii) Background of Transmission Assets:

2. POWERGRID is filing the present petition for determination of tariff for the following Assets which have been implemented under "**OPGW Installation on Itarsi-Dhule Transmission Line**" for the following:

Asset No	Asset Name	SCOD	DOCO
Asset-1	400 kV Itarsi-Khandwa-Dhule Link (400.67 kms) along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule	25.12.2025	30.03.2025

(iv) Brief description of important events relevant to the Petition:

S.No	Event	Date
1.	590 th OCC of WRPC for early commissioning of Itarsi-Dhule OPGW link	17.04.2025 (Minutes issued on 05.06.2025)
2.	CTUIL vide OM Ref No: CTUIL/OM/11/16 th NCT	27.12.2023
3.	Investment Approval	12.04.2024
4.	SCOD	25.12.2025
5.	COD	30.03.2025

(v) Summary of Claims:

3. POWERGRID is seeking determination of tariff for aforesaid transmission assets on estimated capital cost comprising of capital cost incurred up to Commercial Operation Date (“**COD**”) and projected additional capital expenditure in accordance with terms of Regulation 24 & 25 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 (“**Tariff Regulations, 2024**”).
4. The details of FR approved cost vis-à-vis claimed capital cost as on COD and projected additional capital expenditure is as under:

					₹ in Lakhs
Asset No	Approved Cost (FR)	Expenditure Up to DOCO	Projected Expenditure for FY		Estimated Completion Cost
			2024-25	2025-26	
Asset 1	2060	883.69	112.75	511.02	1507.46

5. **Details of commissioning the link before schedule:** As per investment approval, the instant asset is scheduled to be commissioned by 25.12.2025, however in the 590th OCC meeting of WRPC, dt: 17.04.2025, it was decided that the link was required at the earliest as Itarsi- Dhule route serves as the main connectivity route to the ISTS of Khandwa PG. As the earlier installed OPGW on Itarsi-Khandwa-Dhule was installed around 20 years back, the fibres on earlier link were working on threshold level for link healthiness and creating frequent disruptions on the data reporting from Khandwa PG.

Considering the urgency of the requirement for new OPGW on Itarsi-Dhule, implementation schedule for the new OPGW on Itarsi-Dhule (Excluding LILO at Khandwa) has been approved as March'25.

The relevant extract of the 590th OCC meeting, dt: 17.04.2025 is enclosed as **Encl-1**

6. It is prayed to Hon'ble commission to reimburse expenditure of petition filing fee, license fee, newspaper publication expenses and RLDC fee & charges etc.
7. Details of tariff claimed are as under:

₹ in Lakhs						
Sl. No.	Name of the Asset	2024-25	2025-26	2026-27	2027-28	2028-29
1	Asset-1	1.09	255.96	299.27	290.47	281.77

B. Detailed Petition:

MOST RESPECTFULLY SHOWETH:

8. The Petitioner herein, Power Grid Corporation of India Ltd/ POWERGRID is a Government Company within the meaning of the Companies Act, 1956. POWERGRID is a deemed transmission licensee under Section 14 of the Electricity Act 2003.
9. POWERGRID being transmission licensee is required to inter-alia build, maintain and operate an efficient, coordinated and economical interstate transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Central Commission in accordance with the Tariff Regulations, 2024.
10. That the present petition covers approval of transmission tariff for following Asset:

Sl. No	Asset Name	COD
1	400 kV Itarsi-Khandwa-Dhule Link (400.67 kms) along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule	30.03.2025

C. Approval of the Scheme

11. That the petitioner has been entrusted with the implementation of " **OPGW Installation on Itarsi-Dhule Transmission Line** ". The investment approval of the project was accorded by the CMD of POWERGRID vide Memorandum dated 09.04.2024 at an estimated cost of ₹ 20.60 crores including Interest During Construction (IDC) of ₹ 1.11 crores based on December 2023 price level; a copy whereof is attached hereto as **Encl.-2**.
12. The scheme was approved in the 46th WRPC meeting held on 2nd -3rd February 2023 at Udaipur with an implementation schedule of 24 Months. This link was further ratified in the 16th NCT meeting held on 30th November 2023 and awarded to POWERGRID for implementation on RTM basis vide CTU OM dtd.27th December 2023.

Copy of relevant extracts of 46th WRPC, 16th NCT meeting and CTUIL Office Memorandum is enclosed as **Encl-3, Encl-4 & Encl-5** respectively.

Accordingly, investment approval was accorded vide memorandum dated 12.04.2024 considering implementation schedule as 25th December' 2025.

13. As per the investment approval dated 12.04.2024, the Subject project was scheduled to be commissioned by December 2025 against which the subject asset was put under commercial operation as under:

Asset	SCOD	DOCO	Delay (in days)
Asset-1	25.12.2025	30.03.2025	NIL

It is submitted that the entire scope of the instant project is completed and covered under the instant petition.

D. SCOPE OF WORK:

14. The scope of work covered under the project " **OPGW Installation on Itarsi-Dhule Transmission Line** " is as follows:

- a) Supply and Installation of 24F OPGW for 403 Kms.
- b) STM-16, 5 MSP FOTE for Dhule S/S and repeater station.
- c) Repeater shelter including all shelter items / equipment i.e. telecom repeater equipment, auxiliary infrastructure like DG, SMPS, battery bank etc. in between Dhule-Khandwa section as the line is approx. 263 kM. Repeater location may be finalized by transmission licensee preferably in existing ISTS/STU substations for optimizing operation & maintenance of repeater.

The DPR extract of the scheme is attached hereto as **Encl-6**.

15. It is submitted that as per Regulation 9 of the CERC (Terms and Conditions of Tariff) Regulations, 2024, the following condition has to be fulfilled while filing the Tariff petition for 2024-29 tariff block: -

Quote

"Provided that where the transmission system comprises various elements, the transmission licensee shall file an application for determination of tariff for a group of elements on incurring of expenditure of not less than 100 Crore or 70% of the cost

envisaged in the Investment Approval, whichever is lower, as on the anticipated date of commercial operation”

Unquote

The entire scope of the project has been completed in the instant petition. Accordingly, the instant petition is being filed in compliance with the Regulation 9 of CERC Regulations, 2024.

E. Implementation Schedule

16. CTUIL, vide OM Ref No: CTUIL/OM/11/16th NCT, dated 27.12.2023, has approved the implementation time frame of the above ISTS Transmission Scheme by Dec-2025. Accordingly, with investment approval, the project commissioning schedule was kept as 25.12.2025, against which the entire scope in the subject project has been made ready and energized on 29.03.2025. The trial operation of the instant asset has been completed on load on 29.03.2025. Thus, DOCO has been declared w.e.f. 30.03.2025, as per the following details: -

Asset	SCOD	DOCO	Delay (in days)
Asset-1	25.12.2025	30.03.2025	NIL

GRID-INDIA Charging certificate and DOCO letter for the instant asset are enclosed as **Encl. 7 & Encl-8** respectively.

The entire scope of the project is completed after commissioning of subject Asset.

17. Estimated Completion Cost:

The present Petition for determination of tariff is filed in line with provision 9(1) of tariff Regulation 2024 applicable for the 2024-29 period. The capital cost incurred up to DOCO and projected to be incurred during 2024-25, 2025-26, is duly certified in Auditor Certificate. Copy of the said Auditor Certificate(s) is enclosed and marked as **Encl-9**.

					₹ in Lakhs
Asset No	Approved Cost (FR)	Expenditure Up to DOCO	Projected Expenditure for FY		Estimated Completion Cost
			2024-25	2025-26	
Asset 1	2060	882.38	108.99	511.02	1502.39

Hence, it may be seen from the above that against the approved cost of ₹ 2060.00 Lakhs as per FR, the estimated completion cost is ₹1502.39 Lakhs. Hence, there is no cost overrun in commissioning of the instant asset.

Cost variation:

The variation between estimated completion cost vis-à-vis approved cost for the Assets covered under instant petition are given as hereunder:

₹ in Lakhs			
Asset No.	Approved Cost as per FR (a)	Estimated completion Cost (b)	Cost Variation (d=b-a)
Asset-1	2060.00	1502.39	557.61

The item-wise cost variation between FR approved cost and estimated completion cost have been given in Form-5.

Further, Salient Reasons for Cost Variation w.r.t. FR is given here as below:

In Cr			
Cost Break up	Approved DPR/ IA Cost (A)	Actual Cost (B)	Variation (B) - (A)
Cost (excl. IEDC/IDC)	17.65	13.5954	(-)4.0546
IEDC incl. contingencies	1.84	1.2072	(-)0.6328
IDC	1.11	0.2213	(-)0.8887
Total	20.60	15.0239	(-)5.5761

I. Reasons for Variation in Cost Estimate

It may be seen from the above table that there is a variation of (-)5.5 crore (i.e. 27.06 %) from the approved cost of Rs. 20.60 crore. The head wise variation in cost is explained hereunder:

II. Cost Variation (CV) due to award cost (Net decrease of Rs. 4.05 crore: 22.97 %)

Cost variation in the Communication System equipment's and OPGW (decrease of ₹ 4.05 Cr): There has been a decrease in the cost of the project by Rs. 4.05 crore on this account, which works out to 22.97 % of the approved cost as per the details given hereunder.

It may be seen from the above table that out of the total cost of communication equipment and OPGW, variation of Rs. 4.05 crore has been observed from time of

Investment approval of project till award of contract (DPR to LOA) for approved scope based on prices received as per transparent competitive bidding process.

It is submitted that through the open competitive bidding process, the lowest possible market prices for required product/services/as per detailed designing are obtained and contracts are awarded on the basis of lowest evaluated eligible bidder on an overall basis. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market conditions, design and site requirements. Whereas the estimates are prepared by the petitioner as per well-defined procedures for cost estimate. The FR cost estimate is a broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts as a general practice. It is submitted that the cost estimate of the project was prepared on the basis of December' 2023 price level.

Further, regarding variation in cost of individual item in Substation packages, it is submitted that the packages under subject scope of works comprise of a large no. of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the petitioner.

iii. Variation in IEDC and IDC (Net decrease of Rs. 1.5 crore: (-)51.57 %)

Total IDC and IEDC under the project have decreased by Rs. 1.5 crore in comparison to approved cost, which works out to (-) 51.57 % as per the following break-up-

a. Decrease in IEDC incl. contingency

As per the investment approval, the IEDC including contingencies for the project was estimated at Rs. 2.35 Crore on total DOCO cost (i.e. IEDC 10.75% & contingency 3% on total DOCO cost) whereas on the basis of actual expenditure, IEDC incl. contingencies works out to Rs.1.2 Crore.

b. Decrease in IDC

Interest during Construction (IDC) for the project as per approved DPR cost was estimated at Rs. 1.11 crore whereas based on the actual funds flow, the IDC for the project in actual works out to Rs. 0.22 crore. Thus, there is a decrease of Rs. 0.89 crore in IDC.

Considering the above, it is humbly prayed that full tariff may be allowed from DOCO based on estimated completion cost of the subject asset.

DETAILS OF THE INITIAL SPARES:

18. The Initial spares for the Assets have been calculated as per Regulation 23(d) of the Tariff Regulations, 2024 which provides as under:

“23. Initial Spares: Initial spares shall be capitalized as a percentage of the Plant and Machinery cost, subject to following ceiling norms:

.....

(d) Transmission system

(i) Transmission line - 1.00%

(ii) Transmission Sub-station

- Green Field- 4.00%

- Brown Field- 6.00%

(iii) Series Compensation devices and HVDC Station- 4.00%

(iv) Gas Insulated Sub-station (GIS)

- Green Field-5.00%

- Brown Field-7.00%

(v) Communication system - 3.50%

(vi) Static Synchronous Compensator - 6.00%

.....

Provided that:

(i) Plant and Machinery cost shall be considered as the original project cost excluding IDC, IEDC, Land Cost and Cost of Civil Works. The generating company and the transmission licensee, for the purpose of estimating Plant and Machinery Costs, shall submit the break-up of head-wise IDC and IEDC in its tariff application

.....

19. Considering the aforesaid Regulation, the initial spares are calculated as under:

(₹ in Lakhs)

Asset	Type	Plant and Machinery cost for calculation of initial spares (A)	Initial Spares Claimed	Ceiling Limit	Initial Spares Worked out	Excess
			(B)	(C)	$D = [(A-B) * C / (100-C)]$	[B-D] If B>D
Asset- 1	AIS	1359.54	27.17	3.5%	48.32	Nil

It is submitted that the Initial Spares for the instant project are within the specified limit under Regulation 23 of the Tariff Regulations, 2024.

Further, it may be mentioned that in the Auditor Certificate, initial spares discharged upto DOCO are included in DOCO cost, whereas initial spares discharged after DOCO are included in the ADD-CAP expenditure of the respective year.

Therefore, it is prayed to this Hon'ble Central Commission to allow the initial spares as claimed in the present petition.

Initial spares discharge details are enclosed at **Encl-10**.

DETAILS OF THE ADDITIONAL CAPITALIZATION

20. The details of additional capitalization (Add Cap) claimed during 2024-29 tariff block is given as hereunder:

The admissibility of additional capital expenditure (Add Cap) incurred after the Anticipated DOCO is to be dealt with in accordance with the provisions of Regulation 24 of CERC Tariff Regulations, 2024. The extract of Regulation 24 of the Tariff Regulations, 2024 is reproduced as under:

"Additional Capitalization"

(1) *The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (a) *Payment made towards admitted liabilities for works executed up to the cut-off date;*
- (b) *Works deferred for execution;*

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;

(d) Payment against the award of arbitration or for compliance with the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance with any existing law which is not provided for in the original scope of work;

(f) For uninterrupted and timely development of Hydro projects, expenditure incurred towards developing local infrastructure in the vicinity of the power plant not exceeding Rs. 10 lakh/MW shall be considered as part of capital cost and in case the same work is covered under budgetary support provided by Government of India, the funding of such works shall be adjusted on receipt of such funds;

Provided that such expenditure shall be allowed only if the expenditure is incurred through Indian Governmental Instrumentality; and

(g) Force Majeure events:

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

Add cap for 2024-29 block:

Asset	Add cap detail (₹ in Lakhs)	
	2024-25	2025-26
Asset-1	112.75	511.02
	Claimed under regulation 24(1)(a) & 24(1)(b)	

TRANSMISSION TARIFF for 2024-29 BLOCK:

21. That as per regulation 8(1) (i) & (ii), 14 (5) and regulation 15 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, the tariff for transmission of electricity on Inter-State transmission system (ISTS) shall comprise transmission charges for recovery of annual fixed cost consisting of (a) Return on Equity, (b) Interest on Loan Capital, (c) Depreciation, (d) Interest on Working Capital and (e) Operation and maintenance expenses.

Calculations for working out the tariff for the asset are tabulated below:

The details of actual expenditure upto DOCO and add-cap are summarized below: -

S/No	Expenditures	OPGW	PLCC / Communication System	Total
1	Expenditure till DOCO	864.42	17.96	882.38
2	Less Accrual IDC as on DOCO	3.68	0.08	3.76
3	Notional IDC	4.97	0.1	5.07
3	Total Expenditure upto DOCO after deducting accrued IDC	865.71	17.98	883.69
4	Add cap from DOCO to 31.03.2025	105.03	3.96	108.99
5	Accrual IDC discharged during 2024-25	3.68	0.08	3.76
6	Expenditure from DOCO to 31.03.2025	108.71	4.04	112.75
7	Add cap from 01.04.2025 31.03.2026	366.93	144.09	511.02
8	Accrual IDC discharged during 2025-26	0	0	0
9	Expenditure during 2025-26	366.93	144.09	511.02
15	Total	1341.35	166.11	1507.46

**Cost includes notional IDC of Rs.5.07 Lakhs claimed as per Regulation 19 (2) (b) and 21 (1) of CERC tariff Regulations, 2024.*

22. The tariff for block 2024-29 has been worked out as per Regulation 10 of the CERC (Terms and Conditions of Tariff) Regulations, 2024. In the present petition the transmission tariff has been calculated taking actual Expenditure upto DOCO and Actual/estimated expenditure from DOCO to 31.03.2029. The tariff Formats for block 2024-29 have been worked out as per Annexure-I, Part III of the tariff regulations for period 2024-29 and the Calculations for working out the tariff along with supporting documentation are attached hereto as **Encl-11**.

23. Further, for the instant asset, details of accrual IDC as considered under add cap during the year of discharge are tabulated below:

DOCO	IDC as per certificate	Notional IDC	IDC Discharged upto DOCO	IDC to be discharged during	
				2024-25	2025-26
30.03.2025	22.13	5.07	23.44	3.76	0

24. The Hon'ble Commission is requested to kindly allow the IDC on the basis of cash out flow.
25. In respect of IDC calculation, it is submitted that the IDC statement showing details of loans deployed along with the interest rates has been submitted along with the petition. For the purpose of supporting documents for rate of interest, the interest rate proof for loans deployed in the subject asset is enclosed as **Encl-12**.
26. It is submitted that the entire amount of IEDC for the instant asset has been discharged as on DOCO.
27. The transmission tariff has been calculated based on audited cost to be discharged thereafter. The calculations for working out the tariff along with supporting documentation are enclosed as **Encl-13**. The annual transmission tariff for the tariff period 2024-29 is summarized as below:

(Rs in lakhs)						
Sl. No.	Asset	2024-25	2025-26	2026-27	2027-28	2028-29
1	Asset-1	1.09	255.96	299.27	290.47	281.77

28. That, it is submitted that the petitioner being liable to pay income tax at MAT rate prescribed vide the taxation laws (Amendment) ordinance 2019 published in the Gazette dt. 20th September 2019. The ROE has been calculated @ 18.782% after grossing up the ROE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given at regulation 31(2) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for 2024-29 period. That as per clause 31 of the above regulation, the grossed-up rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the tariff period 2024-29 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on ROE after truing up shall be recovered or refunded to beneficiaries

or the long-term customers, as the case may be on year-to-year basis. It is further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable /adjustable during the tariff period 2024-29 on year-to-year basis on receipt of Income Tax assessment order.

- 29.** Under CGST Act, 2017 implemented w.e.f. 01.07.2017, the Govt. of India has exempted the charges of transmission of electricity vide notification no. 12/2017 – Central Tax (Rate) dated 28.06.2017 at serial no. 25 under the heading 9969 “Transmission or distribution of electricity by an electric transmission or distribution utility” by giving applicable GST rate as NIL. Hence, the Transmission Charges as indicated at para 7 above is exclusive of GST. Further, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged & billed separately by the petitioner. Further additional taxes, if any, are to be paid by the petitioner on account of demand from Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.
- 30.** In the tariff calculation for 2024-29 period, Interest on Loan has been calculated on the basis of rate prevailing as on DOCO / 01.04.2024 for respective loans. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries.
- 31.** The transmission charges at para-28 above is inclusive of O&M expenses derived for the subject asset based on the norms for O&M expenditure for Transmission System as specified under regulation 36 (3) (a, b & c) of the tariff regulations for block 2024-29 but excludes security expenses, Insurance and capital spares as provided in the Regulation.
- 32.** That as per Regulation 36(3)(d) of CERC Tariff Regulations, 2024, the Security Expenses, Insurance and Capital Spares more than 10 Lakh for transmission system shall be allowed separately after prudence check.

a) Security Expanses:

In this regard, it is submitted that a separate petition no. 260/MP/2020 was filed before Hon'ble Commission for claiming the overall Security Expenses and consequential

Interest on Working Capital (IOWC) on the same wherein it was proposed to consider actual Security Expense incurred by the Petitioner for the F/Y 2023-24 after escalating the same at 5.25% per annum and estimated additional Security Expenses for new sub-stations to be commissioned in future, for arriving at the Estimated Security Expense for the year 2024-25, 2025-26, 2026-27, 2027-28 and 2028-29. Hon'ble Commission vide order dated 03.08.2021 allowed the petitioner to recover the estimated Security Expenses from beneficiaries as per provisions of 2020 Sharing Regulations. The difference, if any, between the Estimated Security Expenses and Actual Security Expenses calculated as per audited accounts, on year to year basis may be allowed to recover/refund from beneficiaries.

b) Insurance:

In this regard, it is submitted that a separate petition shall be filed before Hon'ble Commission for claiming the overall Insurance Expenses and consequential Interest on Working Capital (IOWC) on the same considering actual Insurance expenses incurred by the Petitioner for the F/Y 2023-24 after escalating the same at 5.25% per for arriving at the Estimated Insurance Expense for the year 2024-25, 2025-26, 2026-27, 2027-28 and 2028-29.

c) Capital Spare:

With regard to Capital Spares, the Petitioner has filed a separate Petition bearing No 45/MP/2024 for claiming the same under Tariff Regulations 2019. Further, as per Tariff Regulations, 2024, Capital spares consumes and consequential Interest on Working Capital (IOWC) on the same shall be claimed by the Petitioner at the end of tariff block as per actual through a separate petition.

Accordingly, these expenses are not claimed in the subject petition through the relevant Tariff Form and shall be claimed separately in a separate petition along with all other assets.

33. That as per Regulation 99 of CERC Tariff Regulations, 2024, the fees and charges of Central Transmission Utility of India Limited ('CTUIL') shall be allowed separately by the Commission through a separate regulation. Further, it provides that that until such regulation is issued by the Commission, the expenses of CTUIL shall be borne by POWERGRID which shall be recovered by POWERGRID as additional O&M expenses through a separate petition.

Accordingly, the expenses of CTUIL borne by POWERGRID shall be claimed through a separate petition.

34. The application filing fee, expenses incurred on publication of Notices in Newspapers and License fee may be allowed to be recovered separately from the respondents in terms of Regulation 94(1) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations as amended from time to time shall also be recoverable from the DICs as provided under clause 94 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
35. The Transmission Charges and other related Charges indicated at para 7 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges or any other kind of imposition (s) and/ or other surcharges etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or in respect of any of its installation associated with the Transmission System and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.

Sharing of Transmission Charges

36. Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per above para shall be recovered on monthly basis and same shall be borne by MSETCL from assets COD, i.e., 30.09.2024 to till COD of downstream transmission system. The billing, collection and disbursement of the transmission charges after COD of downstream transmission system shall be recovered on monthly basis in accordance with Regulation 78 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and shall be shared by the beneficiaries and long-term transmission customers in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 or as amended from time to time.

37. In the circumstances mentioned above it will be just and proper that the transmission tariff for the asset covered under this petition be allowed to be charged from the beneficiaries on the basis set out above. **The Petitioner submits that Encl.-1 to Encl.-17 may please be treated as an integral part of this petition.**

PRAYER

38. It is respectfully prayed that the Hon'ble Commission may be pleased to

- a) Approve the DOCO as claimed in the instant petition.
- b) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred.
- c) Approve the Transmission Tariff for the tariff block 2024-29 block for the asset covered under this petition, as per para –27 above.
- d) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2024 as per para -28 above for respective block.
- e) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 94 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, and other expenditure (if any) in relation to the filing of petition.
- f) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- g) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2024-29 period, if any, from the beneficiaries.
- h) Allow the petitioner to claim the overall security expenses and consequential IOWC on

that security expenses as mentioned at para 32a above.

- i) Allow the petitioner to claim the insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 32b above.
- j) Allow the petitioner to claim the capital spares consumed at the end of tariff block as per actual at para 32c above.
- k) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition on year to year/ at the end of tariff block as mentioned at para 33 above.
- l) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.
- m) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for purpose of inclusion in the PoC charges.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

GURGAON

DATED: 27.06.2025

FILED BY
POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

ANGARU
NARESH
KUMAR

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by ANGARU
NARESH KUMAR
Date: 2025.06.27
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Angaru Naresh Kumar
Dy. General Manager (COMMERCIAL)

BEFORE

THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI

Petition No. ____ /TT/ ____

IN THE MATTER OF: Petition for determination of tariff under Section 62 read with Section 79 (1) (d) of Electricity Act, 2003 and under the Regulation 15 (1) (a) and Regulation 23 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 read with Central Electricity Regulatory Commission (Terms and Condition of Tariff Regulations) 2024 for 400 kV Itarsi-Khandwa-Dhule Link (400.67 kms) along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule under “**OPGW Installation on Itarsi-Dhule Transmission Line**”.

Power Grid Corporation of India Ltd

Registered office: B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi. 110 016.

Corporate Centre: 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

---PETITIONER

Vs

Madhya Pradesh Power Management Company Ltd.

Shakti Bhawan, Rampur

Jabalpur - 482 008

Represented by Its MD

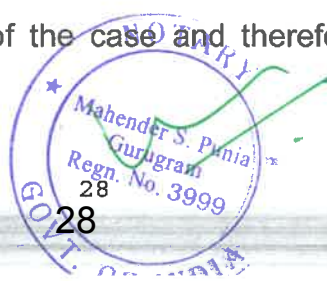
and Others

---RESPONDENTS

AFFIDAVIT VERIFYING THE PETITION

I, Angaru Naresh Kumar, S/O Late Sh. Angaru Yanadi, working as Dy. General Manager (Commercial) in the Power Grid Corporation of India Ltd., having its registered Office at B-9, Institutional Area, Katwaria Sarai, New Delhi-110 016, do hereby solemnly affirm and state as under: -

1. That the deponent is the Dy. General Manager of Petitioner and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.



2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorized representative/nominated counsel under my instruction and the contents of the same are true and correct to the best of my knowledge and belief.
3. That the contents of Para 1 to 38 of the facts mentioned in the Petition are true and correct based on my personal knowledge, belief and records maintained in the office and the contents of Para 1 to 38 of the Petition are believed to be true on the basis of the legal advice received.
4. That the annexures annexed to the Petition are correct and true copies of the respective originals.
5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute

ANGARU
NARESH KUMAR

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VERIFICATION

Solemnly affirmed at Gurugram on this 27th day of June' 2025 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

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NARESH
KUMAR

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ATTESTED

MAHENDER S. PUNIA
ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India



Ref: CC/Commercial/2024

Date: 28.08.2024

LETTER OF AUTHORIZATION

In reference to the POWER OF ATTORNEY dated 14.08.2024 and in supersession of letter of authorization dated 13.12.2022 I hereby authorize following executives to sign Petitions, Appeals, Vakalatnama, Affidavits, etc. and to represent POWERGRID before various forums/ courts / tribunals i.e Central Electricity Regulatory Commission, State Electricity Regulatory Commission, Appellate Tribunal for Electricity, High courts and Supreme Court etc. :

1. Sh. Mohd. Mohsin, Chief General Manager
2. Sh. V. C. Sekhar, Senior General Manager
3. Sh. Zafrul Hasan, General Manager

Further, following executives are authorised to represent cases before Central Electricity Regulatory Commission and Appellate Tribunal for Electricity

1. Sh. Angaru Naresh Kumar, Deputy General Manager
2. Smt. Suchitra Gautam, Deputy General Manager
3. Sh. Vishal Sagar, Deputy General Manager
4. Sh. G. Vijay, Deputy General Manager
5. Sh. Vivek Kumar Singh, Deputy General Manager
6. Sh. Amit Kumar Chachan, Deputy General Manager
7. Smt. Supriya Singh, Chief Manager (Law)
8. Sh. Arjun Malhotra, Manager (Law)
9. Smt. Tanushree Rao, Deputy Manager (Law)


28/08/2024

Dilip Nagesh Rozekar
Executive Director (Commercial & RC)

दिलीप रोजेकर / DILIP ROZEKAR

Executive Director (Commercial & Regulatory Cell)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)



LETTER OF AUTHORISATION

Ref: CC/COMML/POA/LOA/2025-01

Date: 24.01.2025

In reference to the POWER OF ATTORNEY dated 14.08.2024 I hereby authorize Sh. Naresh Kumar Angaru, Deputy General Manager (Commercial) to sign Petitions, Appeals, Vakalatnama, Affidavits, etc. and to represent POWERGRID before various forums/ courts / tribunals i.e. Central Electricity Regulatory Commission, State Electricity Regulatory Commission, Appellate Tribunal for Electricity, High courts and Supreme Court etc.



Dilip Nagesh Rozekar

Executive Director (Commercial & RC)

दिलीप रोजेकर / DILIP ROZEKAR
Executive Director (Commercial & Regulatory Cell)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

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भारत सरकार

Government of India

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पश्चिम क्षेत्रीय विद्युत समिति

Western Regional Power Committee

एफ -3, एमआयडीसी क्षेत्र, अंधेरी (पूर्व), मुंबई - 400 093

F-3, MIDC Area, Andheri (East), Mumbai 400093

वेबसाइट/ website: www.wrpc.nic.in

ईमेल/e-mail: opc-wrpc@nic.in

सं: पक्षेविस/प्रचा. / प्रसस-कार्यवृत्त /2025-26/9982/Revised दिनांक 05.06.2025

सेवा में,

विषय:- प.क्षे.वि.समिति, मुंबई की प्रचालन एवं समन्वय समिति की 590 वीं बैठक का
का संशोधित कार्यवृत्त।

महोदय,

पश्चिम क्षेत्रीय विद्युत समिति, मुंबई की प्रचालन एवं समन्वय समिति की दिनांक
17.04.2025 को आयोजित 590 वीं बैठक का संशोधित कार्यवृत्त आपकी सूचनार्थ
संलग्न है।

धन्यवाद।

संलग्न : उपरोक्तानुसार

भवदीय,

Sd/-

(डी एन गवाली)

अधीक्षण अभियंता (प्रचालन)

List of OCC Members

1.	Chief Engineer (L D), GETCO, Gotri	0263-2352019
2.	Chief Engineer (Generation), GSECL, Vadodara	0265-2344734/2338847
3.	Superintendent Engineer (CP & SS), GETCO, Vadodara	0265-2337918, 2338164
4.	Chief Engineer (L D), MPPTCL, Jabalpur	0761-2664343
5.	Chief Engineer (O&M:Gen), MPPGCL, Jabalpur	0761-2664572/2668050
6.	Chief Engineer (L D), MSETCL, Kalwa	022-27601769
7.	Chief Engineer (PP), MSEDCL, Mumbai	
8.	Chief Engineer (Works), MSPGCL, Mumbai	022-26473896
9.	Superintending Engineer (LD), MSETCL Ambazari	07104-220275
10.	Chief Engineer (L D), CSPTCL /Raipur	0771-2574174
11.	Chief Engineer (O&M:GEN), CSPGCL, Raipur	0771-2574425
12.	Executive Director, PGCIL Raipur	
13.	General Manager, POSOCO, Mumbai	022-28202630
14.	General Manager (WRTS-I), Powergrid, Nagpur	0712-2641366
15.	General Manager (O & M), WRTS-II, PGCIL, Vadodara	0265-2487542
16.	Chief Engineer (Transmission), NPCIL, Mumbai	25580741/25563350
17.	Station Director, TAPS, Tarapur 1 & 2	02525-282125/244125
18.	Station Director, TAPS, Tarapur 3 & 4	02525-244021/244169
19.	Station Director, KAPS, Kakrapar 1 & 2	02626-231231
20.	Station Director, KAPS, Kakrapar 3 & 4	
21.	General Manager (OS), NTPC, Mumbai	022-28216692
22.	General Manager, NTPC, Korba	07759- 237462/237552
23.	General Manager (OS), NTPC, HQ-II Raipur	0771-2544550
24.	General Manager, NTPC, Vindhyachal, M.P.	07805 -247711
25.	General Manager, NTPC, SIPAT, CG	07752-246504
26.	General Manager NTPC LARA	
27.	General Manager NTPC Gadawada	
28.	General Manager NTPC Kharagone	
29.	General Manager NTPC Solapur	
30.	General Manager, NTPC, Kavas, Surat	0261-2860290
31.	General Manager, NTPC, Gandhar	02642-287402
32.	General Manager, NTPC, Mouda	07115-281221/281219
34.	CLD TPC, Mumbai	022-25541908/67175385
35.	Head (O), Dahanu TPS, Dahanu	02528-222039
36.	Sr V P Reliance Transmission, Pune 30471555 Vice President (Generation), Torrent Power Ltd, Ahmedabad	0124-3917982/020- 079-27506679
37.	Executive Director, Sugen CCPP, Torrent Power Ltd, Surat.	02621-661151
38.	Vice President (O & M), APL Mundra , Gujarat	02838-266364
39.	Head Operation CGPL Mundra	
40.	Vice President (Opn), Jindal Power Ltd., Raigarh	07767-281993/281995
41.	AGM(OS) NSPCL Delhi	011-26717363, 26717366
42.	GENERAL MANAGER (POWER), RGPPL, Ratnagiri	02359-241071/241011
43.	Member (Power), NCA, Indore	0731-2559888
44.	Chief Engineer (PM & C), NHDC, Bhopal	0755 4030188/4030130
45.	E. E. Elect. (Ponda), Goa	0832-2313780
46.	Executive Engineer DD (UT), Daman	0260-2230771/2250889/2230550
47.	Executive Engineer DNH (UT), Silvassa	0260-2642338
48.	Secretary, CERC, New Delhi	011-24360010/23753923
49.	CEO, JSW Energy Ltd.	011-46032343/26183546
50.	VP-Power Infra-Essar Hazira Surat	0261-6688498/022-67082198
51.	Chief Electrical Distribution Engineer CR	022-22621060
52.	Vice President EPTCL Hazira Surat	0261-6682747
53.	COO, Korba West Power Co. Ltd. Raigarh	
54.	VP(COMML) Essar Power MP Ltd MP	
55.	GM Torrent power grid ltd. Ahmedabad, Gujarat	
56.	Adani Power Maharashtra Ltd Tiroda	
57.	CGM, R K M Powergen Pvt Ltd	
58.	ED, Athena Chattishgarh Power Ltd.	
59.	Head(O&M) Dhariwal Infra Ltd C'pur	
60.	Head Operation Jaypee Nigrie STPP Singrauli.	
61.	VP(O&M), GCEL, Chhattishgarh	
62.	Head Operation DB Power, Chhattishgarh.	
63.	Head operation Hindustan Power, Anuppur MP	
64.	Head operation GMR, Warora Energy Ltd.	
65.	Head O&M, Sterlite Grid Ltd Bhopal	
66.	Head Operation Balco, Chhattishgarh.	
67.	Head(O&M), SKS, SPGCL, Raigarh	
68.	AVP,O&M Electrical,RIPL,Amravati	

590th OCCM Minutes Index

Item Number	Item Particulars
1	Confirmation of the Minutes
1.1	Action to be taken based on decisions of previous OCCM
2	Review of System Operation during the month of March 2025
2.1	Frequency Particulars
2.2	State-wise Power Scenarios of the Region & Power Supply Position Report
2.3	Inter-Regional Exchanges
2.4	Voltage Profile
2.5	U/F Relay Operations
2.6	Power Cuts / Load Restrictions
2.7	Details of Generating Units under Forced Outages
2.8	Details of Generating Units under Planned Outages
2.9	Presentation on Operational Aspects by SLDCs & RLDC
2.10	List of New Grid Elements Added / List of Elements Decommissioned
2.11	Submission of Failure Analysis of Grid Elements
2.12	Various Status Reports for Monitoring the WR Grid
3	Operational Planning
3.1	Proposed Planned Maintenance Programme for Generating Units
3.2	Outage Programme of Transmission Lines/Elements
3.3	Anticipated Power Supply Position for April 2025 to May 2025
4	Operational Statistics for the Month of March 2025
5	System Disturbances in the Western Region
6	Miscellaneous Operational Items
7	WRLDC Agenda

7.1	Low voltages in South Gujarat
7.2	Over-reliance on defence mechanism by Maharashtra - Continuous high loading of 400kV Pune-Chakan S/c
7.3	Status update of corrective actions related to protection settings of NTPC stations
7.4	Replacement of the old RTUs at NTPC stations
7.5	Planning of outages related with communication equipment / links
7.6	FRO Targets for Control Areas under RLDC jurisdiction FY 2025-2026
7.7	Updating List of Important Grid Elements-2025.
7.8	Black start Mock drill status 2025
7.9	DR/EL and Detailed event report receipt status for Events in the month of March'25
8	Additional Agenda Items
SA 1	Support sought from PGCIL regarding M/s Sharda EHV line shifting work (Raigarh Project)
SA 2	Issuance of Availability certificates of POWERGRID Dharamjaygarh Transmission Ltd (PDTL) and POWERGRID Raipur Pool Dhamtari Transmission Ltd (PRPDTL):
SA 3	High Loading of 400kV Korba (NTPC)- Bhatapara line:
SA 4	Generator Planned outages
SA 5	Commissioning of Itarsi-Dhule OPGW link before schedule
SA 6	Transmission Constraints in evacuation of Renewable Energy Sources (RES) power from Khavda Complex:
SA 7	Follow-up on Repeated Water Logging at KSK Bays of 400 KV Champa Switchyard and Resolution of Nallah Cleaning
SA 8	High Frequency Operation in grid
9	Date and venue of the next OCC Meeting

Western Regional Power Committee

Mumbai

Title:	Minutes Notes
Meeting no.:	590
Meeting name:	Operation & Coordination Sub-Committee

The 590th OCC Meeting of the Western Regional Power Committee (WRPC) held on April 17, 2025 at Mumbai under the chairmanship of the Member Secretary, WRPC. The list of participants is attached as Annexure-I.

Item No.1: Confirmation of the Minutes.

Minutes of 589th meeting of Operation & Coordination Sub-Committee (OCC) of WRPC held on 21st March, 2025 in physical mode were issued vide letter No. WRPC/OPN/OCC-Minutes//2025-26/8728-8796 dated 01.04.2025.

590th OCCM Discussions:

The Sub-Committee confirmed the Minutes.

1.1 Action to be taken based on decisions of previous OCCM.

WRPC circulated actions to be taken based on discussion of previous OCCM. The same has been attached as **Annexure1.1.**

590th OCCM Discussions:

The Sub-Committee reviewed the action taken report. The action items that remain pending due to reasons provided by the respective utilities have been kept open for continued follow-up in future OCC meetings. The updated action taken report, reflecting the information submitted by the concerned utility during the meeting, is attached as Annexure-1.1.1.

SA 5: Commissioning of Itarsi-Dhule OPGW link before schedule

(PGCIL WR2)

OPGW installation on 400 kV Itarsi-Dhule (402Km-Excluding LILO portion at Khandwa) was approved in 46th WRPC meeting held on 2nd -3rd February 2023 at Udaipur with an implementation schedule of 24 Months. This link was further ratified in the 16th NCT meeting held on 30th November 2023 and awarded to POWERGRID for implementation on RTM basis vide CTU OM dtd.27th December 2023.

2. As per the above approvals, the scheme was to be commissioned by Nov'25. However, considering the urgency of requirement, the work was included in the ongoing contract through amendment and is successfully commissioned on 27th March 2025.

3. The link was required at the earliest as Itarsi-Khandwa-Dhule route serves as the main connectivity route to the ISTS station of Khandwa PG. As the earlier installed OPGW on Itarsi-Khandwa-Dhule was installed around 20 years back, the fibres on earlier link were working on threshold level for link healthiness and creating frequent disruptions on the data reporting from Khandwa PG. Schematic of the Khandwa PG connectivity is attached in Annexure-SA 5.1.

4. Considering the urgency of requirement for new OPGW on Itarsi-Dhule, implementation schedule for the new OPGW on Itarsi-Dhule (Excluding LILO at Khandwa) may be considered as March'25.

590th OCCM Discussions:

The Sub-Committee noted.

SA 6: Transmission Constraints in evacuation of Renewable Energy Sources (RES) power from Khavda Complex:

(WRLDC)

Khavda transmission system for evacuation of RES Phase-I (3 GW), II (5 GW), III (7 GW) is follows.

ANGARU

NARESH KUMAR

Digitally signed by ANGARU
NARESH KUMAR
Date: 2025.06.27 18:13:20
+05'30'

C/CP/PA2425-0B-IA002

April 12, 2024

MEMORANDUM**SUB: Investment Approval for “OPGW Installation on Itarsi- Dhule Transmission Line”**

Investment approval for “OPGW Installation on Itarsi- Dhule Transmission Line” has been accorded by CMD on April 09, 2024 as per the details given below:

1. SCOPE OF PROJECT

Broad Scope of works:

1. Supply and installation of 24F OPGW for 403km.
2. STM-16, 5 MSP FOTE for Dhule S/s and repeater station.
3. Repeater Shelter including all shelter items/equipment i.e. telecom repeater equipment, auxiliary infrastructure like DG, SMPS, battery bank etc in between Dhule-Khandwa section as the line length is approx. 263 km. Repeater location may be finalized by transmission licensee preferably in existing ISTS/STU substations for optimizing operation & maintenance of repeater.

2. PROJECT COST & FUNDING

The estimated cost of the project based on December' 2023 price level is **₹20.60 crore** including IDC of **₹1.11 crore**. The abstract cost estimate is attached as **Annexure - I**.

The project is proposed to be implemented through Debt (70%) and Equity (30%) with loan component from domestic borrowing/ bonds/ External Commercial Borrowing (ECB) etc. and equity component through internal resources.

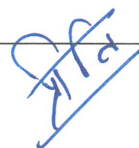
3. COMMISSIONING SCHEDULE

The project is scheduled to be commissioned within 24 months from the date of allocation by NCT i.e by 25th December, 2025.



(Priti Nahar)
Sr. DGM (CP)

ABSTRACT COST ESTIMATE		
OPGW Installation on Itarsi- Dhule Transmission Line		
(December 2023 Price Level)		
Sl. No.	Description	Amount (Rs. in Crore)
	Equipment Cost	
A	Supply	
i	OPGW cable & accessories and Communication System	10.12
	Sub- Total A	10.12
B	Installation, Testing and Commissioning	4.06
C	Inland Freight and Insurance (@ 4%)	0.40
D	Taxes and Duties	
i	GST @ 18% (on Supply cost & Services)	2.55
	Total (A to D)	17.13
E	Incidental Expenditure during Construction (@ 10.75%)	1.84
F	Contingency (@ 3%)	0.51
	Total (A to F)	19.48
G	Interest During Construction (IDC)	1.11
	Grand Total	20.60



वितरण /Distribution:

1. Chairman & Managing Director, MSETCL, Prakashganga, Plot No.C-19, E-Block, Bandra-Kurla Complex, Bandra (E), Mumbai - 400051.
2. Managing Director, MPPTCL, Block no -2, Shakti Bhawan, Rampur, Jabalpur – 482008 (M.P)
3. Managing Director, GETCO, Sardar Patel Vidyut Bhawan, Race Course, Vadodara-390 007
4. Chief Electrical Engineer, Vidyut Bhavan, 3rd Floor, Panaji, Goa - 403001
5. Managing Director, CSPTCL, Dangania, Raipur (CG) – 492 013
6. Secretary (Power), UT of Dadra & Nagar Haveli, Secretariat, Amli, Silvassa – 396230
7. Secretary (Power), Administration of Daman & Diu (U.T.), Fort Area, Moti Daman-396 220
8. CMD, Grid Controller of India Limited, B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai, New Delhi -11001

प्रति विनम्र सूचनार्थ /Copy for kind information, please:

1. PS to Secretary (Power), MoP, Shram Shakti Bhawan, New Delhi - 110 001
2. Chairperson, CEA, Sewa Bhawan, R.K. Puram, New Delhi- 110 066
3. Member Secretary, NRPC, 18-A Shajeed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi – 110016
4. Joint Secretary, Ministry of Statistics & Programme Implementation, Sardar Patel Bhawan, New Delhi-110001
5. Joint Secretary (Transmission), MoP, Shram Shakti Bhawan, New Delhi- 110 001
6. Joint Secretary (Plan Finance Div.-II), Ministry of Finance, North Block, New Delhi- 110 001
7. Director, Ministry of Finance (Plan finance Div.), North Block, New Delhi- 110 001
8. Under Secretary, Finance & Budget Section, MoP, Shram Shakti Bhawan, New Delhi- 110 001

**(Priti Nahar)
Sr. DGM (CP)**

Important Note:

As per approval, following critical activities may be monitored:

- (i) Timely Award of major package(s).
- (ii) Timely supply of major equipment.
- (iii) Risk Management Matrix indicating various milestones to be monitored for the subject project is attached at **Annexure-II**.

Distribution:

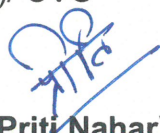
ED : CMG / Engg-SS,TL,CIVIL,CE, TD, HVDC/ QA&I, FQA / CS / GA&C, ISD, ERP & IT Cell
/ Commercial & RC/ IB, BDD & JV/ ESMD & CSR/ Finance/ AM, NTAMC & Safety Cell/
HRD, Corp Comm & Law / WR-II/ HR-Admin, IR, RB, RoW

CGM : HR

Company Secretary

For kind information of:

Director(Operations)/ Director (Finance)/ Director (Projects)/Director (Personnel)/ CVO


(Priti Nahar)
Sr. DGM (CP)

Risk Management Matrix for "OPGW Installation on Itarsi- Dhule Transmission Line"

Sl. No.	Risk Parameters	Broad Mitigation steps		Responsibility Centre**
		Mitigation-1	Mitigation-2	
1	Delay in obtaining Forest clearance due to cumbersome process		Not Applicable	
2	Delay in commencement of project	Award of major contracts to be placed within 1 month of Investment Approval & Contract Agreement to be signed within 1 month thereafter	Kick-off meeting within 1 month of Letter of Award	CS/CMG
3	Time overrun due to delay in resolution of RoW issues in construction of Transmission line		Not Applicable	
4	Delay in land acquisition of substations		Not Applicable	
5	Idling of transmission system due to non-readiness of generator / downstream / upstream transmission system		Not Applicable	
6	Restriction of additional cost by CERC in absence of RCE	RCE-I to be prepared within 1 month of award of all major packages (Tower & Substation)	RCE-II to be prepared when actual Capex is > 50% & thereafter regular review of project cost and completion schedule to ascertain requirement, if any, of further RCE requirement	Site Project Head / Cost. Engg.
7	Restriction of IDC/IEDC by CERC due to lack of / insufficiency in documentary evidence of time overrun	Regular records to be maintained regarding constraints in project progress and documented for support	Hinderance Register to be maintained in SAP and reviewed regularly by project Head	Site Project Head / Commercial
8	Failure of equipments due to non-resolution of quality issue resulting in delay in projects	All major equipment quality checks to be maintained at Level-4	Quality to be ensured at different stages of manufacture as per standard practice.	QA & I Group
9	Non-compliance to statutory requirement of legal / safety / social / environmental etc.	preparation of check-list at RHQ level and monitoring of same		Site Project Head
10	Timely Implementation of the Project			
a.	Commencement			
1	Finalization of L2	Within 1 month of NOA		
2	Site Mobilisation	As per L2		CMG
2	Survey		Not Applicable	Site Project Head
	Statutory Approvals/NOC (i.e. PTCC, Civil Aviation, Defence Establishment etc.)		Not Applicable	
b.	Physical Progress			
i	Strengthening of OPGW Network			
1	Supply of OPGW and Communication equipment	As per L2	Completion 2 months before completion of erection	CC: Head (Engg.- S/s)
2	Stringing (of OPGW)	As per L2	Complete before scheduled completion of project	Site Project Head
3	Foundation/Civil works etc	As per L2	Complete 3 months before completion schedule	Site Project Head
4	Finalisation of repeater for OPGW link	Finalisation of repeater location and signing of land lease agreement (in case of private land) within 3 months of NOA/considering other options such as repeater on tower.	Taking up additional works for taking up repeater on tower.	Site Project Head
5	Erection of Equipment (incl repeater)	As per L2	Complete 1 month before completion schedule	Site Project Head
c.	Commissioning	As per L2		Site Project Head





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Government of India
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
पश्चिम क्षेत्रीय विद्युत समिति

Western Regional Power Committee
एफ -3, एमआयडीसी क्षेत्र, अंधेरी (पूर्व), मुंबई - 400 093
F-3, MIDC Area, Andheri (East), Mumbai - 400 093



आईएस/आईएसओ

9001-2015

IS/ISO : 9001-2015

दूरभाष Phone: 022- 28221636; 28200194;195;196
Website : www.wrpc.gov.in

फैक्स Fax : 022 - 28370193
E-mail : ms-wrpc@nic.in

सं. : पक्षेविस/ 46वीं/ पक्षेविस बैठक/ सहा.स. /2023/ 2286
No. : WRPC/46th/ WRPC Mtg./A.S./2023/

दिनांक: 20.03.2023
Dated:

सेवा में/To,

(संलग्न सूची के अनुसार/
As per enclosed list)

विषय : पश्चिम क्षेत्रीय विद्युत समिति (पक्षेविसमिति) की 46 वीं बैठक का कार्यवृत्त।
Sub : Minutes of 46th meeting of Western Regional Power Committee (WRPC).

महोदय/Sir,

इस पत्र के साथ दिनांक 3 फरवरी, 2023 को उदयपुर (राज.) में आयोजित पश्चिम क्षेत्रीय विद्युत समिति की 46वीं बैठक एवं इससे पहले दिनांक 2 फरवरी, 2023 को आयोजित तकनीकी समन्वय समिति की बैठक का कार्यवृत्त आपकी सूचना एवं आवश्यक कार्रवाई हेतु संलग्न है।

Please find enclosed herewith the Minutes of the 46th meeting of Western Regional Power Committee held on 3rd February 2023 at Udaipur (Raj.) preceded by Technical Coordination Committee meeting on 2nd February 2023 for your kind information and necessary action.

धन्यवाद / Thanking you,

भवदीय / Yours faithfully,

संलग्न: उपरोक्तानुसार/As above

(सत्यनारायण एस. / Satyanarayan S.)

सदस्य सचिव/Member Secretary



भारत सरकार

Government of India

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पश्चिम क्षेत्रीय विद्युत समिति, मुंबई
Western Regional Power Committee, MUMBAI

तक.सम.स. / प. क्षे. वि. स.

की दिनांक 02 एवं 03 फ़रवरी, 2023 को

उदयपुर में

आयोजित 46 वीं बैठक का कार्यवृत्त

Minutes of 46th Meeting of TCC / WRPC

held on

02nd & 03rd February, 2023

at **Udaipur**

**Minutes of 46th TCC/WRPC meeting
held on 02nd/03rd February 2023 at Udaipur**

The 46th WRPC meeting was held on 3rd February 2023 at Udaipur, preceded by the TCC meeting on the 2nd February 2023. The meeting was hosted by Adani Power Maharashtra Limited. The list of participants is given at **Annex 1.1**

During the WRPC meeting MS, WRPC informed that due to unavoidable reasons, Shri M. Chaitanya Prasad, IAS, Chairman WRPC & Secretary Power, DNH & DD could not attend the meeting and on short notice Shri Dinesh Waghmare Sir, Senior IAS officer and CMD MSETCL has accepted the request to Chair the forum as Chairman, WRPC. MS, WRPC thanked Shri Dinesh Waghmare Sir, Senior IAS officer and CMD MSETCL for accepting the request on short notice to guide the forum as Chairman WRPC.

Shri Dinesh Waghmare, Senior IAS officer and CMD MSETCL welcomed all delegates of WRPC. He thanked the hosts for making excellent arrangements for the meeting. He informed that the 45th WRPC meeting was held in December 2022 in which important issues for the scheme submitted by CTU for the projected connectivity requirement of evacuation of additional 7 GW RE power from Khavda RE park were discussed and concluded. He informed that in 46th WRPC meeting decision would be taken on various issues like the new ISTS proposal submitted by CTU, DC issue of CGPL, avoiding loss of communication, settlement of energy for Osmanabad solar and a new approved scheme by MoP for the National level optimization of surplus generation capacity etc. He informed that as we know that 500 GW RE installed capacity target is there by 2030, for that we should also address the issues of downstream network. He said that since the last TCC meeting various sub-committees of WRPC like PCM, OCC, CCM were held and also special e- meetings were conducted by WRPC. Some highlights of western region in terms of installed capacity and generation for the month of December. During this period the total installed capacity of WR reached was 133670 MW as on December 2022 and RE installed capacity reached 45050 MW. Maximum all time high demand was 71677 MW which was witnessed in 27th December 2022. System frequency remained in IEGC band (49.90– 50.05 Hz) for 57.38% of time in this month. Average frequency was 50.01Hz and frequency violation index was 0.13. He welcomed all the members and look forward for a fruitful discussion.

Earlier day during the TCC meeting held on 02nd February, Shri C.A. Parmar, Chief Engineer- DNH & DD and TCC Chairperson informed that in the last TCC meeting held in Dec'22, discussions were held on the connectivity issues of 7GW RE in Khavada. He informed that in the TCC meeting various Agenda items would be discussed like operational issue of western part of Grid and data communication issues.

TCC/WRPC noted the above.

Item no. 15. OPGW replacement on Itarsi-Dhule Transmission Line

Background:

OPGW on Itarsi-Dhule (402Km-Excluding LILO portion at Khandwa) was commissioned in 2003 by POWERGRID using C- band fibre. Later on, this line was LILOed at Khandwa and OPGW on LILO portion (56Km) was installed under Master communication plan for WR in 2015.

Presently the OPGW on Itarsi-Khandwa line and Khandwa-Dhule line is of STM-4 level bandwidth. For the replacement with STM-16 level, one number repeater station is also required to be considered in Khandwa-Dhule link as the link length is more than 225km.

The OPGW on main line i.e. Itarsi-Dhule line is at the end of useful life and the link is an important connectivity to send data of sub-stations of MP locations to WRLDC.

In view of the above, the OPGW on Itarsi-Dhule line requires urgent replacement and following is the proposal regarding the same:

S. No.	Items	Details
1.	Name of Scheme	Replacement of OPGW on Itarasi – Dhule Line with new OPGW of STM-16 level connectivity.
2.	Scope of the scheme	1. Supply and installation of 24F OPGW for 403km (105% of Route length) 2. STM-16,5 MSP FOTE for both Itarsi, Dhule Stations and also for Khandwa Substation which is connected through LILO with the main line. 3. Repeater Shelter including all shelter items/ Equipment i.e. telecom repeater equipment, auxiliary infrastructure like DG, SMPS, battery bank etc. in between Dhule-Khandwa section as the line length is approx. 263kM. Repeater location may be finalized by transmission licensee preferably in existing ISTS/STU substations for optimizing operation & maintenance of repeater.

3.	Schematic diagram	
4.	Estimated Cost	Rs. 16 Crore (approx.) excluding GST.
5.	Implementation timeframe	Approx. 24 months from the date of allocation
6.	Implementation Mode	Through POWERGRID-RTM as the ownership of the line is POWERGRID

The scheme was discussed in the 7th SCADA meeting and agreed by the members. However, constituents requested POWERGRID to review the Estimated Cost of the project.

POWERGRID is to share modified estimated cost in 47th TCC meeting to be held on 2nd Feb'2023.

46th TCC Discussions:

MS WRPC informed that this project was agreed in the WR SCADA committee but in 7th SCADA committee meeting MP had requested to relook the estimated cost of the OPGW replacement.

PGCIL representative informed that it is the approximated cost and the actual cost of the project will be discovered by competitive bidding and that shall be shared subsequently.

TCC committee recommended the above scheme .

Minutes of 46th TCC/WRPC meeting held on 2nd/3rd February 2023 at Udaipur

46th WRPC Discussions:

WRPC committee approved the scheme as per TCC recommendation.

TCC/WRPC noted the same.

Item no. 16. Unified High Demand Months (season) at the national level.

Background

As per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, Chapter – 11, Computation and Payment of Capacity Charge for Thermal Generating Stations, Pt 1:

Quote

“The capacity charge shall be recovered under two segments of the year, i.e. High Demand Season (period of three months) and Low Demand Season (period of remaining nine months), and within each season in two parts viz.... “

Unquote

Accordingly, WRLDC vide Letter Ref No: WRLDC/RE&R/2022-23/322 dtd 26.09.2022 has declared **Dec’23, Jan’24 and March’24 as High Demand months (season) and balance nine (9) months of FY 23-24 as Low Demand months (season)** in Western Region for the financial year 2023-24.

Also, as per Minutes of the Meeting taken by Hon'ble Minister of Power and New & Renewable Energy on 07th December,2022 'Availability of Capacity during crunch period in April 2023' -reg

Cl 4.8 It was also directed that CEA/Grid-India will ensure zero planned outage during crunch period in April-May'24.

Also, while planning the Outages in the remaining months, NTPC at times has been declined to take Unit Off bar by its beneficiaries because of their high demand season or being some festive season. These, regulations, and directives effectively leave NTPC to schedule Planned Outage (AOH/COH) of its 47 Units (NTPC WR Stations)

I/32647/2023



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Government of India

विद्युत मंत्रालय

Ministry of Power

केंद्रीय विद्युत प्राधिकरण

Central Electricity Authority

विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग- II

Power System Planning & Appraisal Division-II

सेवा में /To

As per list of Addresses

विषय: ट्रांसमिशन पर राष्ट्रीय समिति (एनसीटी) की सोलहवीं बैठक का कार्यवृत्त - के सम्बन्ध में।

Subject: Minutes of the 16th Meeting of National Committee on Transmission (NCT) – regarding.

महोदया (Madam) / महोदय (Sir),

The 16th meeting of the "National Committee on Transmission" (NCT) was held on 30th November, 2023. The minutes of the meeting are enclosed herewith.

भवदीय/Yours faithfully,

(राकेश गोयल / Rakesh Goyal)

मुख्य अभियन्ता एवं सदस्य सचिव, एन.सी.टी.

/ Chief Engineer & Member Secretary (NCT)

प्रतिलिपि / Copy to:

Joint Secretary (Trans), Ministry of Power, New Delhi

सेवा भवन, आर. के. पुरम-I, नई दिल्ली-110066 टेलीफोन: 011-26732613 ईमेल: cea-pspa2@gov.in वेबसाइट: www.cea.nic.in

Sewa Bhawan, R.K Puram-I, New Delhi-110066 Telephone: 011-26732613, Email: cea-pspa2@gov.in Website: www.cea.nic.in

I/32647/2023

List of Addresses:

1.	Chairperson, Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	2.	Member (Power System), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.
3.	Member (Economic & Commercial), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	4.	Director (Trans), Ministry of Power Shram Shakti Bhawan, New Delhi-110001.
5.	Sh. Ajay Yadav, Joint Secretary Room no 403, Atal Akshay Urja Bhawan Opposite CGO Complex gate no 2, Lodhi Road, New Delhi – 110003	6.	Chief Operating Officer, CTUIL, Saudamini, Plot No. 2, Sector-29, Gurgaon – 122 001.
7.	Sh. Rajnath Ram, Adviser (Energy), NITI Aayog, Parliament Street, New Delhi – 110 001.	8.	CMD, Grid Controller of India, B-9, Qutub, Institutional Area, Katwaria Sarai, New Delhi – 110010
9.	Sh. Ravinder Gupta Ex. Chief Engineer CEA		

Special Invitee

Chief Engineer (PCD), CEA

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Minutes of the 16th meeting of National Committee on Transmission

1 Confirmation of the minutes of the 15th meeting of National Committee on Transmission.

- 1.1 The minutes of the 15th meeting of NCT held on 25.08.2023 were issued vide CEA letter no CEA-PS-12-13/3/2019-PSPA-II dated 18.09.2023.
- 1.2 CTUIL had requested the amendment in para 3.9.4 of the minutes of 15th NCT meeting for clarity. Accordingly, it was proposed to replace the table under para 3.9.4 as under:

<i>Sl. No.</i>	<i>Original Scope</i>	<i>Revised Scope</i>
1.	<i>Replacement of old OPGW and terminal equipment on existing 400 kV Agra – Ballabgarh line (181 km) with new OPGW and terminal equipment</i>	<i>Supply & Installation of OPGW alongwith terminal equipment on existing 400 kV Agra – Ballabgarh line (181 km)</i>
2.	<i>Replacement of old OPGW alongwith terminal equipment on 400 kV KishenpurWagoora line with new OPGW (183 km) except LILO portion at New Wanpoh (3 km) and terminal equipment</i>	<i>Supply & Installation of OPGW alongwith terminal equipment on existing 400 kV Kishenpur – Wagoora line (183 km) except LILO portion at New Wanpoh (3 kms)</i>

- 1.3 Members confirmed the minutes with above amendment.

2 Status of the transmission schemes noted/approved/recommended in the 15th meeting of NCT:

- 2.1 Status of new transmission schemes approved/recommended:

Sr. No	Name of the Transmission Scheme	Noted/ Recommended / Approved	Mode of Implemen tation	MoP approval	BPC
1.	North Eastern Region Generation Scheme-I (NERGS-I)	Approved	TBCB	Notified vide Gazette dated 26.10.2023	RECPDCL
2.	Transmission Scheme for integration of Tumkur-II REZ in Karnataka	Recommended	TBCB	Would be taken up for approval after completion of survey by BPC	RECPDCL
3.	Transmission system strengthening for interconnections of	Recommended	TBCB	Notified vide Gazette dated 07.11.2023	PFCCL

4.9.5 Detailed scope of the scheme is given below:

Sl. No.	Scope of the Transmission Scheme
1.	The OPGW Supply and installation alongwith accessories on the following line by replacing the existing one no. earthwire by Live Line installation: ➤ 765/400kV Pune (PG) (GIS) – 400kV Parli (PG) line
2.	STM-16, 3 MSP (FOTEs of requisite configuration at Pune, Parli for establishing the communication in between Pune-Kallam-Parli.

4.10 OPGW installation on Itarsi-Dhule Transmission Line

4.10.1 Representative of CTUIL stated that the OPGW on main line i.e. Itarsi-Dhule line installed by POWERGRID in 2003 is at the end of useful life and the link is an important connectivity to send data of sub-stations of MP locations to WRLDC.

4.10.2 The proposal was deliberated in 46th & 47th TCC/ WRPC meeting held on 2-3 Feb & 14-15 June 2023 respectively WRPC agreed to the installation of OPGW on 400kV Itarsi-Dhule (403 Km) to be installed on the 2nd peak of transmission line under ongoing WRCSS project for an estimated cost of Rs 16 Crores Excluding taxes.

4.10.3 NCT approved OPGW installation on Itarsi-Dhule Transmission Line through RTM mode with tentative implementation timeframe of 24 months.

4.10.4 Summary of the scheme is given below:

SI No.	Name of the scheme and tentative implementation timeframe	Estimated Cost (₹ Crores)	Remarks
1.	OPGW installation on Itarsi-Dhule Transmission Line Tentative Implementation timeframe: 24 months	15.4	Through POWERGRID on RTM mode

4.10.5 Detailed scope of the scheme is given below:

SI No.	Name of the scheme	Scope of the scheme
1.	OPGW installation on Itarsi-Dhule Transmission Line	1. Supply and installation of 24F OPGW for 403km. 2. STM-16, 5 MSP FOTE for Dhule S/s and repeater station. 3. Repeater Shelter including all shelter items/ Equipment i.e. telecom repeater

		equipment, auxiliary infrastructure like DG, SMPS, battery bank etc. in between Dhule-Khandwa section as the line length is approx. 263 km. Repeater location may be finalized by transmission licensee preferably in existing ISTS/STU substations for optimizing operation & maintenance of repeater.
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4.11 Additional FOTE at AGC locations for Redundancy in NER region

4.11.1 Representative of CTUIL stated that additional FOTE at all AGC operated generating stations in North Eastern region is required in view of resource disjoint and criticality of AGC operation for grid operation purpose as failure of single equipment may lead to disruption in AGC operation. Further, at many locations redundant ethernet port are not available as per NLDC requirement.

4.11.2 This scheme was approved by the NERPC in its 24th meeting.

4.11.3 NCT approved implementation of Additional FOTE at Loktak and Bongaigaon AGC locations in NER region, under RTM mode with tentative implementation timeframe of 06 months.

4.11.4 Summary of the scheme is given below:

SI No.	Name of the scheme and tentative implementation timeframe	Estimated Cost (₹ Crores)	Remarks
1.	Additional FOTE at Loktak and Bongaigaon AGC locations in NER region Tentative Implementation timeframe: 06 months	0.4	Through POWERGRID on RTM mode.

4.11.5 Detailed scope of the scheme is given below

SI No.	Name of the scheme	Scope of the scheme
1.	Additional FOTE at Loktak and Bongaigaon AGC locations in NER region.	One no. of FOTE STM-16 at Loktak and One no of FOTE STM-16 at Bongaigaon is proposed.

Note No. #1

Attachment: Annexure II CTUIL OM 1KD.pdf

(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड के स्वामित्व में)

(भारत सरकार का उद्यम)

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

(A wholly owned subsidiary of Power Grid Corporation of India Limited)

(A Government of India Enterprise)

Ref. No.: CTUIL/OM/11/16th NCT27th December 2023

1. The Chairman & Managing Director Power Grid Corporation of India Ltd., Saudamini, Plot No. 2, Sector-29, Gurgaon- 122 001.	2. Shri Sanjay Johari Vice President (Business Development) M/s Western Transmission Power Ltd. (M/s Adani Energy Solutions Ltd.) 5 th Floor Adani Corporate House, Shantigram, S.G. highway, Ahmedabad – 382421, Gujarat.
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Sub: Implementation of ISTS Transmission/Communication Schemes approved by NCT in its 16th meeting held on 30-11-2023 under Regulated Tariff Mechanism (RTM).

NCT vide letter dated 26-12-2023 has awarded the following ISTS Transmission/Communication Scheme for its implementation under RTM mode by implementing agencies as indicated in the table below:

Sl. No.	Transmission/Communication Schemes	Implementing Agency
I. ISTS costing between Rs. 100Cr. To Rs. 500 Crs.:		
1.	Augmentation of transformation capacity at 765/400 kV Indore S/s in Madhya Pradesh.	POWERGRID
2.	Augmentation of 1x1500 MVA (3rd), 765/400 kV transformation capacity at Kurnool New S/s.	POWERGRID
3.	Reconductoring of Raichur – Vellore (Mahabubnagar) 400 kV S/c line with HTLS conductor	POWERGRID
II. Communication schemes approved by NCT:		
1.	Supply and Installation of OPGW on existing line 765/400kV Pune (PG)(GIS) – 400kV Parli (PG) line which is to be LILOed at Kallam Substation under TBCB project namely “Transmission system for evacuation of power form RE projects in Osmanabad area (1GW) in Maharashtra”	M/s Western Transmission Power Ltd. (M/s Adani Energy Solutions Ltd.)
2.	OPGW installation on Itarsi-Dhule Transmission Line	POWERGRID
3.	Additional FOTE at Loktak and Bongaigaon AGC locations in NER region.	POWERGRID

Copy of NCT letter dated 26-12-2023 in this regard is enclosed at **Annexure-I**. The detailed scope of work along with implementation time frame for the above Transmission/Communication Schemes shall be as per the enclosed letter of NCT.

The implementing agency shall enter into a concession agreement with CTUIL for implementation of aforementioned Transmission/Communication Schemes. However, pending finalization of

Note No. #1

Attachment:Annexure II CTUIL OM IKD.pdf

Concession Agreement, it is requested to initiate necessary actions for implementation of the aforementioned Transmission/Communication Schemes.

This is for your kind information and necessary action, please.

Yours faithfully,



(Partha Sarathi Das)
Sr General Manager

Encl.: as stated.

ANGARU
NARESH
KUMAR

Digitally signed by
ANGARU NARESH
KUMAR
Date: 2025.06.27
18:15:04 +05'30'

DETAILED PROJECT REPORT FOR INSTALLATION OF OPGW ON EXISTING 400 KV Itarsi - Dhule D/C line

1.0 BACKGROUND

OPGW is installed on one peak of towers of 400 kV Itarsi - Dhule D/c line (403 km) (owned by POWERGRID). It was commissioned in 2003 and has completed its useful life of 15 years.

Optical losses in the link have increased and healthiness of OPGW and the fibers have deteriorated. This line is further LILOed at Khandwa S/s of POWERGRID, therefore link become Itarsi – Khandwa - Dhule. OPGW on LILO portion was installed in the year 2015 (around 28 kms.). Itarsi – Khandwa - Dhule link provides backbone connectivity to sub-stations of MP locations for WRLDC. In view of above constraints and critical nature of the link, OPGW installation on Itarsi-Dhule Transmission except LILO portion at Khandwa (28 km) in live line installation alongwith terminal equipment was discussed in the 16th meeting of National Committee on Transmission (NCT) held on 30th November 2023.

After deliberations, the scheme was approved by NCT for OPGW installation on Itarsi – Dhule Transmission Line with new OPGW (403 km) except LILO portion at Khandwa (28 km) and terminal equipment under RTM route by owner of the line, i.e. POWERGRID, with implementation timeframe of 24 months.

Subsequently, CTUIL vide OM Ref. No. CTUIL/OM/11/16th NCT dated 27.12.2023 recommended the subject scheme for implementation by POWERGRID through RTM route.

A schematic diagram of the system is given at **Exhibit 1.0**.

2.0 PROJECT OBJECTIVES

The objective of the project is to provide a reliable wideband communication system for catering to data & voice requirements as well as new technological requirements such as Automatic Generation Control (AGC), Special Protection Scheme, Wide Area measurement System, Advanced Protection System and Substation Automation System for the substations.

2.1 Scope of work

The scope of work under the project to be implemented is summarized below:

- (i) Supply and Installation of OPGW on existing 400 kV Itarsi – Dhule line
- 403 km
- (ii) SDH Equipment - 2 nos.
- (iii) Repeater Shelter - 1 No

3.0 **PROJECT HIGHLIGHTS**

a)	Project	:	Supply and Installation of OPGW on existing 400 kV Itarsi – Dhule Transmission Line
b)	Location of the Project	:	Western Region
c)	Project Cost	:	Rs.20.60 crores including IDC of Rs. 1.11 crores at December 2023 price level.
d)	Monthly Fixed Charges	:	Rs. 35.60 lakhs on Base Cost Rs. 35.88 lakhs on Projected Completed Cost
e)	Commissioning schedule	:	The project is scheduled to be commissioned within 24 months from the date of allocation, i.e., December 2025 as per CTUIL OM dated 27.12.2023

4.0 **PROJECT APPROVAL BY CONSTITUENTS / SHARING OF TRANSMISSION CHARGES**

The proposal was deliberated in the 46th & 47th TCC/ WRPC meeting held on 2-3 Feb & 14-15 June 2023 respectively and approved in 16th NCT meeting held on 30th Nov 2023 (Minutes of meeting enclosed at **Annexure – 8.0**).

Subsequently, CTUIL vide OM Ref. No. CTUIL/OM/11/16th NCT dated 27.12.2023 recommended the subject scheme for implementation by POWERGRID through RTM route. As mentioned in the OM, POWERGRID has to enter into a concession agreement with CTUIL for the implementation of this scheme (Copy of OM enclosed at **Annexure – 9.0**).

4.1 **TARGET BENEFICIARIES**

The subject project is to be implemented to meet the communication and data requirement in view of the expansion of power system network and other requirements as detailed above. Beneficiaries of this project shall be various state utilities, IPP's and CGS of Western Region.

5.0 **PROJECT STRATEGY**

POWERGRID has been assigned this communication scheme by CTUIL vide their OM dated 27.12.2023 in line with the approval of NCT. The proposed network under the scheme shall be integrated with the existing communication network. The proposed communication network would meet the present and future communication requirement of the region for grid operation and AGC.

6.0 LEGAL FRAMEWORK

It is proposed to execute the above communication scheme as per provisions contained in the Indian Electricity Act, 2003 and CEA Technical Standards in so far as these are applicable. Approval of the Govt. of India under section 68 of the Electricity Act, 2003 is not required as communicated by MoP for similar projects.

7.0 ENVIRONMENTAL AND SOCIAL ASPECTS

7.1 Forest involvement / Clearance

The project would involve installation of communication equipment in existing substations and installation of OPGW on existing transmission line. Since the present scope is on the existing transmission lines and substations, involvement of new forest sections or any new clearances are not foreseen.

7.2 Social Issues/R&R measures Not foreseen.

8.0 TECHNICAL FEATURES

8.1 Salient features

The major components of the fiber optic communication system to be established shall include the following:

- (a) OPGW Cable, Approach Cable and associated hardware & fittings
- (b) Fiber Optic Terminal Equipment
- (c) Repeater for long haul link as required.
- (d) DC Power Supply along with Batteries, if required.

Detailed description of these items is as under:

(a) Optical Ground Wire (OPGW) Cable and Approach Cable

- Proposed OPGW cable shall contain 24 Fibers. Provision for 48 Fiber OPGW cable is also considered mainly for providing connectivity of repeater stations, if any. Fibers shall conform to ITU-T G.652D.

- The mechanical & electrical properties of OPGW shall be similar to the earth wire being replaced and shall be adapted meeting the requirement of transmission line.
- Installation of OPGW shall be carried out in live line for existing lines and off-line for new lines under construction, if any. In cases where earth wire condition is not suitable for live-line installation or there is presence of aviation globes in some section of line, off-line installation of OPGW is considered as best option due to difficult working conditions. Approach cable (armored) is dielectric fiber optic cable and is provided at sub-stations /repeater stations for providing connectivity from joint box at the terminating station up to the communication room. The fibers in armored cables shall be same as OPGW.

(b) Fiber Optic Terminal Equipment (FOTE)

- FOTE shall be of SDH technology with STM-16 capacity with hot standby configuration and shall be EMI/EMC compatible.
- It shall provide minimum repeater less distance of 225 km. Repeater shelter for distance more than 225 km for STM-16 link and 250 km for STM-4 link shall be considered for locations where repeater is to be located on private land or at sub-stations with space constraints for installing communication equipment.

(c) Network Management System (NMS)

- Network Management System (NMS) also referred, as TMN shall be provided, in main and backup configuration for operational support to the FOTE and associated Termination equipment subsystems.
- TMN shall provide the capability to monitor, reconfigure, and control elements of the telecommunications network from a centralized location and at each node of the network where equipment is located.
- TMN system shall assist Employer/Owner in the operations and maintenance of the wideband communication resources of the including detection of degraded circuits, system performance, the diagnosis of problems, the implementation of remedial actions and the allocation or reallocation of telecommunications resources and addition/deletion of network elements.

(d) DC Power Supplies & Batteries

- 48V DC Power Supply with battery back-up of at least 10 hours is considered for working of communication equipment. TMN shall work on UPS supply available at NMS locations.
- VRLA type battery is considered for 48 V DCPS.

8.2 Support facilities

The SDH equipment shall mostly be in existing communication room at substation. At new wideband locations the space, in the existing control rooms of the substation shall be provided and no additional infrastructure is envisaged except some minor civil work for cable entry and grouting of panels, etc. At substations under construction, the requirement of input power supply, minor civil works, etc., shall be coordinated with the agency responsible for substation equipment supply & commissioning. Wherever space constraints are there in substation control room, space for shelter shall be identified for installation of communication equipment.

8.3 Design Criteria

High system availability, reliability and flexibility in maintenance of the system are the main criteria for design of any communication network. Principally these are described as follows:

- (a) High Reliability: The system should be engineered to provide high reliability with minimum loss of communication by selecting proven hardware and using proven methods of communication.
- (b) High Availability: The system should suffer only minimum degradation in the event of circuits failing due to media shortcomings, and care should be taken to provide alternative route of speech & data wherever it is economically feasible.
- (c) Rapid Response: The system should offer quick response to changes in measured values by keeping the update time within specified limits.
- (d) Economy: The system should be engineered to provide the required performance in an economical manner.
- (e) Flexibility: The communication network should have enough flexibility to changed requirements and future augmentation programs. The network should itself be capable of being easily changed to embrace these new requirements.
- (f) Maintainability: The network should use methods which make minimum demands for maintenance. Also, adequate provision of spares should be allowed to ensure quick remedial action of any fault at any station within the network.

The communication network under the proposed project shall have the following aspects in order to meet the high reliability, availability and maintainability criteria:

- (a) The proposed FO based communication network shall be primarily used for speech and data communication to cater SCADA/EMS and associated systems to efficiently operate the large and interconnected Power System. Presently large no of RTUs installed at the substations are communicating to the control center on PLCC at least for a portion of the communication route. The performance of data communication over PLCC is not satisfactory when the data transmission involves more than two hops, this problem is further aggregated on aged lines of constituents due to high noise occurring out of poor maintenance.
- (b) The Fiber Optic cable to be laid shall have 24 or 48 fibers, which will ensure the continuity of the link over a longer period as spare fibers can be used to replace the damaged fibers at any point of the time during its design life time. The spare fibers can also be leased to the telecom services which would generate additional revenue. However, this would depend upon the prevailing market conditions at particular point of time.
- (c) The Fiber Optic (FO) terminal equipment to be installed under the project shall be based upon SDH technology and will have STM-16 capacity. The interfaces shall be selected meeting the present requirement and considering the forthcoming developments in control center technology for grid management etc. The SDH equipment shall be provided with redundancy to ensure path protection and against failure of any interface card/power supply.
- (d) For longer lines (>225kms) if the output of FO terminal equipment does not meet the link budget requirement, repeater may be required which shall be installed at the substations or repeater shelters.
- (e) For ease of maintenance, configuration changes and centralized monitoring in the equipment the Network Management System (NMS) shall be provided for Fiber Optic Terminal Equipment as well as for multiplexers.

9.0 MANAGEMENT ARRANGEMENTS

9.1 Organizational set up

In POWERGRID the 'Organizational Concept' has been given due importance and the basic structure of the organization has been made with a view to achieve the following objectives:

- i) To group related functions together to have clearly defined 'Roles' for the relevant 'functional heads'.
- ii) To have well defined 'Responsibility & Authority' centers in the structure.
- iii) To have well defined 'communication channels' and optimum 'span of control' in the organization.

- iv) To have optimum manpower.
- v) To have decentralization of activities as far as possible.

At the first level in the organization, Corporate Centre will be planning, monitoring and controlling the objectives and activities of the organization. At the second level, the Regional HQs will be playing the role of controlling the activities in the regions and will report to the Corporate Centre. In POWERGRID, regions have been identified as NR-I, NR-II, NR-III, SR-I, SR-II, WR-I, WR-II, ER-I, ER-II, Odisha & NER, and these regions are headed by CGM (I/c)/ED. At the third level in the structure, the Substation Groups will be controlling the activities of the respective Substation and associated lines under that Group and will report to the Regional HQs. The Groups will consist of basic working units such as substation construction/maintenance, line construction/maintenance. The Groups will have both service and technical functions, to cater to the basic functional requirements. Regarding work related to SCADA/EMS, Communication System, WAMS, etc. in this project, AM/IT/ULDC departments of Western Region are responsible for the construction, operation and maintenance of communication network.

9.2 Project Management

The project of Fiber Optic based Wideband Communication system will be planned, implemented, monitored and controlled through Integrated Project Management and Control System (IPMCS). IPMCS uses PERT/CPM technique as the basic management tool. For effective project planning and review, three tier level of planning and review have been adopted.

Level-I:

Planning is done by the central planning cell, which is in the form of an overall project schedule called the Master Network, for the project which forms the basis for all subsequent planning and monitoring of the activities. This covers broadly all the packages of project and indicates activities of engineering, contracts, manufacturing, erection and commissioning. The Master Network is prepared using computerized techniques which subsequently helps in comparing the actual progress of the project with the scheduled progress. This gives indication of the likely critical areas and helps in preventing the same, thereby resulting in smoother implementation. The Master Network also acts as a source for the planning to be done at Level - II & Level - III.

Level-II:

Planning is done package-wise and is worked out and finalized with the respective contractor/vendor during the pre-award stage. Level II networks are made within the milestones identified in the project Master Network (L-I).

Level-III:

Plans deal with elaborate schedules and weekly/monthly rolling plans which are prepared for activities of engineering, supply (as the case may be) & field activities. These form the basis of monitoring by the various functions.

The system envisages monthly review of the level II programs with contractors and at field on a weekly basis.

A site monthly progress report is sent to the head office having four sections, i.e.

- i) Project completion trend
- ii) Salient achievements for the month
- iii) Program for next month
- iv) Areas needing attention of top management

10.0 MODE OF FINANCE AND PROJECT BUDGET

10.1 Project Cost Estimate

The estimated cost of the project based on **December 2023 price level** is as follows:

	Total Cost (Rs. in Crore)
Basic Cost (excl. IDC)	19.49
IDC	1.11
Total	20.60

The abstract cost estimate for FO Communication System is given at **Annexure - 1.0**. The break-up of the cost estimates for the project are given at **Annexures - 1.1**.

10.2 Basis of Cost Estimate

The estimated cost of the project as on December 2023 price level works out to **Rs. 20.60 crores** including an IDC of **Rs. 1.11 Crore**. Unit rates have been considered from Schedule of Rates (SOR) for December 2023 price level.

The cost estimate is inclusive of Goods and Services Tax (GST) on all equipment – on supply and services as applicable (as funding for supply of equipment is proposed to be done through domestic borrowings/bonds/External Commercial borrowings). F&I @ 4% has been considered in the estimate for plain terrain.

10.3 Project Overheads

The following overheads have been considered as a percentage of the equipment cost:

i) Incidental Expenditure During Construction	10.75%
ii) Contingencies	3.00%

10.4 Phased Fund Requirement

The anticipated year wise fund requirement for the project including interest during construction is given below:

YEAR	TOTAL (Rs in Crores)
2024 – 2025	10.90
2025 - 2026	9.53
2026 - 2027	0.97
Total	20.60

10.6 Mode of Financing

The project is proposed to be funded through internal resources and domestic funding. For the total project, equity component **(30%)** is proposed to be met through POWERGRID's internal resources and loan component **(70%)** through domestic funding. The details of the project financing are given hereunder:

Source	Amount (Rs. in Crore)
Domestic Loan	14.13
IR	6.47
Total	20.60

10.7 Interest During Construction

Based on the assumption of project financing from loan and equity in the ratio of 70:30 and the equity component being released simultaneously along with the loan component, the interest during construction works out to **Rs. 1.11 Crore**. The details of calculation are given at **Annexure 4.0**.

The rate of interest for Domestic Loan has been considered @ **10.50%**. The interest during construction would however be based on the actual financial structure of the project and applicable terms of interest on loan(s), etc.

10.8 Monthly Fixed Charges

Monthly Fixed Charges have been calculated as per CERC norms (2025-26) considering following:

- (i) Rate of interest on Domestic Loan @ 10.5%
- (ii) Return on equity @ 15.5%

- (iii) Depreciation @6.33%
- (iv) O& M charges 2.0% of the original project cost related to such a communication system.
- (v) Debt: Equity ratio 70:30
- (vi) Interest on working capital @ 12.0%

On the basis of the above, the indicative monthly fixed charges work out as **Rs. 35.60 Lakhs** for base cost and **Rs. 35.88 lakhs** for projected completed cost. The details are given in **Annexure – 3.0** and **3.0 a**.

The above monthly fixed charges are indicative only. Actual tariff for the project would depend upon actual capital expenditure, actual interest payable on loan, actual commissioning schedule etc.

10.9 Completed Cost

The completion cost of the project is expected to be **Rs. 20.83 crores** including IDC of **Rs. 1.12 crores**. The above cost has been worked out based on the average movement of *WPI (80% weightage)* and *CPI (20% weightage)* for the preceding 12-month period as per *guidelines dated 06.08.1997*. (Details given in **Annexure 6.0**)

10.10 Internal Rates of Returns

The project IRR, Equity IRR and Economic IRR on Projected Completed Cost have been calculated for the project and the same is tabulated below:

	For Completed Cost
Project IRR	11.41%
Equity IRR	13.30%
Economic IRR	14.05%

The details of calculation are furnished in **Annexure-7.0**.

11.0 TIME FRAME

The project is scheduled to be commissioned within 24 months from date of allocation, i.e., **by Dec 2025** as per CTUIL OM dated 27.12.2023. (Copy of implementation schedule is attached at **Exhibit – 2.0**.)

12.0 RISK ANALYSIS

Revenue Risk

The capital cost of the project comprises of (i) an equity component and (ii) a loan component. The same shall be recovered through the annual charges consisting of return required for the equity, an interest for the loan component together the O&M charges and interest on working capital from the beneficiaries as per CERC/GOI Guidelines. These are recovered in the form of monthly fixed charges from the beneficiaries. In addition to annual charges, FERV and incentives, etc. as per notification would also be payable.

Regulatory Risk

The provision that the tariff for existing assets commissioned as well as the additional tariff payable due to additional capitalization from year to year, etc. shall be computed by POWERGRID based on norms / methodology to be specified by the Central Electricity Regulatory Commission (CERC) as amended from time to time.

Environmental Risk

Not foreseen.

Legal / Contractual Risks

Not foreseen.

Project Management Risks

Not foreseen.

13.0 PAST RECORD OF SUCCESSFUL PROJECT IMPLEMENTATION

POWERGRID has built around 97,000 km of FO based communication network by installing the FO cable on POWERGRID and state utilities' transmission lines under ULDC projects, POWERGRID's Business Telecom Network, MW Replacement, Fiber Optic Expansion and numerous consultancy projects. This network is in successful operation. Further around 30,000 km of OPGW network is under implementation. The state portion of the network is also being maintained by POWERGRID on their behalf as per agreement signed with them. As on 29th February, 2024, POWERGRID operates about 176,762 ckt. kms. of transmission lines and 276 Sub-stations with a transformation capacity of about 5,22046 MVA. POWERGRID has maintained the transmission systems availability over 99% consistently. POWERGRID has team of dedicated experts in the field of engineering for Grid Automation and Communication facilities comprising of SCADA/EMS system and Telecommunication Systems, substation and Transmission Line Engg equipped with state-of-the-art technology, software capabilities and computer aided facilities for Planning, Design, Operation and Maintenance of Load Despatch & Communication facilities and transmission system. It has a well-established system of continuous feedback from the field and upgrades the system accordingly.

Load Despatch and Communication facilities involve the technologies which are fast developing and have comparatively short life cycle. The control center requirements are also changing due to regulatory changes such as implementation of ABT, Open access, desirability to declare spare transmission capacity etc. Based on the development on technology front and the feedback from the grid operators as well as in pursuit to economize the cost and implementation period, its experts are vigorously pursuing the developments on technical and operational fronts and systems are designed considering these developments.

POWERGRID has developed a project monitoring system matching with the organization structure, complexity / intricacies involved in the project implementation and Management information system. The system calls for increasing details of planning in all the facets of functions such as engineering, contracts, site and corresponding levels of monitoring and control, for generating a management summary report to the top management. This management summary report highlights the project completion trends, actions being taken/to be taken for the attention of the top management on exceptional basis of critical areas.

Further, the monitoring system envisages a regular total project review called Project Review Meeting (PRM). This review meeting is headed by Regional in-charge with representation from all functions viz. Contracts, Engineering, Field, Personnel, Finance, Corporate Monitoring Group, etc. The participants discuss project critical, project interface problems and project completion trends, etc.

From the discussions held during the PRM emanates a status report and also an exception report put up to the Chief Executive and Directors. The reports highlight extremely critical areas needing immediate attention and assistance required. Once in three months the PRM is held at Corporate Centre. These discussions help in identifying the critical areas and seeking decisions for speedy project implementation.

14.0 SUCCESS CRITERIA

The proposed ISTS Communication scheme approved by 16th NCT has been planned by CTUIL by carrying out detailed studies of existing wideband communication network, availability of transmission line connectivity, recommendations of CERC and discussions with beneficiaries at NRPC & NCT meetings. Regarding achieving its objective in the stipulated time frame, it is to mention that POWERGRID has in-house expertise in all specialized areas of

OPGW based Fiber Optic Wideband Communication Systems and associated requirements.

In support of above, it may be stated that POWERGRID has been rated as “Excellent” since 1993-94 in achieving the MoU targets with Ministry of Power and is recipient of Prime Minister’s MoU Award consecutively for many years for being amongst top ten PSUs.

Major wideband communication projects commissioned during the last five years include Fibre Optic Expansion projects of all regions, utilities like DVC, BBMB and states like Delhi, Bihar, Punjab, Himachal, UP, Assam, Tripura, Manipur along with Consultancy services to West Bengal, Jharkhand, Odisha, AP Transco etc.

POWERGRID has also been associated for the establishment of many complex SCADA/EMS and communication projects by using live line stringing technology for OPGW installation in most of the projects, which are in operation or under implementation. Such projects include:

- Unified Load Despatch and Communication Project in all India involving around 9000 km Fibre –Optic based communication network.
- MW Replacement Project in all India involving around 10000 km Fibre –Optic based communication network.
- Fibre Optic Expansion Project in all India involving around 34000 km Fibre – Optic based communication network.
- Reliable Communication Project in all India involving around 19000 km Fibre –Optic based communication network. This project is under implementation.
- OPGW Strengthening Scheme in all India involving around 9000 km Fibre – Optic based communication network. These projects are under implementation.

Consultancy Projects

- OPGW System projects in all India under consultancy involving around 22000 Km Fibre –Optic based communication network.

15.0 SUSTAINABILITY

15.1 System Design Philosophy

The OPGW based Fiber Optic Wideband Communication System designed in the most optimum manner such that availability of the system is of the highest order prevailing in the industry. The system and equipment parameters are chosen according to the present trends in technology, the fibers available are such that

the attenuation & dispersion in them are bare minimum. Wideband communication equipment is SDH based technology with STM-16 capacity.

15.2 System Operation Philosophy

NMS is envisaged for the entire wideband communication which will facilitate – configuration management, fault management, performance management and management from a Centralized location and also through local craft terminal during maintenance. In addition implementation of Unified Network Management System (UNMS) is being taken up in the regions to facilitate Centralized Supervision and Quick Fault Detection of ISTS Communication System for efficient management of Communication System in regions and also at national level. The proposed NMS shall be integrated with upcoming UNMS System.

15.3 System Maintenance Philosophy

The maintenance management system in vogue in POWERGRID aims at keeping the system under stable conditions while ensuring minimum maintenance cost and safety of equipment and personnel. The maintenance management schedule includes detailed work specification covering all maintenance jobs, permit to work system, long term maintenance planning, meetings for finalizing maintenance schedule for next 24 hours and resolution of interface problems between departments. These meetings are supplemented by meeting of HODs on alternate days to accelerate the decision making process and to lay down the priorities and guidelines for maintenance work during next 72 hours. Further FO communication system being specialized area, support of specialized agencies is taken for electronic equipment through maintenance contracts as per existing practice in POWERGRID and industry standards. The provision for such maintenance support would be kept in the technical specification for a limited period for which the cost may be allocated to O&M charges.

15.3.1 Spare parts Management System

The primary objective of spare part management system will be to ensure timely availability of proper spare parts for efficient maintenance of the Fiber Optic based Wideband Communication System without excessive build-up on slow- and non-moving inventory. The spare parts management system for this project will cover the following areas:

- a) Proper codification of all spares and consumables
- b) Spare parts indenting and procurement policy
- c) Ordering of critical mandatory and recommended spares
- d) Judicious fixation of inventory levels and ordering levels for spare parts based on our experience in other projects.
- e) Development of more than one source wherever practicable.

15.3.2 Training of personnel

The expertise available within the organization is required to be augmented to cater maintenance of state-of-the art technology SDH equipment & OPGW cable to be installed under the proposed project. Accordingly, training in the areas including Communication Equipment and NMS shall be arranged by POWERGRID at manufacturer's place and site which is considered essential under the project.

15.3.3 O & M Manuals

- a) Adequate O & M manuals will be distributed to all concerned as per the approved distribution policy of the company.
- b) O & M manuals will be available to all concerned prior to commissioning of Fiber Optic based Wideband Communication System to avoid problems in preparation of commissioning documents as well as proper installation & commissioning of equipment.

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पश्चिम क्षेत्रीय भार प्रेषण केन्द्र / Western Regional Load Despatch Centre

कार्यालय : एफ-3, एम. आई. डी. सी. क्षेत्र, मरोल, अंधेरी (पूर्व), मुंबई-400093

Office : F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai- 400093

CIN : U40105DL2009GOI188682, Website : www.wrldc.in, E-mail : wrldc@grid-india.in, Tel.: 022 28202690, Fax: 022 28235434, 28202630

सर्टिफिकेट संख्या : WRLDC/LO/SCADA/TRIAL/708

दिनांक: 01.04.2025

संचार उपकरणों के साथ संचार लिंक की सफल कमीशनिंग के लिए परीक्षण संचालन प्रमाण पत्र
Trial Operation Certificate for successful commissioning of Communication link with communication equipment
संदर्भ/Reference:

- Communication via email dated 26.03.2025 and 30.03.2025 from Transmission Licensee to RLDC in Format-I and IA.
- Communication from POWERGRID to RLDC through mail dated 26.03.2025 and 30.03.2025 in Format III, IIIA, IIIB and IIIC regarding confirmation of telemetry.

उपरोक्त संदर्भ के आधार पर, यह प्रमाणित किया जाता है कि संबंधित स्थानों से पंक्षेभांप्रेके० या बैकअप पंक्षेभांप्रेके० पर डेटा रिपोर्टिंग के साथ निम्नलिखित संचार लिंक सफलतापूर्वक चालू कर दिए गए हैं।

Based on the above reference, it is hereby certified that the following communication links have been successfully commissioned with data reporting at WRLDC or Backup WRLDC from locations mentioned in the table below.

I. लिंक/उपकरणों की सूची / List of Links/Equipments :

क्र०	संचार लिंक / तंत्र का नाम		छोर-ए	छोर-बी	छोर-सी	पूरा करने की तिथि
Sr. No.	Name of Communication Link /System		End A	End B (Repeater)	End C	Completion Date
1	400KV Itarsi Khandwa Dhule		Itarsi Powergrid	Repeater Station-1 (T.N.-720), Village: Wadgaon,Discrit – Jalgaon(MH)	Dhule (MSETCL)	29.03.2025
	OPGW (No.)	Length (Km.)				
	24F	147 Km (WR-I portion only)	SDH (STM-16) 05 MSP Tejas make (existing equipment). Only amplifier installed	Communication repeater equipment(STM-16),DG Set, PIU ,Battery and DCPS	SDH (STM-16) 05 MSP Tejas make	
	Approved in 16 th NCT meeting					

नोट/NOTE:

इस लिंक का उपयोग 765kV धुले बी.डी.टी.सी.एल. की डेटा रिपोर्टिंग और 400kV धुले एम.एस.ई.टी.सी.एल. की वॉयस के लिए किया जा रहा है।

This link is being used for RTU data reporting of 765kV Dhule BDTCL and Voice of 400kV Dhule MSETCL

सर्टिफिकेट संख्या : WRLDC/LO/SCADA/TRIAL/708

दिनांक: 01.04.2025

संचार उपकरणों के साथ संचार लिंक की सफल कमीशनिंग के लिए परीक्षण संचालन प्रमाण पत्र
Trial Operation Certificate for successful commissioning of Communication link with communication equipment

यह प्रमाणपत्र सी०ई०आर०सी० (टैरिफ के नियम और शर्त), 2019 के विनियम 5 के और आई०ई०जी०सी० खंड 25 के अनुसार जारी किया जा रहा है, यह प्रमाणित करने के लिए कि उपर्युक्त संचार प्रणाली या तत्व को संबंधित नियंत्रण केंद्र को आवाज और डेटा के हस्तांतरण सहित साइट स्वीकृति परीक्षण के पूरा होने के बाद (लाइसेंसधारी द्वारा घोषित) सेवा में डाल दिया गया है।

This certificate is being issued in accordance with Regulation 5 of CERC (Terms and Condition of Tariff) Regulations, 2019 and IEGC clause 25 to certify that the above-mentioned communication system or element has been put into service after completion of site acceptance test (as declared by licensee) including transfer of voice and data to respective control centre.

यह प्रमाणपत्र इस लिंक के 147 किमी हिस्से के लिए जारी किया गया है जो पावरग्रिड के डब्ल्यू०आर० क्षेत्र के अंतर्गत आता है।

The certificate is issued for 147 Km part of this link which comes under WR I region of Powergrid.

किसी अन्य उद्देश्य के लिए इस प्रमाण पत्र का उपयोग निषिद्ध है।

Usage of this certificate for any other purpose is prohibited.

महेश मेहेंदले
11/4/25

महेश मेहेंदले

(कार्यपालक निदेशक)

प्रति:

1. मुख्य महाप्रबंधक (ए०एम०जी०ए० एवं सी०), पश्चिम क्षेत्र-I, पावरग्रिड

प्रतिलिपि:

1. सदस्य सचिव, पश्चिम क्षेत्रीय विद्युत समिति
2. कार्यकारी निदेशक, राष्ट्रीय भार प्रेषण केंद्र



ग्रिड-इंडिया
GRID-INDIA

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)

GRID CONTROLLER OF INDIA LIMITED

(A Government of India Enterprise)

[formerly Power System Operation Corporation Limited (POSOCO)]

पश्चिम क्षेत्रीय भार प्रेषण केन्द्र / Western Regional Load Despatch Centre

कार्यालय : एफ-3, एम. आई. डी. सी. क्षेत्र, मरोल, अंधेरी (पूर्व), मुंबई-400093

Office : F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai- 400093

CIN : U40105DL2009GOI188682, Website : www.wrlde.in, E-mail : wrldc@grid-india.in, Tel.: 022 28202690, Fax: 022 28235434, 28202630

सर्टिफिकेट संख्या : WRLDC/LO/SCADA/TRIAL/704

दिनांक: 21.03.2025

संचार उपकरणों के साथ संचार लिंक की सफल कमीशनिंग के लिए परीक्षण संचालन प्रमाण पत्र
Trial Operation Certificate for successful commissioning of Communication link with communication equipment

संदर्भ/Reference:

- Communication via email dated 17.03.2025 from Transmission Licensee to RLDC in Format-I and IA.
- Communication from POWERGRID to RLDC through mail dated 17.03.2025 in Format III, IIIA, IIIB and IIIC regarding confirmation of telemetry.

उपरोक्त संदर्भ के आधार पर, यह प्रमाणित किया जाता है कि संबंधित स्थानों से पंक्षेभांप्रेके या बैकअप पंक्षेभांप्रेके पर डेटा रिपोर्टिंग के साथ निम्नलिखित संचार लिंक सफलतापूर्वक चालू कर दिए गए हैं।

Based on the above reference, it is hereby certified that the following communication links have been successfully commissioned with data reporting at WRLDC or Backup WRLDC from locations mentioned in the table below.

I. लिंक/उपकरणों की सूची / List of Links/Equipments :

क्र०	संचार लिंक / तंत्र का नाम		छोर-ए	छोर-बी	पूरा करने की तिथि
Sr. No.	Name of Communication Link /System		End A	End B	Completion Date
1	400KV Itarsi Khandwa Dhule		Itarsi Powergrid	Khandwa Powergrid	16.03.2025
	OPGW (No.)	Length (Km.)			
	24F	253.67 Km	SDH (STM-16) 05 MSP Tejas make (existing equipment). Only amplifier installed	SDH (STM-16) 05 MSP Tejas make (existing equipment). Only amplifier installed	
	Approved in 16 th NCT meeting				

नोट/NOTE:

इस लिंक का उपयोग 400kV इटारसी की डेटा रिपोर्टिंग और 765kV इंदौर की वॉयस के लिए किया जा रहा है।

This link is being used for RTU data reporting of 400kV Itarsi and Voice of 765kV Indore

सर्टिफिकेट संख्या : WRLDC/LO/SCADA/TRIAL/704

दिनांक: 21.03.2025

संचार उपकरणों के साथ संचार लिंक की सफल कमीशनिंग के लिए परीक्षण संचालन प्रमाण पत्र
Trial Operation Certificate for successful commissioning of Communication link with communication equipment

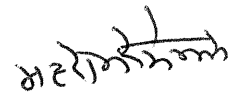
यह प्रमाणपत्र सी०ई०आर०सी० (टैरिफ के नियम और शर्त), 2019 के विनियम 5 के और आई०ई०जी०सी० खंड 25 के अनुसार जारी किया जा रहा है, यह प्रमाणित करने के लिए कि उपर्युक्त संचार प्रणाली या तत्व को संबंधित नियंत्रण केंद्र को आवाज और डेटा के हस्तांतरण सहित साइट स्वीकृति परीक्षण के पूरा होने के बाद (लाइसेंसधारी द्वारा घोषित) सेवा में डाल दिया गया है।

This certificate is being issued in accordance with Regulation 5 of CERC (Terms and Condition of Tariff) Regulations, 2019 and IEGC clause 25 to certify that the above-mentioned communication system or element has been put into service after completion of site acceptance test (as declared by licensee) including transfer of voice and data to respective control centre.

यह प्रमाणपत्र इस लिंक के 253.67 किमी हिस्से के लिए जारी किया गया है जो पावरग्रिड के डब्ल्यू०आर० II क्षेत्र के अंतर्गत आता है।

The certificate is issued for 253.67 Km part of this link which comes under WR II region of Powergrid.

किसी अन्य उद्देश्य के लिए इस प्रमाण पत्र का उपयोग निषिद्ध है।
Usage of this certificate for any other purpose is prohibited.



महेश मेहेंदले
(कार्यपालक निदेशक)

प्रति:

- मुख्य महाप्रबंधक (परिसंपत्ति प्रबंधन), पश्चिम क्षेत्र-II,
पी०जी०सी०आई०एल०

प्रतिलिपि:

- सदस्य सचिव, पश्चिम क्षेत्रीय विद्युत समिति
- कार्यकारी निदेशक, राष्ट्रीय भार प्रेषण केंद्र

**ANGARU
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Ref: WR-II/VDR/OPGW/13052025

Date: 13.05.2025

To,

As per Distribution List.

NOTIFICATION OF DOCO

Subsequent to certification by WRLDC for completion of successful commissioning of Communication link vide letter ref no. WRLDC/LO/SCADA/TRIAL/704 dated 21.03.2025(for WR-II part) and WRLDC/LO/SCADA/TRIAL/708 dated 01.04.2025(for WR-I part), it is hereby intimated that the following assets under the scheme “**OPGW Installation on Itarsi - Dhule Transmission line**” has been put under commercial operation w.e.f. 00:00 hours of 30th March, 2025 in terms of clause no.5(1) of CERC(Terms and Conditions of Tariff) Regulations, 2024 and clause no. 27(1)(d) of IEGC Regulations, 2023.

Name of the Communication link	DOCO
400 kV Itarsi-Khandwa-Dhule link (Total length 400.67 kms, WR-II part: 253.67 kms & WR-I part: 147.0 kms) along with matching amplifiers in existing SDH(STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater Station at Jalgaon(MH) and SDH(STM-16) MSP-5 at Dhule.	00:00 hrs of 30.03.2025

Transmission charges of the above-mentioned asset is payable with effect from **30th March, 2025**.

The DOCO for WR-II part only declared vide our earlier letter ref. WR-II/VDR/OPGW/26032025 dated 26.03.2025 may be treated as withdrawn.


(Rajesh Kumar)
Executive Director(WR-II)

List of Distribution:

1. Member Secretary, WRPC, F-3, M.I.D.C Area, Andheri (East), Mumbai - 400093.
2. Managing Director, GUVNL, Sardar Patel Vidyut Bhavan, Race Course, Vadodara, Gujarat-390007.
3. Managing Director, GETCO, Sardar Patel Vidyut Bhavan, Race Course, Vadodara, Gujarat-390007.
4. Managing Director, MPPTCL, Shakti Bhavan, MPSEB colony, Rampur, Jabalpur, Madhya Pradesh-482008
5. Managing Director, MPPMCL, E-4, Arera colony, Bhopal, Madhya Pradesh - 462016.
6. Managing Director, MSEDCL, Prakashgad, Bandra (East), Mumbai - 400051.
7. Managing Director, CSPTCL, Sewa Bhavan, Dangania, Raipur, Chhattisgarh-492013.
8. Executive Director, WRLDC, POSOCO, F-3, M.I.D.C Area, Andheri (East), Mumbai - 400093.
9. CEO (CTUIL), Floors No. 5-10, Tower-1, Plot No-16, IRCON International Tower, Institutional Area, Sector-32, Gurugram, Haryana-122001.
10. Chief Engineer, GOA Electricity Department, Panjim, Goa - 403001.
11. Executive Engineer, Electricity Department, Daman and Diu, Moti Daman, Daman.
12. Executive Engineer, Electricity Department, Dadra & Nagar Haveli, Silvassa.
13. Vice President, Dadra & Nagar Haveli and Daman and Diu Power Distribution Corporation Ltd (DNHDDPDCL), 1st and 2nd Floor, Vidyut Bhavan, Next to Secretariat building, 66kV road, Dadra and Nagar Haveli and Diu and Daman, Silvassa - 396230

Copy to :

1. ED (PMD), POWERGRID, CC, Gurgaon.
2. ED (F&A), POWERGRID, CC, Gurgaon.
3. ED (Commercial & RC), POWERGRID, CC, Gurgaon.
4. CGM-I/C (Engg), POWERGRID, CC, Gurgaon.
5. CGM-I/C(AM), POWERGRID, CC, Gurgaon.
6. CGM (AM) WR-II, POWERGRID, Vadodara.
7. CGM (Projects), WR-II, POWERGRID, Vadodara.
8. Sr.GM (Comm), WR-II, POWERGRID, Vadodara.
9. Sr.GM (PESM), WR-II, POWERGRID, Vadodara
10. GM (Finance), WR-II, POWERGRID, Vadodara.
11. Sr.DGM (SC&C/IT), WR-II, POWERGRID, Vadodara.
12. Sr.DGM (RTAMC), WR-II, POWERGRID, Vadodara.
13. STA to ED (WR-II), POWERGRID, Vadodara.

**ANGARU
NARESH
KUMAR**Digitally signed
by ANGARU
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Date: 2025.06.27
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CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost of "400 kV Itarsi-Khandwa-Dhule link (Total length 400.67 kms, WR-II part: 253.67 kms & WR-I part: 147.0 kms) along with matching amplifiers in existing SDH(STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater Station at Jalgaon(MH) and SDH(STM-16) MSP-5 at Dhule" under "OPGW Installation on Itarsi - Dhule Transmission line" in Western Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 30.03.2025 is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Capital Cost	IEDC	IDC	Total
1	Expenditure up to 29.03.2025	739.53	120.72	22.13	882.38
2	Expenditure from 30.03.2025 to 31.03.2025	108.99	0.00	0.00	108.99
3	Estimated Expenditure from 01.04.2025 to 31.03.2026	511.02	0.00	0.00	511.02
	Total	1359.54	120.72	22.13	1502.39

We certify that we have verified the expenditure up to 31-03-2025 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. Western Region as on 31-03-2025. We further certify that the expenditure from 01.04.2024 to 31.03.2025 as referred above has been verified by us from the books of Power Grid Corporation of India Ltd.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.

Chartered Accountants

Firm Registration Number: 100 515W

UDIN: 25121007BMITBW6138

Anagha M. Nanivadekar

Partner

Membership Number: 121007

Pune, June 11, 2025



CERTIFICATE

This is to certify that we have verified the relevant records and other documents of Power Grid Corporation Of India Limited having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 and on the basis of our verification, we certify that Capital Cost of "400 kV Itarsi-Khandwa-Dhule link (Total length 400.67 kms, WR-II part: 253.67 kms & WR-I part: 147.0 kms) along with matching amplifiers in existing SDH(STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater Station at Jalgaon(MH) and SDH(STM-16) MSP-5 at Dhule" under "OPGW Installation on Itarsi - Dhule Transmission line" in Western Region of Power Grid Corporation of India Limited, which is under commercial operation w.e.f. 30.03.2025 is detailed as under:

(Rs. in Lakhs)

S/N	Particulars	Building and Civil Works	OPGW	Communication System excl. OPGW	Total
1	Expenditure up to 29.03.2025	0.00	864.42	17.96	882.38
2	Expenditure from 30.03.2025 to 31.03.2025	0.00	105.03	3.96	108.99
3	Estimated Expenditure from 01.04.2025 to 31.03.2026	0.00	366.93	144.09	511.02
	Total	0.00	1336.38	166.01	1502.39

S/N	Particulars	OPGW	Communication System .
1	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	1196.86	162.68
2	Initial Spares included above	26.18	0.99



G.D. Apte & Co.
Chartered Accountants

We certify that we have verified the expenditure up to 31-03-2025 as referred above on the basis of the information drawn from the audited Statement of Accounts of Power Grid Corporation of India Ltd. Western Region as on 31-03-2025. We further certify that the expenditure from 01.04.2024 to 31.03.2025 as referred above has been verified by us from the books of Power Grid Corporation of India Ltd.

The estimated expenditure is based on Management estimate.

For G.D. Apte & Co.

Chartered Accountants

Firm Registration Number: 100 515W

UDIN: 25121007BMITBW6138

Anagha M. Nanivadekar

Partner

Membership Number: 121007

Pune, June 11, 2025



**ANGARU
NARESH
KUMAR**

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by ANGARU
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Spare Discharge Liability of "OPGW Installation on Itarsi-Dhule Transmission Line".

In Lacs

Particulars	(P&M)	Initial Spare discharged
		As on COD (30.03.2025)
OPGW	1196.86	26.18
Communication equipment	162.68	0.99

ANGARU
NARESH
KUMAR

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KUMAR
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Summary of Tariff

Form No. - 1

Name of the Transmission Licensee:		Power Grid Corporation of India Limited	
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Year Days	365.00	365.00	365.00	366.00	365.00
Tariff Days	2.00	365.00	365.00	366.00	365.00
Depreciation-Form No. 10A	0.34	87.40	109.83	109.83	109.83
Interest on Loan-Form No. 9E	0.28	65.55	71.86	63.20	54.62
Return on Equity-Form No. 8	0.28	68.27	82.20	82.20	82.20
Int. on Working capital-Form No.11	0.02	4.59	5.23	5.09	4.97
Op. and maintenance-Form No.2	0.17	30.15	30.15	30.15	30.15
Total AFC	1.09	255.96	299.27	290.47	281.77

(Petitioner)

Summary of Asset Level Cost

Form No. - 1A

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

(Amount in Rs. Lakh)

A) Summary of Capital Cost, Means of Finance of the Asset

Particular	i) Apportioned Approved Cost		ii) Summary of Actual / Projected Capital Expenditure incurred						
	As Per IA	As per RCE	As on COD / 01.04.2024	2024-25	2025-26	2026-27	2027-28	2028-29	As on 31.03.2029
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	138.54	0.00	27.57	0.00	0.00	0.00	166.11
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	1,329.46	0.00	11.89	0.00	0.00	0.00	1,341.35
Total Capital Cost as per Books	0.00	0.00	1,468.00	0.00	39.46	0.00	0.00	0.00	1,507.46
Less: Liability	0.00	0.00	584.31	0.00	0.00	0.00	0.00	0.00	0.00
Add: discharge of liability	0.00	0.00	0.00	112.75	471.56	0.00	0.00	0.00	0.00
De cap During Year As per Books	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capital incurred	0.00	0.00	883.69	112.75	511.02	0.00	0.00	0.00	1,507.46
Equity	617.70	0.00	265.11	33.82	153.31	0.00	0.00	0.00	452.24
Debt	1,441.30	0.00	618.58	78.93	357.71	0.00	0.00	0.00	1,055.22

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

1. Transmission Lines

(Amount in Rs. Lakh)

Summary:

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2. Sub Station

Summary:

- .
- .
- .
- .
- .

3. Communication System

Name of Communication System	Type of Communication System ULDC/ SCADA/ WAMS/Fibre Optic Communication System/RTU/ PABX/PMU/PLCC/etc	Length of OPGW links	No of RTU	No of PMU	Date of Commercial operation	Capital Cost upto Cutoff	Covered in the present petition Yes/No If No, Petition No.
COMMUNICATION SYSTEM					Mar 30, 2025	1507.46	Y

Summary:

O & M Expenses for the Communication System covered in the instant petition		2024-25	2025-26	2026-27	2027-28	2028-29
CC						
Normative Rate of O&M as per Regulation		2.00	2.00	2.00	2.00	2.00
The original project cost / Asset related to the communication system (Amount in Rs. Lakh)		1,507.46	1,507.46	1,507.46	1,507.46	1,507.46
O&M Claimed		0.17	30.15	30.15	30.15	30.15

Summary of O&M Expenses claim

(Amount in Rs. Lakh)

Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	0.00	0.00	0.00	0.00	0.00
Substation	0.00	0.00	0.00	0.00	0.00
Communication System	0.17	30.15	30.15	30.15	30.15
Total Normative O&M	0.17	30.15	30.15	30.15	30.15
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition)					
*Security Expenses	0.00	0.00	0.00	0.00	0.00
*Actual Capital Spare consumed	0.00	0.00	0.00	0.00	0.00
*Insurance Premium Paid	0.00	0.00	0.00	0.00	0.00
Total O&M	0.17	30.15	30.15	30.15	30.15

(Petitioner)

Normative parameters considered for tariff computations

Form No. - 3

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOC Date	Mar 30, 2025

(Amount in Rs. Lakh)

Particulars	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
Base Rate of Return of Equity (in %)						
Tax Rate (in %)	17.472	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)						
Grossed up Rate for ROE of 15.5% (in %)	18.782	18.782	18.782	18.782	18.782	18.782
Grossed up Rate for ROE of 15.0% (in %)	18.176	18.176	18.176	18.176	18.176	18.176
Target availability - AC System (in %)	98.00	98.00	98.00	98.00	98.00	98.00
Target availability - HVDC System (in %)	96.00	96.00	96.00	96.00	96.00	96.00
Norms for sub-station Bays (Rs Lakh per bay)						
765 kV	51.68	41.34	43.51	45.79	48.20	50.73
400 kV	36.91	29.53	31.08	32.71	34.43	36.23
220 kV	25.84	20.67	21.75	22.90	24.10	25.36
132 kV and below	18.46	15.78	16.61	17.48	18.40	19.35
Norms for Transformers (Rs Lakh per MVA)						
765 kV	0.564	0.262	0.276	0.29	0.305	0.322
400 kV	0.411	0.262	0.276	0.29	0.305	0.322
220 kV	0.282	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.282	0.262	0.276	0.29	0.305	0.322
Norms for Reactor (Rs Lakh per MVAR)						
765 kV	0.00	0.262	0.276	0.29	0.305	0.322
400 kV	0.00	0.262	0.276	0.29	0.305	0.322

220 kV	0.00	0.262	0.276	0.29	0.305	0.322
132 kV and below	0.00	0.262	0.276	0.29	0.305	0.322
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	1.011	0.861	0.906	0.953	1.003	1.056
Single Circuit (Bundled conductor with four sub-conductors)	0.867	0.738	0.776	0.817	0.86	0.905
Single Circuit (Twin & Triple Conductor)	0.578	0.492	0.518	0.545	0.573	0.603
Single Circuit (Single Conductor)	0.289	0.246	0.259	0.272	0.287	0.302
Double Circuit (Bundled conductor with four or more sub-conductors)	1.517	1.291	1.359	1.43	1.506	1.585
Double Circuit (Twin & Triple Conductor)	1.011	0.861	0.906	0.953	1.003	1.056
Double Circuit (Single Conductor)	0.433	0.369	0.388	0.409	0.43	0.453
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.662	2.266	2.385	2.51	2.642	2.781
Multi Circuit (Twin & Triple Conductor)	1.773	1.509	1.588	1.671	1.759	1.851
Norms for HVDC stations (Rs Lakh/MW)						
HVDC Back-to-Back stations (Rs Lakh/MW) (Except Gazuwaka BTB)	0.00	2.07	2.18	2.30	2.42	2.55
Gazuwaka HVDC Back-to-Back station (Rs Lakh/MW)	0.00	1.83	1.92	2.03	2.13	2.24
HVDC bipole scheme (Rs Lakh/MW)	0.00	1.04	1.10	1.16	1.22	1.28

(Petitioner)

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

A) Details of All the Asset Covered under the Scope of the Project

(Amount in Rs. Lakh)

Asset Name	Actual COD of the asset	COD considered for tariff purpose	Effective COD for the project as whole (Refer C)	Weighted Average useful life of the project (Refer D)	Lapsed useful Life of the project as on 01.04.2024 (Refer E)	Balance useful Life of the project as on 01.04.2024 (Refer E)
					0	15

B) Details as on 01.04.2024 for determination of Single Tariff for the Project Commissioned prior to 01.04.2024

C) Computation of Effective COD for determining lapsed useful life of the project as whole

D) Weighted Average useful Life of the Project as whole

**E) Lapsed Weighted average useful life of the project & Balance weighted average Useful life
This refers to the No. of completed years from the effective COD till the last day of the previous tariff period (i.e. 31.03.2024)**

1) Effective COD	
2) Last date of the previous tariff control period	Mar 31, 2024
3) No. of Completed years lapsed as on 01.04.2024 (2) - (1)	0

4) Remaining useful life (in year) (WAL-lapsed year)

15

(Petitioner)

Statement of Capital cost

Form No. - 4A

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

A) Capital Cost

(Amount in Rs. Lakh)

Particular	Accrual Basis	Un-discharged Liabilities	Cash Basis
As on relevant date :2024-25			
a) Opening Gross Block Amount as per books	1,468.00	584.31	883.69
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	22.13	3.76	18.37
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	120.72	0.00	120.72
a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00
a) Closing Gross Block Amount as per books	1,468.00	471.56	996.44
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in C(a) above	22.13	0.00	22.13
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost)included in C(a) above	120.72	0.00	120.72
As on relevant date :2025-26			
a) Opening Gross Block Amount as per books	1,468.00	471.56	996.44
b) Amount of (i) IDC (ii) FERV & (iv) Hedging cost included in A(a) above	22.13	0.00	22.13

c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	120.72	0.00	120.72
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a) Addition in Gross Block Amount during the period	39.46	0.00	39.46
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books:	1,507.46	0.00	1,507.46
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	22.13	0.00	22.13
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	120.72	0.00	120.72

As on relevant date :2026-27

a) Opening Gross Block Amount as per books	1,507.46	0.00	1,507.46
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	22.13	0.00	22.13
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	120.72	0.00	120.72

a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	1,507.46	0.00	1,507.46
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	22.13	0.00	22.13
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	120.72	0.00	120.72

As on relevant date :2027-28

a) Opening Gross Block Amount as per books	1,507.46	0.00	1,507.46
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	22.13	0.00	22.13
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	120.72	0.00	120.72

a) Addition in Gross Block Amount during the period		0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above		0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above		0.00	0.00	0.00
d) De-cap in gross block amount during the year		0.00	0.00	0.00

a) Closing Gross Block Amount as per books	1,507.46	0.00	1,507.46
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	22.13	0.00	22.13
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	120.72	0.00	120.72

As on relevant date :2028-29

a) Opening Gross Block Amount as per books	1,507.46	0.00	1,507.46
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in A(a) above	22.13	0.00	22.13
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) above	120.72	0.00	120.72

a) Addition in Gross Block Amount during the period	0.00	0.00	0.00
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in B(a) above	0.00	0.00	0.00
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) above	0.00	0.00	0.00
d) De-cap in gross block amount during the year	0.00	0.00	0.00

a) Closing Gross Block Amount as per books	1,507.46	0.00	1,507.46
b) Amount of (i) IDC (ii) FC (iii) FERV & (iv) Hedging cost included in C(a) above	22.13	0.00	22.13
c) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) above	120.72	0.00	120.72

B) Flow of liability for the Asset

(Amount in Rs. Lakh)

Particular	2024-2025	2025-2026					
Opening balance of liability	584.31	471.56	0.00	0.00	0.00	0.00	0.00
Add: Liability from ACE	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Discharge of liability by payment and claimed as ACE	112.75	471.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reversal/cancelation (to be entered)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Balance of Admitted liability	471.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Petitioner)

Abstract of Capital Cost Estimates and Schedule of Commissioning for New Project/Element

Name of the Transmission Asset: OPGW Link in 400kV Itarsi-Khandwa-Dhule

Board of Director/ Agency approving the Capital cost estimates:	CMD, POWERGRID	
Date of approval of the Capital cost estimates:	09-04-2024	
	Present Day Cost	Completed Cost
Price level of approved estimates	As of End of Q3 Qtr. of the year 2023-24	As on Scheduled COD of the transmission system/transmission element/ Communication System
Foreign Exchange rate considered for the Capital cost estimates	-	-
Capital Cost excluding IDC, IEDC& FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)	-	-
Domestic Component (Rs. Lakh)	1713.00	1359.54
Capital cost excluding IDC, FC, FERV & Hedging Cost (Rs. Lakh)	1713.00	1359.54
IDC, IEDC, FC, FERV & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)	-	-
Domestic Component (Rs Lakh)	346.00	142.85
Total IDC, FC, FERV & Hedging Cost (Rs Lakh)	346.00	142.85
Rate of taxes & duties considered	18% GST	18% GST
Capital cost Including IDC, IEDC, FC, FERV & Hedging Cost		
Foreign Component, if any (In Million US \$ or the relevant Currency)	-	-
Domestic Component (Rs Lakh)	2059.00	1502.39
Capital cost Including IDC, IEDC& FC (Rs Lakh)	2059.00	1502.39
Schedule of Commissioning		
COD of transmission system 1 /transmission element 1/Communication System 1		
COD of transmission system 1/ transmission element 2/ Communication System 2		

COD of last transmission system / transmission element / Communication System	25-12-2025	30-03-2025
Note: 1. Copy of approval letter by the Board duly certified by the Company secretary should be enclosed 2. Details of Capital Cost are to be furnished as per FORM-5 or 5A as applicable 3. Details of IDC & Financing Charges are to be furnished as per FORM-12(B).		

(Petitioner)

Element wise Break-up of Project/Asset/Element Cost for Transmission System or Communication System

Part-III

Name of the Transmission Asset: ORCW Link in 40kV Itarsi-Khandwa-Dhule											
S. No. (1)	Particulars (2)	Cost in Lakh									
		As per Original Estimates (3)			As per Revised Cost Estimates (If any) (4)			Actual Capital Expenditure (Gross Block) as on COD as per Books of Accounts (5)			Capital Work in Progress as per Books of Accounts as on COD (12)
		Qty	Rate	Estimated Cost	Quantity	Rate	Estimated Cost	Quantity	Rate	Gross Block of asset	
A	TRANSMISSION LINE										
1	Preliminary works										
1.3	Total Preliminary works (1.1+1.2)			0							
2	Transmission Lines material										
2.9	Total Transmission Lines material (2.1+2.2+2.3+2.4+2.5+2.6+2.7+2.8)			0							
3	Taxes and Duties										
3.3	Total Taxes & Duties (3.1+3.2)			0							
3.4	Total Transmission Lines (1.3+2.9+3.3)			0							
B	SUBSTATIONS										
4	Preliminary works & land										
4.4	Total Preliminary works & land (4.1+4.2+4.3)			0.00							
5	Civil Works										
5.1	Control Room & Office Building including HVAC										
5.2	Township & Colony										
5.3	Roads and Drainage										
5.4	Foundation for structures										
5.5	Misc. civil works										
5.6	Total Civil Works (5.1+5.2+5.3+5.4+5.5)			0.00							
6	Substation Equipment										
6.1	Switchgear (CT, PT, Circuit Breaker, Isolator etc)	Lot		0.00							
6.2	Transformers	LS		0.00							
6.3	Compensating Equipment (Reactor, SVCs etc)										
6.4	Control, Relay & Protection Panel	LS	0.00	0.00							
6.5	PLCC										
6.6	HVDC package										
6.7	Bus Bars/ conductors / Insulators	LS	0.00	0.00							
6.8	Outdoor lighting	LS	0.00	0.00							
6.9	Emergency D.C. Set										
6.1	Grounding System										
6.11	Structure for switchyard	LS	0.00	0.00							
	Substation Auxiliaries	LS	0.00	0.00							
6.12	Total Substation Equipment (Sum of 6.1 to 6.11)			0.00						0.00	
7	Spare										

Note:

1. In case of cost variation, a detailed note giving reasons of such variation should be submitted clearly indicating whether such cost over- run was beyond the control of the transmission licensee.
2. Separate details of free hold/lease hold land should be submitted.
3. Deduction form Gross Block includes the Grant Received as on COD, Gross block as on COD which pertains to other business, Adjustment of excess initial spare etc.

Petitioner

Break-up of Construction / Supply / Service Packages

400 kV Itarsi-Khandwa-Dhule link (Total length 400.67 kms, WR-II part: 253.67 kms & WR-I part: 147.0 kms) along with matching amplifiers in existing SDH(STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater Station at Jalgaon(MH) and SDH(STM-16) MSP-5 at Dhule.

Sl. No.	Name /No. of Construction / supply / service package	Scope of works (in line with head of cost break-ups as applicable)	Whether awarded through ICB / DCB / Departmentally / Deposit work, etc.	Date of Award	Date of start of work	Actual Date of completion of work	Value of Award in (Amount Rs in Lakh)	Firm or With escalation in price	Actual Expenditure till the completion or up to COD whichever is earlier (Amount Rs in Lakh)	Taxes & Duties and IEDC	IDC, FC, FERV & Hedging cost	Sub-total
1	Supply & Installation completed through APAR	Supply, F & I and Erection package	Domestic	24.01.2024	01.02.2024	29.03.2025	Supply - INR 87342094.50	Prices Firm however may be correlated with cost	702.124	158.13	22.13	882.38
	CC-CS/1017-WR2/OPGW-4235/3/G7/NOA-IWR2-400001 dtd.16.11.2021						F & I - INR 2156513.87	Prices Firm however may be correlated with WR-I cost				
							Erection - INR 21266022					
									0.000	0.00	0.00	0.00
	Civil, Land & Others											
	TOTAL								702.12	158.13	22.13	882.38

(Petitioner)

DETAILS OF ELEMENTWISE COST OF THE PROJECT

Name of the Communication Project
SCOD 25-12-2025

OPGW installation on 400 kV Itarsi-Khandwa-Dhule link
DOCO:30.03.2025

Sl. No.	Name of asset	COD	Delay in No. of Days	Apportioned approved Cost (Lakh)	Revised cost estimates, if applicable (Lakh)	Completed Cost (Lakh)	Covered in the present petition	
							Yes / No	If No, Petition No.
1	400 kV Itarsi-Khandwa-Dhule link (Total length 400.67 kms, WR-II part: 253.67 kms & WR-I part: 147.0 kms) along with matching amplifiers in existing SDH(STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater Station at Jalgaon(MH) and SDH(STM-16) MSP-5 at Dhule.	30-03-2025	0.00	2059.00	0.00	1502.39	Yes	
GRAND TOTAL							1502.39	

(Petitioner)

Financial Package upto COD

Form No. - 6

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

(Amount in Rs. Lakh)

Particulars	Financial Package as Approved		Financial Package as on COD 01/04/2024		As Admitted on COD 01/04/2024	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans		0.00		0.00		0.00
Loan-Domestic		0.00		0.00		0.00
Loan-Foreign		0.00		0.00		0.00
Total Loans	INR	1,055.222	INR	618.58		0.00
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	452.238	INR	265.11		0.00
Total Equity	INR	452.238	INR	265.11		0.00
Debt Equity Ratio					70:30	
Total Cost	INR	1,507.46	INR	883.69		0.00

Particulars	Debt	Equity	Total
Addcap for 2024 - 2025			112.75
Addcap for 2025 - 2026			511.02
Addcap for 2026 - 2027			0.00
Addcap for 2027 - 2028			0.00

Addcap for 2028 - 2029			0.00	
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Particulars	Actual	Normative	
Addcap for 2024 - 2025			
Equity		33.82	
Debt		78.93	
Total		112.75	
Addcap for 2025 - 2026			
Equity		153.31	
Debt		357.71	
Total		511.02	
Addcap for 2026 - 2027			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2027 - 2028			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2028 - 2029			
Equity		0.00	
Debt		0.00	
Total		0.00	
Total Capital cost with Addcap		1,507.46	

(Petitioner)

Statement of Additional Capitalisation after COD

Form No. - 7

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

(Amount in Rs. Lakh)

Particulars	Addition into Gross Block as per books of Account during the year (2)	De-Cap into Gross Block as per books of Account during the year	Less: Deductions dr. the year towards				Add: Discharge of earlier admitted liability	ACE on cash basis for tariff purpose	Admitted Cost in final tariff (Rs Lakh)
			Grants Received (if any) (3)	Asset pertaining to other businesses (if any) (4)	Other Deduction (if any) (5)	Less: Undischarged liability included in (2-4-5)			
ACE for the year :2024-25 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	4.04	4.04	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	108.71	108.71	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	112.75	112.75	0.00
ACE for the year :2025-26 (Actual/Projected)									

Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	27.57	0.00	0.00	0.00	0.00	0.00	116.52	144.09	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSP/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	11.89	0.00	0.00	0.00	0.00	0.00	355.04	366.93	0.00
Total	39.46	0.00	0.00	0.00	0.00	0.00	471.56	511.02	0.00
ACE for the year :2026-27 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDSP/ SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2027-28 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2028-29 (Actual/Projected)									
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm. Sys. excluding Fiber Optic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Leasehold)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Petitioner)

Financing of Additional Capitalisation

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

(Amount in Rs. Lakh)

Financial Year (Starting of COD)	Actual/Projected					Admitted				
	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28	2028-29
Amount capitalized in Work/ Equipment										
Financing Details										
Total Loan	78.93	357.71	0.00	0.00	0.00					
Equity	33.82	153.31	0.00	0.00	0.00					
Total	112.75	511.02	0.00	0.00	0.00					

(Petitioner)

Calculation of ROE

Form No. - 8

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	OPGW Installation on Itarsi-Dhule Transmission line			
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule			
Region	Western Region	DOCO Date	Mar 30, 2025	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the year	365.00	365.00	365.00	366.00	365.00
No. of days for which tariff claimed	2.00	365.00	365.00	366.00	365.00
Opening Normative Equity	265.11	298.93	452.24	452.24	452.24
Less: Adjustment in Equity*	0.00	0.00	0.00	0.00	0.00
Adjustment during the year	0.00	0.00	0.00	0.00	0.00
Net opening equity (Normal)	265.11	298.93	452.24	452.24	452.24
Add: Increase in Equity due to addition during the year / period	0.00	11.84	0.00	0.00	0.00
Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Increase due to discharge during the year / period	33.82	141.47	0.00	0.00	0.00
Closing Normative Equity	298.93	452.24	452.24	452.24	452.24
Average Normative Equity	282.02	375.59	452.24	452.24	452.24
Rate of return on Equity (%)	18.176	18.176	18.176	18.176	18.176
Reduced rate of 1% decided by commission under Regulation 30(2) (if any)	0.00	0.00	0.00	0.00	0.00
Effective rate of ROE	15.00	15.00	15.00	15.00	15.00
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.176	18.176	18.176	18.176	18.176
Return on Equity	51.26	68.27	82.20	82.20	82.20
Pro rata return on Equity	0.28	68.27	82.20	82.20	82.20

(Petitioner)

Calculation of WAR of interest on actual loan

Form No. - 9C

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
Canara-01 -DOCO FUNDING					
Gross Loan- Opening	159.00	159.00	159.00	159.00	159.00
Cumulative repayments of Loans upto previous year	8.83	8.83	26.50	44.17	61.83
Net loan-Opening	150.17	150.17	132.50	114.83	97.17
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	17.67	17.67	17.67	17.67
Net Loan-Closing	150.17	132.50	114.83	97.16	79.50
Average Net Loan	150.17	141.34	123.67	106.00	88.34
Rate of Interest on Loan on Annual Basis	7.90	7.90	7.90	7.90	7.90
Interest on loan	11.8634	11.1659	9.7699	8.374	6.9789

Canara-01 -DOCO FUNDING					
Gross Loan- Opening	100.00	100.00	100.00	100.00	100.00
Cumulative repayments of Loans upto previous year	5.56	5.56	16.67	27.78	38.89
Net loan-Opening	94.44	94.44	83.33	72.22	61.11
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	11.11	11.11	11.11	11.11
Net Loan-Closing	94.44	83.33	72.22	61.11	50.00

Average Net Loan	94.44	88.89	77.78	66.67	55.56
Rate of Interest on Loan on Annual Basis	7.90	7.90	7.90	7.90	7.90
Interest on loan	7.4608	7.0223	6.1446	5.2669	4.3892

Canara-02 -ADDCAP 24-25(ACCIDC)

Gross Loan- Opening	0.00	1.15	1.15	1.15	1.15
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.08
Net loan-Opening	0.00	1.15	1.15	1.15	1.07
Add: Drawl(s) during the year	1.15	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.08	0.16
Net Loan-Closing	1.15	1.15	1.15	1.07	0.91
Average Net Loan	0.58	1.15	1.15	1.11	0.99
Rate of Interest on Loan on Annual Basis	7.90	7.90	7.90	7.90	7.90
Interest on loan	0.0458	0.0909	0.0909	0.0877	0.0782

Canara-02 -DOCO FUNDING

Gross Loan- Opening	185.46	185.46	185.46	185.46	185.46
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	13.25
Net loan-Opening	185.46	185.46	185.46	185.46	172.21
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	13.25	26.49
Net Loan-Closing	185.46	185.46	185.46	172.21	145.72
Average Net Loan	185.46	185.46	185.46	178.84	158.97
Rate of Interest on Loan on Annual Basis	7.90	7.90	7.90	7.90	7.90
Interest on loan	14.6513	14.6513	14.6513	14.1284	12.5586

Canara-02 -DOCO FUNDING					
Gross Loan- Opening	40.00	40.00	40.00	40.00	40.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	2.86
Net loan-Opening	40.00	40.00	40.00	40.00	37.14
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	2.86	5.71
Net Loan-Closing	40.00	40.00	40.00	37.14	31.43
Average Net Loan	40.00	40.00	40.00	38.57	34.29
Rate of Interest on Loan on Annual Basis	7.90	7.90	7.90	7.90	7.90
Interest on loan	3.16	3.16	3.16	3.047	2.7089

Canara-02 -DOCO FUNDING					
Gross Loan- Opening	119.00	119.00	119.00	119.00	119.00
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	8.50
Net loan-Opening	119.00	119.00	119.00	119.00	110.50
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	8.50	17.00
Net Loan-Closing	119.00	119.00	119.00	110.50	93.50
Average Net Loan	119.00	119.00	119.00	114.75	102.00
Rate of Interest on Loan on Annual Basis	7.90	7.90	7.90	7.90	7.90
Interest on loan	9.401	9.401	9.401	9.0653	8.058

HDFC-03 -ADDCAP 24-25					
Gross Loan- Opening	0.00	76.29	76.29	76.29	76.29
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	76.29	76.29	76.29	76.29

Add: Drawl(s) during the year	76.29	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	76.29
Net Loan-Closing	76.29	76.29	76.29	76.29	0.00
Average Net Loan	38.15	76.29	76.29	76.29	38.15
Rate of Interest on Loan on Annual Basis	7.72	7.72	7.72	7.72	7.72
Interest on loan	2.9452	5.8896	5.8896	5.8896	2.9452

HDFC-03 -ADDCAP 24-25(ACCIDC)

Gross Loan- Opening	0.00	1.47	1.47	1.47	1.47
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	0.00	1.47	1.47	1.47	1.47
Add: Drawl(s) during the year	1.47	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	1.47
Net Loan-Closing	1.47	1.47	1.47	1.47	0.00
Average Net Loan	0.74	1.47	1.47	1.47	0.74
Rate of Interest on Loan on Annual Basis	7.72	7.72	7.72	7.72	7.72
Interest on loan	0.0571	0.1135	0.1135	0.1135	0.0571

HDFC-03 -DOCO FUNDING

Gross Loan- Opening	11.58	11.58	11.58	11.58	11.58
Cumulative repayments of Loans upto previous year	0.00	0.00	0.00	0.00	0.00
Net loan-Opening	11.58	11.58	11.58	11.58	11.58
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	0.00	0.00	0.00	11.58
Net Loan-Closing	11.58	11.58	11.58	11.58	0.00
Average Net Loan	11.58	11.58	11.58	11.58	5.79

Rate of Interest on Loan on Annual Basis	7.72	7.72	7.72	7.72	7.72
Interest on loan	0.894	0.894	0.894	0.894	0.447

Summary

Gross Loan- Opening	615.04	693.95	693.95	693.95	693.95
Cumulative repayments of Loans upto previous year	14.39	14.39	43.17	71.95	125.41
Net loan-Opening	600.65	679.56	650.78	622.00	568.54
Add: Drawl(s) during the year	78.91	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	0.00	28.78	28.78	53.47	167.48
Net Loan-Closing	679.56	650.78	622.00	568.53	401.06
Average Net Loan	640.12	665.18	636.40	595.28	484.83
Rate of Interest on Loan on Annual Basis	7.8858	7.8758	7.8747	7.873	7.8834
Interest on loan	50.4786	52.3885	50.1148	46.8664	38.2211

(Petitioner)

Loans in Foreign Currency

Form No. - 9D

Name of the Transmission Licensee		Power Grid Corporation of India Limited	
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

(Petitioner)

Calculation of interest on Normative loan

Form No. - 9E

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	OPGW Installation on Itarsi-Dhule Transmission line			
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule			
Region	Western Region	DOCO Date	Mar 30, 2025	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No. of Days in the Year	365.00	365.00	365.00	366.00	365.00
No. of days for which Tariff claimed	2.00	365.00	365.00	366.00	365.00
Gross normative loan-Opening	618.58	697.51	1,055.22	1,055.22	1,055.22
Cumulative repayments of Normative loan upto previous year	0.00	0.34	87.74	197.57	307.40
Net normative loan-Opening	618.58	697.17	967.48	857.65	747.82
Addition in normative loan towards the ACE	78.93	357.71	0.00	0.00	0.00
Adjustment of normative gross loan pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Normative repayments of normative loan during the year	0.34	87.40	109.83	109.83	109.83
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	697.17	967.48	857.65	747.82	637.99
Average normative loan	657.88	832.33	912.57	802.74	692.91
Weighted Average Rate of interest on actual loan	7.8858	7.8758	7.8747	7.873	7.8834
Interest on normative loan	51.88	65.55	71.86	63.20	54.62
Pro rata interest on normative loan	0.28	65.55	71.86	63.20	54.62

(Petitioner)

Calculation of Depreciation Rate on Original Project Cost

Form No. - 10

Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	OPGW Installation on Itarsi-Dhule Transmission line		
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule		
Region	Western Region	DOCO Date	Mar 30, 2025

(Amount in Rs. Lakh)

Name of Assets	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Depreciation Rate as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year upto 31.03.2029
2024-25						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	0.00	0.00	0.00	0.00	4.22	0.00
Comm. Sys. excluding Fiber Optic	17.98	4.04	22.02	20.00	15.00	0.02
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	865.71	108.71	974.42	920.07	6.33	0.32
TOTAL	883.69	112.75	996.44	940.07	0.00	0.34
Weighted Average Rate of Depreciation(%)					0.036168	

2025-26						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00

Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	0.00	0.00	0.00	0.00	4.22	0.00
Comm. Sys. excluding Fiber Optic	22.02	144.09	166.11	94.07	15.00	14.11
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	974.42	366.93	1,341.35	1,157.89	6.33	73.29
TOTAL	996.44	511.02	1,507.46	1,251.96	0.00	87.40
Weighted Average Rate of Depreciation(%)					6.981054	

2026-27						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	0.00	0.00	0.00	0.00	4.22	0.00
Comm. Sys. excluding Fiber Optic	166.11	0.00	166.11	166.11	15.00	24.92
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	1,341.35	0.00	1,341.35	1,341.35	6.33	84.91
TOTAL	1,507.46	0.00	1,507.46	1,507.46	0.00	109.83
Weighted Average Rate of Depreciation(%)					7.285765	

2027-28						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	0.00	0.00	0.00	0.00	4.22	0.00
Comm. Sys. excluding Fiber Optic	166.11	0.00	166.11	166.11	15.00	24.92
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	1,341.35	0.00	1,341.35	1,341.35	6.33	84.91
TOTAL	1,507.46	0.00	1,507.46	1,507.46	0.00	109.83
Weighted Average Rate of Depreciation(%)					7.285765	

2028-29						
Land(Freehold)	0.00	0.00	0.00	0.00	0.00	0.00
Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	0.00	0.00	0.00	0.00	4.22	0.00
Sub Station	0.00	0.00	0.00	0.00	4.22	0.00
Comm. Sys. excluding Fiber Optic	166.11	0.00	166.11	166.11	15.00	24.92
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDMS/SCADA,etc	0.00	0.00	0.00	0.00	15.00	0.00
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	1,341.35	0.00	1,341.35	1,341.35	6.33	84.91
TOTAL	1,507.46	0.00	1,507.46	1,507.46	0.00	109.83

Weighted Average Rate of Depreciation(%)					7.285765	
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(Petitioner)

Statement of Depreciation

Form No. - 10A

Name of the Transmission Licensee	Power Grid Corporation of India Limited			
Project	OPGW Installation on Itarsi-Dhule Transmission line			
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule			
Region	Western Region	DOCO Date	Mar 30, 2025	

(Amount in Rs. Lakh)

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	2.00	365.00	365.00	366.00	365.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/Project	15.00	15.00	15.00	15.00	15.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	0.00	0.00	1.00	2.00	3.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	15.00	15.00	14.00	13.00	12.00
Capital Base					
1.4 Opening capital cost	883.69	996.44	1,507.46	1,507.46	1,507.46
1.5 Additional Capital Expenditure dr. the year	112.75	511.02	0.00	0.00	0.00
1.6 De-Capitalisation During the year	0.00	0.00	0.00	0.00	0.00
1.7 Closing capital cost	996.44	1,507.46	1,507.46	1,507.46	1,507.46
1.8 Average capital cost	940.07	1,251.96	1,507.46	1,507.46	1,507.46
1.9 Freehold land included in 1.8	0.00	0.00	0.00	0.00	0.00
1.10 Asset having NIL salvage value included in 1.8	0.00	0.00	0.00	0.00	0.00
1.11 Asset having 10% salvage value included in 1.8	940.07	1,251.96	1,507.46	1,507.46	1,507.46
1.12 Depreciable Value(1.10+90% of 1.11)	846.06	1,126.76	1,356.72	1,356.72	1,356.72
Depreciation for the period and Cum. Depreciation					
1.13 Weighted Average Rate of depreciation	0.036168	6.981054	7.285765	7.285765	7.285765

1.14 Depreciation(for the period)	0.34	87.40	109.83	109.83	109.83
1.15 Depreciation(Annualised)	0.34	87.40	109.83	109.83	109.83
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	0.00	0.34	87.74	197.57	307.40
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	0.00	0.00	0.00	0.00	0.00
1.18 Cumulative depreciation at the end of the period	0.34	87.74	197.57	307.40	417.23

(Petitioner)

Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee	Power Grid Corporation of India Limited				
Project	OPGW Installation on Itarsi-Dhule Transmission line				
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule				
Region	Western Region	DOCO Date	Mar 30, 2025		

(Amount in Rs. Lakh)					
Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
No of Days in the year	365.00	365.00	365.00	366.00	365.00
No of days for which tariff claimed	2.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	2.51	2.51	2.51	2.51	2.51
Maintenance spares 15% of O&M Expenses	4.52	4.52	4.52	4.52	4.52
Receivables equivalent to 45 days of AFC	24.43	31.56	36.90	35.71	34.74
Total Working capital	31.46	38.59	43.93	42.74	41.77
Bank Rate as on 01.04.2024 or as on 01st April of the COD year, whichever is later.	11.90	11.90	11.90	11.90	11.90
Interest on working capital	3.74	4.59	5.23	5.09	4.97
Pro rata interest on working capital	0.02	4.59	5.23	5.09	4.97

(Petitioner)

Incidental Expenditure during Construction

Name of the Petitioner: M/s Power Grid Corporation of India Ltd.
Name of the Region: Western Region - I
Name of the Project: OPGW Link in 400kV Itarsi-Khandwa-Dhule
Name of the Transmission Element: OPGW Link in 400kV Itarsi-Khandwa-Dhule

₹ in Lakhs

Sl. No.	Parameters	F/Y 2022-23	F/Y 2023-24	F/Y 2024-25 (till DOCO)	Total
A	Expenses:				
1	Communication Expenses				-
2	Corp. Centre/RHQ Expd. Transfer to WIP			10.01	10.01
3	Depreciation				-
4	Employees' Remuneration & Benefits			110.71	110.71
5	Other Office and Administrative Expenses				-
	Total Expenses (A)	-	-	120.72	120.72
B	Less :-				
1	Income recovered from Contractors				-
2	Income from Others				-
	Total Less (B)	-	-	-	-
					-
C	Memorandum of Accounts				-
	Total(A-B+C)	-	-	120.72	120.72

Drawdown schedule Calculation of IDC & Financing Charges

Form No. - 12B

Name of the Transmission Licensee	Power Grid Corporation of India Limited
Project	OPGW Installation on Itarsi-Dhule Transmission line
Element Description	400 kV Itarsi-Khandwa-Dhule Link along with matching amplifiers in existing SDH (STM-16) MSP-5 directions communication equipment at Itarsi and Khandwa, Repeater station at Jalgaon (MH) and SDH (STM-16) MSP-5 at Dhule
Region	Western Region
	DOC Date
	Mar 30, 2025

Particulars	Quarter 1		Quarter 2		Quarter 3		Quarter 4		Quarter 5		Quarter 6	
	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee
Loans												
Foreign Loans												
Total of Foreign Loans												
Indian Loans												
Canara-01 -DOCO FUNDING												
Draw Down Account												159.00
IDC												
Financing Charges												
Canara-01 -DOCO FUNDING												

(Amount in Rs. Lakh)

[illegible]

Name of the petitioner		Power Grid Corporation of India Ltd										Details of Initial Spares			
Claimed / Admitted COD		01-04-2025										Cut-off Date of the Asset: 31/3/2029			
A) Determination of Excess initials spare and its adjustment from Capital cost															
Particulars	Plant and machinery cost as on cut-off Date ¹	Initial Spare Capitalised as per Books of Account up to Cut-off Date					Ceiling limit as mentioned in Regulations 23	Entitled Initial Spare as per Regulations	Excess of capitalised Initial Spare to be reduced from Capital cost.	Adjustment of Excess Initial Spare from Capital cost of Plant and Machinery					
		As on COD	2024-25	2025-26	2026-27	Total as on Cut off Date ³				COD	2024-25	2025-26	2026-27		
1	2	3	4	5	6	7	8	9	10=7-9(Note 2)	11	12	13	14		
Transmission Line	0.00	0	-	-	-	0	1.00%	0	0	0	-	-	-		
Substation Green field	-	-	-	-	-	0	4.00%	-	-	-	-	-	-		
Substation Brown Field	0.00	0	0	0	-	0	6.00%	0	0	0	-	-	-		
Series Compensation devices and HVDC Station	-	-	-	-	-	-	4.00%	-	-	-	-	-	-		
GIS/S- Green field	-	-	-	-	-	-	5.00%	-	-	-	-	-	-		
GIS/S-Brown field	0.00	0	-	-	-	0	7.00%	0	0	-	-	-	-		
Communication System	1332.37	27.17	-	-	-	27.17	3.50%	48.32	-	-	-	-	-		
Static Synchronous Compensator	-	-	-	-	-	-	6.00%	-	-	-	-	-	-		
initial spare as per Books of Account															
Un-Discharge liabilities included above															
Total Capitalized initial spare															
Note: 1) Plant and machinery cost as on cut-off Date for the purpose of initial spare (As computed in Col.L of the below table)															
2) The column 10 has to be shown as nil in case the claimed initial spare is with in the ceiling limit.															
3) Total cost should be excluding IDC and IEDC.															

Note: 1) Plant and machinery cost as on cut-off Date for the purpose of initial spare (As computed in Col.L of the below table)

2) The column 10 has to be shown as nil in case the claimed initial spare is with in the ceiling limit.

3) Total cost should be excluding IDC and IEDC.

B) Determination of Plant & Machinery Cost for ceiling of initial spare.

Particulars	Gross Block of Asset as on COD	Less: Amount included in Col. B towards					Plant and machinery cost as on COD for Initial Spare purpose	Plant & Machinery Capitalised as ACE up to cut off date					Plant and machinery cost as on cut-off Date for the purpose of initial spare
		Land Cost	Cost of Civil Works	IDC	IEDC	Initial Spare		2024-25	2025-26	2026-27	2027-28	2028-29	
a	b	c	d	e	f	g	h=b-c-d-e-f-g	i	j	k			l=h+i+j+k
Transmission Line													
Substation Green field													
Substation Brown Field													
Series Compensation devices and HVDC Station													
Gas Insulated Substation-Green field													
Gas Insulated Substation-Brown field	0		0	0	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Communication System	1462.93		0	22.13	120.72	27.17	1292.91	0.00	39.46	0.00	0.00	0.00	1332.37
Static Synchronous Compensator													
Note: The Cost details for the year in which Cut-off date falls has to be provide only up to the cut-off date.													

(Petitioner)

Other Income as on COD

Name of the Petitioner:

M/s Power Grid Corporation of India Ltd.

Name of the Region:

Western Region - I

Name of the Project:

OPGW Link in 400kV Itarsi-Khandwa-Dhule

Name of the Transmission Element

OPGW Link in 400kV Itarsi-Khandwa-Dhule

₹ in Lakhs

Sl. No.	Parameters	F/Y 2022-23	F/Y 2023-24	F/Y 2024-25 (till DOCO)	Total
1	Income recovered from Contractors	-			-
2	Income from Others	-			-
		-			-
	Total	-	-	-	-

ANGARU
NARESH
KUMAR

Digitally signed
by ANGARU
NARESH KUMAR
Date: 2025.06.27
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15.05.2025 as per draft MC dtd 15.05.2025 from Ramavath WR1)

Project: P807		OPGW Installation on Itarsi - Dhule Transmission line			
Element:		400 KV Itarsi Khandwa Dhule OPGW 24F Link WR I portion 147KM			
DOCO: Actual		30-Mar-25			
Loans		Amount	Interest Rate	Drawl Date	2024-25
Canara-01 (2024-2025) (Q2) (17.09.2024)		100.00	Floating	17-Sep-24	4.21
Canara-02 (2024-2025) (Q3) (07.10.2024)		40.00	Floating	07-Oct-24	1.54
Canara-02 (2024-2025) (Q4) (02.01.2025)		119.00	Floating	02-Jan-25	2.27
HDFC-03 (2024-2025) (Q4) (06.03.2025)		11.58	Floating	06-Mar-25	0.06
Canara-02 (2025-2026) (Q1) (15.04.2025) (IR Replacement)		0.00	Floating	15-Apr-25	0.00
Total		270.58			8.07
Total Cost upto 30.03.2025 (DOCO)		386.54	Cum IDC		
DOCO Cost		386.54	270.58 Cert IDC		
			0.00		
IR AS ON DOCO		115.97			
IR % AS ON DOCO		30.00%			
Actual Exp from DOCO to 31.03.2025		0.00			
Add Cap Loan		0.00			
Actual Exp from DOCO to 31.03.2025 (Accrual IDC)		1.65			
Canara-02 (2025-2026) (Q1) (15.04.2025) (IR Replacement) (Add Cap Loan) (Accrual IDC)		1.15			
Total Cost upto 31.03.2025		388.19			
Total Loan upto 31.03.2025		271.73			
Loan Percentage as on 31.03.2025		70.00%			
Estimated Expenditure from 01.04.2025 to 31.03.2026		246.26			
Total Projected Cost		634.45			

12.04.2025 as per mail dtd 11.04.2025-Urvish-WR2/07.06.2025 as per mail dtd 04.06.2025-Urvish-WR2

Project: P807

OPGW Installation on Itarsi - Dhule Transmission line

400 KV Itarsi - Dhule link (WR-II portion 253.67 Kms) along with matching amplifiers in existing STM-16 MSP-5 directions communication equipment at Itarsi and Khandwa

DOCO: Actual	30-Mar-25	Drawl Date	Repayment	Net Loan	Interest Rate	Interest Start Date	Interest End Date	2024-25
Loans	Gross Loan	20-Jun-24	0.00	159.00	8.150%	20-Jun-24	30-Jun-24	0.39
Canara-01 (2024-2025) (Q1) (20.06.2024)	• 159.00		0.00	159.00	8.15%	01-Jul-24	31-Jul-24	1.10
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	159.00	8.15%	01-Aug-24	31-Aug-24	1.10
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	159.00	8.15%	01-Sep-24	30-Sep-24	1.07
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	159.00	8.15%	01-Oct-24	31-Oct-24	1.10
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	159.00	8.15%	01-Nov-24	30-Nov-24	1.07
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	159.00	8.15%	01-Dec-24	31-Dec-24	1.10
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	159.00	8.15%	01-Jan-25	13-Jan-25	0.46
Canara-01 (2024-2025) (Q1) (20.06.2024)			8.83	150.17	8.15%	14-Jan-25	31-Jan-25	0.60
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	150.17	8.15%	01-Feb-25	11-Feb-25	0.37
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	150.17	7.90%	12-Feb-25	28-Feb-25	0.55
Canara-01 (2024-2025) (Q1) (20.06.2024)			0.00	150.17	7.90%	01-Mar-25	29-Mar-25	0.94
Canara-02 (2024-2025) (Q3) (17.12.2024)	• 185.46	17-Dec-24	0.00	185.46	8.15%	17-Dec-24	31-Dec-24	0.62
Canara-02 (2024-2025) (Q3) (17.12.2024)			0.00	185.46	8.15%	01-Jan-25	31-Jan-25	1.28
Canara-02 (2024-2025) (Q3) (17.12.2024)			0.00	185.46	8.15%	01-Feb-25	11-Feb-25	0.46
Canara-02 (2024-2025) (Q3) (17.12.2024)			0.00	185.46	7.90%	12-Feb-25	28-Feb-25	0.68
Canara-02 (2024-2025) (Q3) (17.12.2024)			0.00	185.46	7.90%	01-Mar-25	29-Mar-25	1.16
HDFC-03 (2024-2025) (Q4) (29.03.2025) (IR Replacement)	0.00	29-Mar-25	0.00	0.00		29-Mar-25	29-Mar-25	0.00
Total	344.46							14.06

Cum IDC
Cert IDC

344.46
0.00

Total Cost upto 30.03.2025 (DOCO)	492.08
DOCO Cost	492.08

IR AS ON DOCO	147.63
IR % AS ON DOCO	30.00%

Actual Exp from DOCO to 31.03.2025	108.99
HDFC-03 (2024-2025) (Q4) (29.03.2025) (Add Cap Loan)	76.29

Actual Exp from DOCO to 31.03.2025 (Accrual IDC)	2.11
HDFC-03 (2024-2025) (Q4) (29.03.2025) (Add Cap Loan)	1.47

Total Cost upto 31.03.2025	603.18
Total Loan upto 31.03.2025	422.22
Loan Percentage as on 31.03.2025	• 70.00%

Estimated Expenditure from 01.04.2025 to 31.03.2026	264.76
Estimated Expenditure from 01.04.2026 to 31.03.2027	0.00
Total Projected Cost	867.94

NOTIONAL IDC CALCULATION

ELEMENT	QUARTER	YEAR	BEGDA	ENDDA	SOCCO	CTR_DAY	NO OF DAY	EXP_OB	EXP_ADO	EXP_CB	UNDWG CB	DRAWN LOAN	REPAYMEN	FUNDING CB	NOV_FUNDING	DC_BASE	RATE	NOSSING IDC
0746001	1	2024	01-04-2024	30-06-2024	30-03-2025	91	91	0.00	227.45	227.45	0.00	159.00	0.00	159.00	159.22	0.22	2.03	-
0746001	2	2024	01-07-2024	30-09-2024	30-03-2025	92	92	227.45	310.32	537.77	159.00	100.00	0.00	259.00	376.44	117.44	2.05	2.41
0746001	3	2024	01-10-2024	31-12-2024	30-03-2025	92	92	537.77	320.01	857.78	259.00	225.46	0.00	484.46	600.45	115.99	2.05	2.38
0746001	4	2024	01-01-2025	31-03-2025	30-03-2025	90	88	857.78	20.85	878.63	484.46	130.58	14.39	610.65	615.04	14.39	1.98	0.28
Total								878.63	878.63			615.04	14.39					5.07

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Liability Flow Statement

Name of Petitioner : Power Grid Corporation of India Ltd
Project Name OPGW Link in Itarsi-Khandwa-Dhule

2024-2029

Asset No.	Head	Year of Actual Capitalisation	Outstanding Liability as on 01.04.2024	Liability discharge						Additional Liability recognised					Outstanding Liability as on	
				2024-25	2025-26	2026-27	2027-28	2028-29	Total (25-29)	2024-25	2025-26	2026-27	2027-28	2028-29		Total (25-29)
M/s APAR Industries Ltd	OPGW	2024-25	460.07	105.03	355.04				460.07						0.00	0.00
M/s APAR Industries Ltd	Commn	2024-25	120.48	3.96	116.52				120.48						0.00	0.00
Total			580.55	108.99	471.56	0.00	0.00	0.00	580.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2024-2029

Asset No.	Headwise /Partywise	#REF!	Year of Actual	Addition to Gross Block					Total (25-29)
				2024-25	2025-26	2026-27	2027-28	2028-29	
M/s APAR Industries Ltd	OPGW		2024-25		11.90				11.90
M/s APAR Industries Ltd	Commn		2024-25		27.56				27.56
Total				0.00	39.46	0.00	0.00	0.00	39.46

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Summary of issue involved in the petition

**PART-III
FORM- 15**

1. Name of the Petitioner	Power Grid Corporation of India Limited			
2. Petition Category	Transmission			
3. Tariff Period	2024-29			
4. Name of the Project	OPGW Installation on Itarsi-Dhule Transmission Line			
5. Investment Approval date	12.04.2024			
6. SCOD of the Project	25.12.2025			
7. Actual COD/ECOD of the project	30.03.2025			
8. Whether entire scope is covered in the present petition.	Yes			
9. No. of Assets covered in instant petition	1			
10. No. of Assets having time over run	NA			
11. Estimated Project Cost as per IA	Rs.2060.00 Lakh			
12. Is there any REC? if so, provide the date	NO			
13. Revised Estimated Project Cost (if any)				
14. Completion cost for all the assets covered in the instant petition.	Rs. 1507.46 Lakh			
15. No. of Assets covered in instant petition and having cost overrun.	N.A.			
16	Prayer in brief			
17	Key details and any Specific issue involved			
18	Respondents			
	Name of Respondents			
	1	MADHYA PRADESH POWER MANAGEMENT COMPANY LTD	5	DNHDD POWER DISTRIBUTION CORPORATION LIMITED
	2	MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.	6	CHHATTISGARH STATE POWER DISTRIBUTION CO. LTD
	3	GUJARAT URJA VIKAS NIGAM LTD.	7	MAHARASHTRA STATE ELECTRICITY TRANSMISSION COMPANY LIMITED, MUMBAI
	4	ELECTRICITY DEPARTMENT, GOA	8	CENTRAL TRANSMISSION UTILITY OF INDIA LTD, GURUGRAM

(Petitioner)

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Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL the assets covered in the present petition.

	Rupees in lakhs
A) Summary of Capital Cost as on COID and Additional Capital Expenditure claimed for all the assets Covered in the instant petition.	

S. No.	Asset No.	Asset Name and its location	2024-25	2025-26	2026-27	2027-28	2028-29
2. Assets covered in the 2004 (as of) earned not all the assets covered in the instant petition.							

(Petitioner)

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INDEX
Checklist of Forms and other information/ documents for tariff filing for
Transmission System& Communication System

PART-III
Check List

Form No.	Title of Tariff Filing Forms (Transmission& Communication System)	Tick
FORM- 1	Summary of Tariff	✓
FORM- 1A	Summary of Asset Level cost	✓
FORM-2	Details of Transmission Lines and Substations and Communication System covered in the project scope and O&M for instant asset	✓
FORM-3	Normative parameters considered for tariff computations	✓
FORM- 4	Abstract of existing transmission assets/elements under project, Determination of Effective COD and Weighted Average Life for single AFC for the project as whole.	N.A.
FORM- 4A	Statement of Capital cost	✓
FORM- 4B	Statement of Capital Works in Progress	N.A.
FORM- 4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New Project/Element	N.A.
FORM-5	Element wise Break-up of Project/ Asset/Element Cost for Transmission System or Communication System	✓
FORM-5A	Break-up of Construction/Supply/Service packages	✓
FORM-5B	Details of all the assets covered in the project	N.A.
FORM- 6	Actual Cash Expenditure and Financial Package up to COD	✓
FORM- 7	Statement of Additional Capitalisation after COD	✓
FORM- 7A	Financing of Additional Capitalisation	✓
FORM- 7B	Statement of Additional Capitalisation during five year before the end of the useful life of the project.	N.A.
FORM- 8	Calculation of Return on Equity	✓
FORM-8A	Details of Foreign Equity	N.A.
FORM-9	Details of Allocation of corporate loans to various transmission elements	N.A.
FORM-9A	Details of Project Specific Loans	N.A.
FORM-9B	Details of Foreign loans	N.A.
FORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM-9D	Loans in Foreign Currency	N.A.
FORM-9E	Calculation of Interest on Normative Loan	✓
FORM- 10	Calculation of Depreciation Rate on original project cost	✓
FORM- 10A	Statement of Depreciation	✓
FORM- 10B	Statement of De-capitalisation	N.A.
FORM- 11	Calculation of Interest on Working Capital	✓
FORM- 12	Details of time over run	N.A.
FORM- 12A	Incidental Expenditure during Construction	✓
FORM- 12B	Calculation of IDC & Financing Charges	N.A.
FORM- 13	Details of Initial spares	✓
FORM- 14	Non-Tariff Income	✓
FORM- 15	Summary of issue involved in the petition	N.A.
FORM A	Summary of Capital Cost & Annual Fixed Cost (AFC) Claimed for ALL.	N.A.

Other Information/ Documents

S. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Project(s) setup by a company making tariff application for the first time to CERC)	N.A.
2	Region wise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for the new Transmission System & Communication System for the relevant years.	N.A.
3	Copies of relevant loan Agreements	N.A.
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	N.A.
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	N.A.
6	Copies of the BPTA/TSA/PPA with the beneficiaries, if any	N.A.
7	Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted: a. Detailed Project Report b. CPM Analysis c. PERT Chart and Bar Chart d. Justification for cost and time Overrun	N.A.
8	Transmission Licensee shall submit copy of Cost Audit Report along with cost accounting records, cost details, statements, schedules etc. for the transmission system as submitted to the Govt. of India for first two years i.e. 2019-20 and 2020-21 at the time of mid-term true-up in 2021-22 and for balance period of tariff period 2019-24 at the time of final true-up in 2024-25. In case of initial tariff filing the latest available Cost Audit Report should be furnished.	N.A.
9.	BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify formats suitably as per available information to them for submission of required information for tariff purpose.	N.A.
10.	Any other relevant information, (Please specify)	N.A.

Note 1: Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel format) and any other information submitted has to be uploaded in the e-filing website and shall also be furnished in pen drive/flash drive.

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