## THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. /TT/2024

IN THE MATTER OF: Petition for truing up of Transmission Tariff for 2019-24 and determination of Transmission Tariff for 2024-29 tariff block for assets under Korba-Budhipadar Transmission System in Western Region under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under 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 Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

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, Gurugram-122 001 (Haryana).

---RESPONDENT

Madhya Pradesh Power Management Company Ltd.,

Shakti Bhawan, Rampur,

Jabalpur - 482008.

And others

**FILED BY** 

POWER GRID CORPORATION OF INDIA LTD.

Place: Gurugram

REPRESENTED BY

DATED: \0 .12.2024

(Zafrul Hasan)

General Manager (Commercial)



### THE CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

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And others

### INDEX

To The Secretary Central Electricity Regulatory Commission New Delhi 110016 Sir,

The present tariff Petition is filed under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under 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 Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 and same may please be registered and taken on record by the Hon'ble Commission.

Place: Gurugram

**FILED BY** 

DATED: 0.12.2024

POWER GRID CORPORATION OF INDIA LTD.

REPRESENTED BY

(Zafrul Hasan)

**General Manager (Commercial)** 



## THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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Shakti Bhawan, Rampur,

Jabalpur - 482008.

And others

### **MEMO OF PARTIES**

Power Grid Corporation of India Ltd.

--- PETITIONER

**VERSUS** 

**Western Region** 

--- RESPONDENT(S)

- 1. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur – 482 008.
- 2. Maharashtra State Electricity Distribution Company Limited, Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai 400001.
- 3. Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan,



Race Course Road, Vadodara - 390007.

- 4. Electricity Department, Govt. of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa – 403 001.
- 5. DNH and DD Power Corporation Ltd. 1st & 2nd floor, Vidyut bhavan, Silvassa - 396230, DNH, India
- 6. Chhattisgarh State Power Distribution Company Limited, P.O.Sunder Nagar, Dangania, Raipur, Chhattisgarh 492013.

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

PLACE: Gurugram
DATED: 0.12.2024

(Zafrul Hasan)

**General Manager (Commercial)** 

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

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Madhya Pradesh Power Management Company Ltd.,

---- RESPONDENT(S)

Shakti Bhawan, Rampur,

Jabalpur - 482008.

And others

### **MEMO OF APPEARANCE**

### POWER GRID CORPORATION OF INDIA LTD.

--- PETITIONER

- 1. Shri Dilip Nagesh Rozekar, ED (Commercial & RC), POWERGRID
- 2. Shri Mohd. Mohsin, Chief GM (Commercial / RC), POWERGRID
- 3. Shri V.C. Sekhar, Sr. GM (Regulatory Cell), POWERGRID
- 4. Shri Zafrul Hasan, GM (Commercial-Petition), POWERGRID
- 5. Shri Vishal Sagar, DGM (Commercial-Petition), POWERGRID

6. Shri Arjun Malhotra, Manager (Commercial-Petition), POWERGRID

I, Zafrul Hasan, 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 10 day of November 2024.

### **PETITIONER**

### POWER GRID CORPORATION OF INDIA LTD.

(Zafrul Hasan)

**General Manager (Commercial)** 

Place: Gurugram DATED: | 0 .12.2024



### THE CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

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Madhya Pradesh Power Management Company Ltd., ---- RESPONDENT(S)

Shakti Bhawan, Rampur,

Jabalpur - 482008.

And others

### A. Executive Summary of the Petition:

### 1. Brief Background of the Petitioner

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, Own, Operate and Maintain an efficient, coordinated and economical inter-state 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 Commission") Tariff for the transmission system established by POWERGRID is required to be determined by this Hon'ble Commission in accordance with the Tariff Regulations as notified by this Hon'ble Commission from time to time in exercise of its powers under Section 178 of the Electricity Act, 2003.

### 2. Brief background of the Respondent(s):

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

### 3. Background of Transmission Assets:

POWERGRID has filed the present petition for truing up of Transmission Tariff for 2019-24 and determination of Transmission Tariff for 2024-29 tariff block for the following assets which have been implemented under **Korba-Budhipadar Transmission System in Western Region** as per following: 0153001

Asset No	Asset Name	DOCO	Remarks
	Korba- Budhipadar 220 kV S/C line		Tariff for true up of
	alongwith Extension of 220 kV		2014-19 block and tariff
Asset	existing sub-station at Budhipadar	01.09.1999	for 2019-24 block
	and Extension of 220/132 kV existing		approved under petition
	sub-station at Korba		no. 326/TT/2020

### 4. Summary of Claims:

POWERGRID is seeking truing up of transmission tariff for 2019-24 and determination of transmission tariff for 2024-29 tariff block for aforesaid transmission assets on capital cost comprising of expenditure incurred/admitted upto 31.03.2019/DOCO and additional capital expenditure during 2019-24 & 2024-29 tariff blocks in accordance with provisions of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 ("Tariff Regulations, 2019") and

Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 ("Tariff Regulations, 2024").

**5.** The details of FR/RCE apportioned approved cost vis-à-vis claimed capital cost as on COD/31.03.2019 and additional capital expenditure during 2019-24 and 2024-29 tariff block are as under:

### Rs in lakhs

	Apportioned Approved	Expenditure		Expenditure	during 201	9-24 tariff bl	ock	Capital Cost
Asset No.	Cost as per	Up to 31.03.2019	2019-20	2020-21	2021-22	2022-23	2023-24	as on 31.03.2024
Asset	3553.00	3003.76	-	-	-	-	-	3003.76

### Rs in lakhs

Asset	Apportioned Approved	Expenditure	Estimated	ACE/Deca	o during 2	024-29 tar	iff block		Estimated completion
No.	Cost as per	Up to	202	4-25	2025-	2026-	2027-	2028-	Cost as on
	RCE	31.03.2024	Decap	Add cap	26	27	28	29	31.03.2029
Asset	3553.00	3003.76	(52.76)	120.57	-	53.43	35.62	-36.07	3124.55

6. Details of tariff claimed are as under:

True up annual transmission tariff for 2019-24 tariff block:

### Rs in Lakhs

Name of the asset	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
	AFC approved	226.78	228.78	231.53	237.16	243.87
Asset	Revised AFC based					
	on truing up	226.79	228.79	231.21	233.82	237.34

Tariff claimed for 2024-29 tariff block:

### Rs in Lakhs

Name of the asset	2024-25	2025-26	2026-27	2027-28	2028-29 ORPORA
Asset	232.35	244.61	252.16	263.70	270.81

7. It is prayed to Hon'ble Commission to reimburse expenditure of petition filing fee, license fee, newspaper publication expenses and RLDC fee & charges etc.

### B. Detailed Petition:

### **MOST RESPECTFULLY SHOWETH:**

- (i) <u>Issue wise submission(s) with regards to expenditure claimed along with</u> justification:
- 8. The Petitioner herein, Power Grid Corporation of India Ltd ('POWERGRID') is a Government Company within the meaning of the Companies Act, 2013. 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, Own, Operate and Maintain an efficient, coordinated and economical interstate transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Commission in accordance with the provisions of Tariff Regulations, 2019 and Tariff Regulations, 2024.
- **10.** That the subject project/petition covers true up/approval of transmission tariff for following Asset:

Asset No	Asset Name	DOCO	Remarks
Asset	Korba- Budhipadar 220 kV S/C line alongwith Extension of 220 kV existing sub-station at Budhipadar and Extension of 220/132 kV existing sub-station at Korba	01.09.1999	True up of 2014-19 tariff block covered in petition no. 326/TT/2020

### 11. Cost detail:

The details of admitted cost for the assets covered in instant petition as per Hon'ble Commission order dated 21.09.2021 in petition no. 326/TT/2020 (Encl-1) for 2019-24 tariff block, and claimed cost now is given hereunder:

Cost allowed a	s per order in peti	tion no. 3	26/TT/2020	)(A)			
Apportioned	Capital cost	Add cap	during 2019	9-24*			Capital cost
cost as per RCE	as on 31.03.2019	2019-20	2020-21	2021-22	2022-23	2023-24	as on 31.03.2024
3553.00	3003.76	-	-	-2.70	20.68	-	3021.75
Cost claimed in	the instant petition	on (B)					
3553.00	3003.76	-	-	-	-	-	3003.76
Variation (B)-(A)	0.0	0.0	0.0	2.70	-20.68	-	-17.98

\* Add - Cap approved by the Commission in petition no: 326/TT/2020 were based on projections. In this regard it may be noted that the ACE/decap proposed for 2019-24 tariff was for replacement of deteriorating component/equipment in the system which may affect the stability and reliability of the grid in case of sudden failures. However, the said replacement works were not carried out during 2019-24 tariff block and has been spilled to 2024-29 tariff block.

# **11.1** Details of the cost claimed in the instant petition w.r.t. Auditor Certificate is as detailed below:

Sl. No	Expenditure	TL	SS	PLCC	IT	Total
1	Capital cost as admitted by CERC vide order dated 21.09.2021 in 326/TT/2020	2697.65	262.6	43.51	-	3003.76
2	Estimated Decap during 2024-25	-	-52.76	-	-	-52.76
3	Estimated Add Cap during 2024-25	-	120.57	-	-	120.57
4	Estimated Add Cap during 2026-27	-	50.63	-	2.8	53.43
5	Estimated Add Cap during 2027-28	-	33.75	-	1.87	35.62
6	Estimated Decap during 2027-28	-	-36.07	-	RPORA	-36.07
7	Total Estimated Completion Cost	2697.65	378.72	43.51	4.67	3124.55



Copy of auditor certificate w.r.t. claimed cost in the instant petition is enclosed at **Encl- 2.** Hon'ble Commission is requested to kindly allow the cost claimed upto 31.03.2029.

Further as per Clause 33 (8) of Tariff Regulations, 2024, the depreciation of the ACE shall be recovered by equally spreading the depreciable value over the balance useful life of the Asset or 10 years whichever is higher. In the instant petition, the add-cap is proposed in FY 2024-25. Further, balance useful life of the asset/project is 10 years as on 01.04.2024. Accordingly, depreciation on the ACE has been recovered by equally spreading the depreciable value over the balance useful life of the Asset i.e. 10 years.

### 12. Additional capitalization claims under Regulation:

The add-cap projected during 2024-29 is on account of the replacement of component/equipment in the system which are deteriorated due to ageing and may affect the stability and reliability of the Grid in case of sudden failure and covered clause 25(2) of Tariff regulations, 2024.

### Quote:

"Additional Capitalization within the original scope and after the cut-off date:

- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the Cumulative depreciation, subject to prudence check on the following grounds:
- (a) Assets whose useful life is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
- (b) The replacement of the asset or equipment is necessary on account of a change in law or Force Majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.

WE

(e) The additional expenditure, excluding recurring expenses covered in O&M expenses, involved in relation to the renewal of lease of lease hold land on case to case basis.

Provided that any claim of additional capitalisation with respect to the replacement of assets under the original scope and on account of obsolescence of technology, less than Rs. 20 lakhs shall not be considered as part of Capital cost and shall be met through normative O&M expenses."

Unquote:

### Add cap for 2019-24 block:

Asset	Add cap details (Rs. Lakhs)								
	2019-20	2020-21	2021-22	2022-23	2023-24				
		-	-	-	-				
Asset			NA	·					

### Add cap for 2024-29 block:

Asset			Add cap detail (Rs. Lakhs)				
	2024-25		2024-25 2025-26 202		2027-28		
	Decap	Add Cap			Decap	Add Cap	
Asset	52.76	120.57	-	53.43	36.07	35.62	

### 1. Details of the ACE claimed during 2024-29 tariff block:

SI. No.	Equipment detail	Station Involved	Quantity	ACE
1	220kV Isolator	Budhipadar bay at Korba	4 set	58.55
2	220kV Circuit Breaker	Budhipadar bay at Korba	1 set	42.40
3	220kV CT	Budhipadar bay at Korba	3 set	13.27
4	220kV CVT	Budhipadar bay at Korba	3 set	6.35
5	CB, Isolators and relays	Korba Bay at Budhipadar	1 set	89.04
Total			600	209,62

Justification for the ACE proposed to be incurred during 2024-29 tariff block:

WO

It is submitted that the said proposed ACE/Decap has already been proposed and approved by Hon'ble Commission vide order dated 21.09.2021 in petition no. 326/TT/2020. However, the said works could not be carried out during 2019-24 tariff as against the proposal. Therefore, the same work is now proposed to be carried out during 2024-29 tariff block. Further, no new ACE has been proposed during 2024-29 tariff block. The details of ACE proposed during 2024-29 tariff block is as presented below:

- 1) Isolators (4 sets): These isolators are of horizontal centre break (HCB) type and frequent problems of misalignment are being faced. Current transfer assembly on isolator top and other major spares are now no more available due to old/ obsolete designs. Further due to rusting, many MOM boxes have got damaged and due to obsolescence of technology timely support from O&M design is not available.
- 2) 220 kV Circuit breaker (1 set): The circuit breakers (CB) were commissioned in 1999 and have already completed 25 years of operation during 2019-24 tariff period. The hydraulic types are obsolete and have frequent maintenance issues such as hydraulic drive/ magnetic ventil failures, air leakages, SF6 gas leakages etc.
- 3) Current transformer (3 numbers): These CT are of BHEL make dead tank type with porcelain housing and have completed 24 years of service during the 2019-24 period. These CTs are hermetically sealed equipment and therefore major repair at site is not recommended.
- 4) Capacitive voltage transformer (3 numbers CVT): Due to ageing, there is leakage/seepage from multiple points such as EMU tank, oil level glass, secondary terminal boxes. CVTs are hermetically sealed equipment and therefore major repair at site is not recommended. Further, after 25 years of operation, repairing of CVT at manufacturer works is not techno-economically viable due to change in design by manufacturer.
- 5) Circuit Breaker, Isolators and relays and Upgradation to SAS based Control Panel at budhipadar: The circuit breakers (CB) were commissioned in 1999 and have already completed 25 years of operation during 2019-24 tariff period. The hydraulic types are obsolete and have frequent maintenance issues such as hydraulic drive/ magnetic ventil failures, air leakages, SF6 gas leakages etc.

That the said ACE is claimed under Regulation 25 (2) of 2024 Tariff regulation. Hon'ble Commission is requested to kindly allow the ACE as claimed in the instant petition.

The Debt: Equity ratio is 77.96:22.04 as on Date of capitalization and the same debt: equity ratio has been considered for de-capitalization. The details are as below and Form-10B is enclosed hereto as **Encl-3**:

Rs. in lakhs

Financial Year	De-cap amount	Debt	Equity	Cumulative repayment	Cumulative Depreciation
2024-25	52.76	41.13	11.63	41.13	47.48
2027-28	36.07	28.12	7.95	28.12	32.46

### 13. Transmission tariff:

The truing up exercise for the period 2019-2024 is to be done at the time of filing tariff petition for next block, i.e. 2024-29 period as per Regulation 13 of Tariff Regulations, 2019. Regulation 13 of Tariff Regulations, 2019:

### Quote

"The Commission shall carry out truing up exercise for the period 2019-24 along with the Tariff petition filed for the next tariff period, for the following:"

### Unquote

That the Petitioner is required to adjust the yearly impact of MAT as per Regulation 31 (3) of the Tariff Regulations, 2019 dated 07.03.2019 in the truing up petition for 2019-24 tariff block.

### Regulation 31 (3) of the Tariff Regulations, 2019:

### Quote

The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year 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 income tax authorities pertaining to the tariff period 2019-24 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 return on equity 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.

### Unquote

It is submitted that the Income Tax assessment of the Petitioner has been completed and Assessment Orders have been issued by the Income Tax Department for FY 2019-20 and 2020-21; and that the Income Tax returns have been filed with the Income Tax Department for FY 2021-22, 2022-23 & 2023-24.

As such, basis of year wise effective tax rate and Grossed up ROE to be trued up accordingly for the block period 2019-24 is summarized as under.

Financial Year	Basis considered	Total Tax & Interest paid (Rs)	Assessed MAT Income under Sec 115 JB (Rs)	Effective Tax percentage	Grossed up ROE (Base rate/(1-t)
2019-20	Assessment Order	24,52,62,76,991	1,40,37,47,53,855	17.472%	18.782%
2020-21	Assessment Order	26,08,93,59,008	1,49,32,09,65,036	17.472%	18.782%
2021-22	Actual Tax paid	31,81,46,40,406	1,82,08,92,88,030	17.472%	18.782%
2022-23	Actual Tax paid	30,42,88,20,993	1,74,15,76,29,306	17.472%	18.782%
2023-24	Actual Tax paid	31,32,12,38,737	1,79,26,53,31,597	17.472%	18.782%

The above Effective Tax percentage shall be applied by the petitioner in arriving out the Grossed-up ROE rate in all cases of truing up petitions to be filed for the period 2019-24. It is submitted that effective rate of tax considered for FY 2019-20 and 2020-21 are based on Assessment Order issued by Income-Tax authorities, for the purpose of grossing up

of ROE rate and that the effective rate of tax considered for FY 2021-22, FY 2022-23 and FY 2023-24 are based on the Income-tax returns filed, for the purpose of grossing up of ROE rate of respective years.

The Hon'ble Commission is requested to allow the petitioner to claim the differential tariff on account of the trued-up ROE based on effective tax rate calculated on completion of Income-tax assessment/re-assessment for the F/Y 2019-20, 2020-21,2021-22,2022-23 and 2023-24 on receipt of the respective assessment orders, directly from the beneficiaries, on year-to-year basis as provided in the Regulation.

In line with the above Regulation, the tariff for each year of the tariff period 2019-24 has been trued up considering the above effective tax percentage to arrive at Grossed up ROE rate.

While filing Tariff petition for 2019-24 period, the petitioner had prayed for allowing the floating rate of Interest on loan adjustments. As per Hon'ble Commission order dated 21.09.2021 in 326/TT/2020, it has been stated that the weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019 and accordingly, the floating rate of interest on actual, applicable from time to time, if any, during 2019-24 tariff shall be considered at the time of true up or next revision of tariff.

Accordingly in the present petition, truing up of transmission tariff for the tariff block 2019-24 is being carried out based on actual additional capitalization during 2019-24 tariff block, change in MAT rate as well as actual floating rate of interest during 2019-24.

**14.** The trued up annual transmission tariff worked out for the tariff period 2019-24 is summarized as below:

Rs in Lakh

Project	Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Asset	AFC approved	226.78	228.78	231.53	237.16	243.87
	Revised AFC based					
	on truing up	226.79	228.79	231.21	233.82	237.34



Tariff filing formats along with the other relevant information and supporting documents are attached hereto as **Encl-4** 

That in the subject petition, details are provided in various Tariff Forms with respect to Capital Cost as per books / Gross Block amount as per Books. It is submitted that the petitioner has opted for deemed cost exemption as per Para D7 AA of Ind AS 101 'First-time Adoption of Indian Accounting Standards". Accordingly Carrying value i.e. Gross Block less Accumulated Depreciation is considered as deemed cost as on the date of transition i.e. 1st April 2015. As such, in case of assets commissioned before 01.04.2015, the accumulated depreciation as on 1st April 2015 is added back to the deemed Capital Cost as per books / Gross Block amount as per Books for arriving at the figures to be provided in various Tariff Forms.

15. The tariff worked out for 2024-29 tariff block is summarized below:

Rs in Lakh

Project	Particular	2024-25	2025-26	2026-27	2027-28	2028-29
Asset	AFC	232.35	244.61	252.16	263.70	270.81

Tariff filing formats along with the other relevant information and supporting documents are attached hereto as **Encl-5** 

- 16. The asset has completed 12 Yrs of life before 2019-20 and thus depreciation has been calculated based on remaining depreciable value to be recovered in the balance useful life. The details have been computed and are provided in Form- 10 A..
- 17. That, it is submitted that the petitioner is currently liable to pay income tax at MAT rate specified in Income-tax Act,1961. Therefore, 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 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for 2024-29 period. That as per clause 31 (3) 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.

- 18. 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 14 & 15 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.
- 19. In the tariff calculations for 2019-24 period, Interest on Loan has been calculated on the basis of actual rate of interest of various loans deployed for each year. In the tariff calculations for 2024-29 period, Interest on Loan has been calculated on the basis of interest rates prevailing as on 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.

For the purpose of the supporting documents for rate of interest, a compendium of floating rate of interest of various loans during the tariff period 2019-24 has been submitted along with Truing up petition with Diary no. 716/2024. These documents/details are also available on our website www.powergrid in an approximately along the support of the purpose of the supporting documents are also available on our website www.powergrid in a support of the sup

- 20. The transmission charges at para 14 & 15 above are 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) of the Tariff Regulations for block 2024-29.
- 21. That as per Regulation 36(3)(d) of CERC Tariff Regulations, 2024, the Security Expenses, Insurance and Capital Spares more than Rs. 10 Lakh for transmission system shall be allowed separately after prudence check.

### **Security Expenses:**

In this regard, it is submitted that a separate petition shall be filed for truing up of security expenses from 01.04.2019 to 31.03.2024 under the Regulation 35 (3) (C) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations,2019 and recovery of security expenses from 01.04.2024 to 31.03.2029 under the Regulation 36 (3) (d) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.

#### 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 Expense incurred by the Petitioner for the F/Y 2023-24 after escalating the same at 5.25% per annum for arriving at the Estimated Insurance Expense for the year 2024-25, 2025-26, 2026-27, 2027-28 and 2028-29.

### Capital Spare:

With regard to Capital Spares, the Petitioner has filed a separate Petition bearing No 45/MP/2024 for claiming the capital spares under Tariff Regulations, 2019 for 2019-24 period. Further, as per Tariff Regulations, 2024, Capital spares consumed and consequential Interest on Working Capital (IOWC) on the same shall be claimed by the Petitioner for 2024-29 period as per actuals.

Accordingly, these expenses are not claimed in the subject petition through the relevant Tariff Forms and shall be claimed separately.

22. 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 at the end of tariff block.

- 23. 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) & 94(4) 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, 2023 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.
- 24. The Transmission Charges and other related Charges indicated at para 14 & 15 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges, capital spares, security expenses, insurance expenses 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.

### 25. Sharing of Transmission Charges

Truing up tariff for Transmission of Electricity (Annual Fixed Cost) for 2019-24 as per para 14 above shall be recovered on monthly basis in accordance with Regulation 57 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 and shall be shared by the beneficiaries and long-term transmission customers in terms of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 and Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020, as amended from to time for the applicable periods.

Tariff for Transmission of Electricity (Annual Fixed Cost) for 2024-29 as per para 15 above 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 terms of Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020, as amended from to time.

2. 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.-4 may please be treated as integral part of this petition.

### C. PRAYER

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

- a) Approve the trued-up Transmission Tariff for 2019-24 block and transmission tariff for 2024-29 block for the assets covered under this petition, as per para 14 and 15 above.
- b) Admit the capital cost claimed and additional capitalization incurred during 2019-24.
- c) 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 Regulations 2019 and Tariff Regulations, 2024 as per para 14 and 15 above for respective block.
- d) 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.
- e) Allow the petitioner to bill and recover RLDC fees & charges and Licensee fee separately from the respondents in terms of Regulation 94 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024.
- f) 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 respondents.
- g) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 21 above.
- h) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall insurance expenses and consequential IOWC on that insurance expenses as mentioned at para 21 above.
- Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall capital spares as per actual as mentioned at Para 21 above.
- j) Allow the petitioner to claim expenses of CTUIL borne by POWERGRID through a separate petition as mentioned at para 22 above.
- 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.

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.

**FILED BY** 

Place: Gurugram

POWER GRID CORPORATION OF INDIA LTD.

DATED:-10.12.2024

REPRESENTED BY

(Zafrul Hasan)

General Manager (Commercial)



### THE CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

PETITION NO.: .....

IN THE MATTER OF: Petition for truing up of Transmission Tariff for 2019-24 and determination of Transmission Tariff for 2024-29 tariff block for assets under Korba-Budhipadar Transmission System in Western Region under Section 62 read with Section 79 (1) (d) of the Electricity Act, 2003 and under 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 Conditions of Tariff) Regulations, 2019 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024

### 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, Gurugram-122 001 (Haryana).

OTARD

Gurugram No. 3999

Regn.

Madhya Pradesh Power Management Company Ltd.,

---- RESPONDENT(S)

Shakti Bhawan, Rampur,

Jabalpur - 482008.

And others

### AFFIDAVIT VERIFYING THE PETITION

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

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

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- 2. That the accompanying Petition under Section 62 of the Electricity Act, 2003, has been filed by my authorised 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 01 to 26 of the facts as 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 01 to 26 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

(DEPONENT)

### **VERIFICATION**

Solemnly affirmed at Gurugram on this look day of Dec' 2024 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.

(DEPONENT)



MAHENDER S. PUNIA, ADVOCATE & NOTARY Notice Gurugram (Harnarla) India



## पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

### **POWER GRID CORPORATION OF INDIA LIMITED**

(A Government of India Enterprise)

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)

Dip Nagesh Rozekar

Executive Director (Commercial & RC)

दिलीप रोज़ेकर / DHLIP.ROZEKAR
Executive Director (Commercial & Regulatory Cell)
पावर ग्रिंड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(बर्फा सरकार क उधन)/(A Govt. of India Enterprise)
Plot No.-2, Sector-29, Gurgaon-122 001 (Haryana)

ORPORATION OF POWERING &

## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

### Petition No. 326/TT/2020

Coram:

Shri P.K. Pujari, Chairperson Shri I.S. Jha, Member Shri Arun Goyal, Member Shri P.K. Singh, Member

Date of order: 21.09.2021

### In the Matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of transmission tariff of 2001-04, 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for assets under Korba-Budhipadar Transmission System in Western Region.

### And in the Matter of:

Power Grid Corporation of India Limited, "Saudamini", Plot No-2, Sector-29, Gurgaon - 122001, (Haryana).

.....Petitioner

Vs.

- 1. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur 482 008.
- 2. Madhya Pradesh Power Transmission Company Limited, Shakti Bhawan, Rampur, Jabalpur 482 008.
- Madhya Pradesh Audyogik Kendra,
   Vikas Nigam (Indore) Limited,
   3/54, Press Complex, Agra-Bombay Road, Indore 452 008.

Maharashtra State Electricity Distribution Company Limited,
 Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai - 400 001

 Maharashtra State Electricity Transmission Company Limited, Prakashganga, 6th Floor, Plot No. C-19, E-Block,

Power Grid Corporation of India Ltd Plot No. 2, Sector-29, Gurgaan-122001 (HARYAN

A

Order in Petition No. 326/TT/2020

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Bandra Kurla Complex, Bandra (East) Mumbai - 400 051.

- 6. Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara - 390 007.
- 7. Gujarat Energy Transmission Corporation Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara - 390 007.
- 8. Electricity Department, Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa - 403 001.
- 9. Electricity Department, Administration of Daman & Diu, Daman - 396 210.
- 10. Electricity Department, Administration of Dadra Nagar Haveli, U.T., Silvassa - 396 230.
- 11. Chhattisgarh State Electricity Board, P.O.Sunder Nagar, Dangania, Raipur, Chhattisgarh - 492 013.
- 12. Chhattisgarh State Power Transmission Company Limited, Office of The Executive Director (C&P), State Load Dispatch Building, Dangania, Raipur - 492 013.
- 13. Chhattisgarh State Power Distribution Company Limited, P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh.

...Respondent(s)

For Petitioner

Shri S.S. Raju, PGCIL Shri A.K. Verma, PGCIL

Shri D.K Biswal, PGCIL

Shri Ved Prakash Rastogi, PGCIL

For Respondents:

None

### ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, for revision of transmission tariff of 2001-04, 2004-09 and 2009-14 periods; truing up of transmission tariff for the period from 1.4.2014 to 31.3.2019 under the

Order in Petition No. 326/TT/2020

Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations"); and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the Korba-Budhipadar Transmission System (hereinafter referred to as the "transmission asset") in Western Region.

### 2. The Petitioner has made the following prayers in the instant petition:

- "1) Approve the revised Transmission Tariff for 2001-04 block, Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the assets covered under this petition, as per para 8 above.
- 2) Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9 and 10 above.
- 3) 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 2014 and tariff regulation' 2019 as per para 9.0 and 10.0 above for respective block.

Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long-term customers / DIC, as and when the same is materialized as per Regulation 49 of 2014 and Regulation 67 of 2019 tariff regulation. The petitioner may be allowed to recover the deferred tax liability materialized directly without making any application before the commission as provided in the regulation.

- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 6) 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 2019-24 period, if any, from the respondents.



- 7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) 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.

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."

### **Background**

- The brief facts of the case are as follows: 3.
  - In-principle approval for implementation of 220 kV S/C Korba-(a) Budhipadar transmission system, to transmit surplus power from Eastern Region to Western Region was accorded by the Central Electricity Authority vide its letter dated 24.7.1997. The Board of Directors of the Petitioner Company in its 67<sup>th</sup> meeting held on 17.9.1997 accorded the Investment Approval (IA) for the transmission system for ₹3064 lakh including IDC of ₹84 lakh. The approval for revised cost estimate of ₹3553 lakh was subsequently accorded by the Board of Directors in its 101st meeting held on 22.2.2000.
  - The scope of the work covered under the transmission asset is as (b) follows:
    - Korba- Budhipadar 220 kV S/C line
    - ii. Extension of 220 kV existing sub-station at Budhipadar
    - Extension of 220/132 kV existing sub-station at Korba iii
  - (c) The entire scope of work is covered in the instant petition. The details with regard to the transmission asset are as follows:

(₹ in lakh)

COD	Apportioned Approved Cost FR	RCE Approved Cost
1.9.1999	3064.00	3553.00



Order in Petition No. 326/TT/2020

- (d) The transmission tariff from 1.4.2001 to 31.3.2004 was determined vide order dated 18.7.2003 in Petition No. 49/2002. The tariff was revised on account of FERV adjustment vide order dated 17.1.2008 in Petition No. 49/2002.
- (e) The tariff in respect of the transmission asset from 1.4.2004 to 31.3.2009 was determined vide order dated 16.3.2006 in Petition No. 69/2004 and further revised on account of FERV adjustment vide order dated 29.4.2008 in Petition No. 69/2004.
- (f) The transmission tariff for the transmission asset from 1.4.2009 to 31.3.2014 was determined vide order dated 15.9.2010 in Petition No. 07/2010. Further, the tariff for the 2009-14 period was trued up and tariff for the period from 1.4.2014 to 31.3.2019 was determined vide order dated 7.10.2015 in Petition No. 162/TT/2014.
- (g) The transmission tariff was allowed for 2014-19 tariff period vide order dated 7.10.2015 in Petition No. 162/TT/2014 and the transmission tariff based on truing up claimed by the Petitioner in the instant petition is as follows:

(₹ in lakh) 2014-15 **Particulars** 2015-16 2016-17 2017-18 2018-19 Allowed vide order dated 7.10.2015 in Petition 245.49 248.33 251.21 254.14 257.14 No. 162/TT/2014 Claimed by the Petitioner 245.60 249.04 251.86 254.79 258.15 in the instant petition

(h) The Petitioner has sought revision of transmission tariff approved for 2001-04 and 2004-09 tariff periods on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IoL and in Maintenance Spares in terms of the judgments of Appellate Tribunal for Electricity ("APTEL") dated 22.1.2007 in Appeal No. 81/2005 and batch matters and dated 13.6.2007 in Appeal No. 139/2006 and batch matters. The Petitioner has also sought consequential revision of tariff allowed for 2009-14 tariff period, truing up of tariff of 2014-19 tariff period and determination of tariff for 2019-24 tariff period for the transmission asset for Korba-Budhipadar Transmission System in Western Region.



(i) APTEL, vide judgement dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters pertaining to generating stations of NTPC had considered 4 (four) issues. The issues considered by APTEL and its decisions are as given in the following table:

SI. No.	Issue	APTEL's decision/direction
1	Whether APTEL can enquire into the validity of Regulations framed by the Commission.	Challenge to the validity of Regulations framed by the Commission falls outside the purview of APTEL.
2	Computation of interest on loan.	In view of the order of the APTEL dated 14.11.2016 in Appeal No. 94 of 2005 and Appeal No. 96 of 2005 and order dated 24.1.2007 passed in Appeal Nos. 81 to 87, 89 to 93 of 2005, computation of loan has to be based on loan repayment on normative basis. Commission is required to recalculate the loan outstanding as on 31.3.2004 based on loan repayment on normative basis.
3(a)	O&M Expenses: Inadequate provision of employee costs as part of O&M Expenses due to variation in salary and wages	Commission's view upheld
3(b)	O&M Expenses: Non-inclusion of incentives and ex-gratia payment to employees	Commission's view upheld
4	Cost of spares for calculation of working capital	Commission's view upheld

(j) APTEL vide its judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters pertaining to generating stations of NTPC had considered 9 (nine) issues. The issues considered and the decisions of APTEL are given in the following table:

SI. No.	Issue	APTEL's decision/direction
I	Computation of outstanding loan at the beginning of the tariff period i.e. 1.4.2004	The Commission is required to recalculate the loan outstanding as on 31.3.2004 based on loan repayment on normative basis.
11	Consequence of refinance of loan	Commission to consider the issue afresh
III	Treating depreciation available as deemed repayment of loan	Commission to make a fresh computation of outstanding loan

IV	Admissibility of depreciation up to 90%	Commission to consider the issue afresh
V	Cost of Maintenance Spares	Commission to consider the issue afresh
VI	Impact of de-capitalization of the assets on cumulative repayment of Loan	The cumulative repayment of the loan proportionate to the assets decapitalized required to be reduced. Commission to act accordingly.
VII	Non-consideration of normative transit loss for coal import.	Commission to consider afresh the transit losses for coal imported from coal mines other than the dedicated ones.
VIII	Foreign Exchange rate variation (FERV)	FERV has been kept as pass through to ensure that any liability or gain, if any, arising on account of any variation in foreign exchange rates is passed on to the beneficiary as held in order dated 4.10.2006 in Appeals No.135 to 140 of 2005. Commission to act accordingly.
IX	Computation of interest on loan in Singrauli Station	Net loan closing at the end of a year is reflected as net loan opening on the first day of the next year. Commission shall re-compute the interest accordingly.

- (k) The Commission and certain interested parties preferred Civil Appeals against the APTEL's judgments before the Hon'ble Supreme Court in 2007. The Appeals were admitted and initially stay was granted by the Hon'ble Supreme Court. Subsequently, on an assurance by NTPC that the issues under Appeal would not be pressed for implementation during the pendency of the Appeals, the stay was vacated by the Hon'ble Supreme Court.
- (I) Based on APTEL's judgments dated 22.1.2007 in Appeal No. 81/2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2007 and batch matters, the Petitioner had sought revision of tariff of its transmission assets for 2001-04 and 2004-09 tariff periods vide Petition No. 121/2007. The Commission, after taking into consideration the pendency of Appeals before the Hon'ble Supreme Court, adjourned the said petition *sine die* and directed that the same be revived after the disposal of the Civil Appeals by the Hon'ble Supreme Court.
- (m) The Hon'ble Supreme Court vide order dated 10.4.2018, dismissed the said Civil Appeals filed against the APTEL's said judgments. Thus, the said judgments of APTEL have attained finality.



- (n) Consequent to the Hon'ble Supreme Court's order dated 10.4.2018 in Petition No. 121/2007 was listed for hearing before the Commission on 8.1.2019. The Commission, vide order dated 18.1.2019 in Petition No. 121/2007, directed the Petitioner to submit its claim separately for the assets at the time of filing of truing up petitions for 2014-19 tariff period in respect of concerned transmission assets.
- (o) The instant petition was heard on 3.8.2021 and in view of APTEL's judgments dated 22.1.2007 and 13.6.2007 and the order of Hon'ble Supreme Court dated 10.4.2018, transmission tariff is being revised. Period-wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods and suitable assumptions at certain places, if required, are being applied which are indicated.
- (p) The transmission asset was put under commercial operation on 1.9.1999. The tariff in respect of the transmission asset during 2001-04, 2004-09 and 2009-14 periods was worked out based on the admitted capital cost of the transmission asset as on COD and Additional Capital Expenditure (ACE) during the respective periods. Accordingly, considering the admitted capital cost as on COD, tariff is being revised for 2001-04, 2004-09 and 2009-14 tariff periods in terms of APTEL's judgement dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters. The details of admitted capital cost as on COD and ACE admitted in respect of the transmission asset are as follows:

(₹ In lakh) SI. No. Admitted Decapitalisation Admitted **Asset Expenditure** due to FERV **Capital Cost** as on 31.3.2004 up to COD 2001-04 Assets under 3012.57 8.82 3003.76 1. Korba-Budhipadar Transmission System

4. The Respondents are transmission utilities, distribution licensees and power departments who are procuring transmission services from the Petitioner, mainly beneficiaries of the Western Region.



5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers. Madhya Pradesh Power Management Company Ltd. (MPPMCL), Respondent No. 1, has filed its reply vide affidavit dated 5.6.2020. MPPMCL has raised issued like revision of tariff, income tax rate for grossing up of RoE, additional capitalization and decapitalization for 2019-24 period. The Petitioner has filed its rejoinder to the reply of MPPMCL vide affidavit dated 8.6.2021. The issues raised by MPPMCL and the clarifications given by the Petitioner are considered in the relevant paragraphs of this order.

## Re: Interest on Loan (IoL)

6. APTEL while dealing with the issue of computation of IoL, vide judgement dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgement dated 14.11.2006 in Appeal No. 94 of 2005 and Appeal No. 96 of 2005. APTEL vide its judgement dated 14.11.2006 had set aside the Commission's methodology of computation of Ioan on the actual repayment basis or normative repayment whichever is higher and held that the Commission is required to adopt normative debt repayment methodology for working out the IoL liability for the period from 1.4.1998 to 31.3.2001. In view of above, the interest allowed for 2001-04 and 2004-09 tariff periods is revised on the basis of the normative debt repayment methodology.

## Re: Additional Capital Expenditure (ACE)

7. APTEL *vide* its judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters held that ACE after commercial operation date (COD) should also be considered for computation of maintenance spares. In view of above, the maintenance spares to be considered for computation of working capital for the 2001-04 and 2004-09 periods are also required to be revised taking into consideration ACE after COD.

# Re: Depreciation

- 8. As regards depreciation, APTEL *vide* its judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh.
- 9. In view of the above directions of APTEL, the outstanding loan allowed for the transmission asset for the 2001-04 and 2004-09 tariff periods is revised in the instant order.
- 10. The revision of transmission tariff allowed for 2001-04 and 2004-09 tariff periods necessitates the revision of tariff allowed for 2009-14 period which is also being done in the instant order. The implementation of the directions of APTEL in judgement dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters was kept pending in case of the Petitioner awaiting the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the

tariff allowed earlier and allowed in the instant order for 2001-04, 2004-09 and 2009-14 tariff periods. Therefore, we direct that the Petitioner will neither claim nor pay any carrying cost from or to the beneficiaries for the difference, if any, in the tariff allowed earlier and the being allowed in the instant order. Further, the said difference in tariff shall be recovered/ paid over a period of six months from the date of issue of this order.

- 11. The hearing in this matter was held on 3.8.2021 through video conference and order was reserved.
- 12. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.
- 13. This order is issued considering the submissions made in the petition vide affidavits dated 14.1.2020 and 8.4.2021, reply filed by MPPMCL vide affidavit dated 5.6.2020 and rejoinder to the reply of MPPMCL filed by the Petitioner vide affidavit dated 8.6.2021.

# REVISION OF TRANSMISSION CHARGES ALLOWED FOR 2001-04, 2004-09 AND 2009-14 TARIFF PERIODS

## 2001-04 Tariff Period

- 14. The Commission vide order dated 18.7.2003 in Petition No. 49/2002 approved the transmission charges and thereafter revised the tariff vide order dated 17.1.2008 in Petition No. 49/2002 in respect of the transmission asset for 2001-04 period.
- 15. The transmission charges approved for 2001-04 period vide order dated 17.1.2008 in Petition No. 49/2002 are as follows:

(₹ in lakh)

Particulars	2001-02	2002-03	2003-04
Depreciation	81.63	81.63	81.63
Return on Equity	105.91	105.91	105.91
O&M Expenses	69.00	73.14	77.52
Advance against Depreciation	0.00	0.00	114.26
Interest on Loan	285.17	285.17	265.22
Interest on Working Capital	15.12	15.47	17.69
Total	556.83	561.32	662.23

16. The Petitioner has claimed the following revised transmission charges in respect of the transmission asset for 2001-04 period in this petition:

(₹ in lakh)

			(
Particulars	2001-02	2002-03	2003-04
Depreciation	81.63	81.63	81.63
Return on Equity	105.91	105.91	105.91
O&M Expenses	69.00	73.14	77.52
Advance against Depreciation .	0.00	0.00	114.26
Interest on Loan	285.30	285.30	265.19
Interest on Working Capital	15.12	15.48	17.69
Total	556.97	561.46	662,20

- 17. The Petitioner has claimed that the transmission tariff for 2001-04 period was approved by the Commission vide order dated 17.1.2008 in Petition No.49/2002. No ACE was claimed by the Petitioner during 2001-04 tariff period.
- 18. We have considered the submissions of the Petitioner and perused the order dated 17.1.2008 in Petition No. 49/2002. The tariff allowed in respect of the transmission asset on the basis of the following:
  - a) Admitted capital cost of ₹ 3012.57 lakh as on COD of the transmission asset;
  - b) Weighted Average Rate of Interest on actual loan, Weighted Average, Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per order dated 17.1.2008 in Petition No. 49/2002.

19. In view of the above, the revised transmission charges allowed in respect of the transmission asset for 2001-04 tariff period are as follows:

(₹ in lakh)

Particulars	2001-02	2002-03	2003-04
Depreciation	81.63	81.63	81.63
Return on Equity	105.91	105.91	105.91
O&M Expenses	69.00	73.14	77.52
Advance against Depreciation	0.00	0.00	114.26
Interest on Loan	285.30	285.30	265.18
Interest on Working Capital	15.12	15.48	17.69
Total	556.96	561.46	662.19

20. The Annual Fixed Charges (AFC) allowed for 2001-04 tariff period vide order dated 17.1.2008 in Petition No. 49/2002, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2001-02	2002-03	2003-04
AFC approved vide order dated 17.1.2008 in Petition No.49/2002	556.83	561.32	662.23
AFC claimed by the Petitioner in the instant petition	556.97	561.46	662.20
AFC allowed in the instant order	556.96	561.46	662.19

## 2004-09 Tariff Period

21. The Commission vide order dated 16.3.2006 in Petition No. 69/2004 approved the transmission charges in respect of the transmission asset for 2004-09 period and further revised the same on account of FERV adjustment vide order dated 29.4.2008 in Petition No. 69/2004. The Petitioner has claimed tariff based on capital cost of ₹3003.76 lakh after accounting for de-capitalization of ₹8.82 lakh on account of FERV. The transmission charges approved for 2004-09 period vide order dated 29.4.2008 in Petition No. 69/2004 are as follows:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	81.39	81.39	81.39	81.39	81.39
Return on Equity	92.67	92.67	92.67	92.67	92.67



Total	431.23	555.07	523.71	492.22	430.33
Interest on Working Capital	11.98	14.36	14.11	13.87	13.13
Interest on Loan	175.29	141.18	107.06	72.95	47.96
Advance against Depreciation	0.00	152.79	152.79	152.79	113.33
O&M Expenses	69.89	72.67	75.68	78.55	81.84

22. The Petitioner has claimed the following revised transmission charges in respect of the transmission asset for 2004-09 period in the instant petition:

					(₹ in lakh
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	81.39	81.39	81.39	81.39	81.39
Return on Equity	92.67	92.67	92.67	92.67	92.67
O&M Expenses	69.89	72.67	75.68	78.55	81.84
Advance against Depreciation	0.00	152.79	152.79	152.79	113.31
Interest on Loan	175.16	141.05	106.94	72.84	47.86
Interest on Working Capital	11.98	14.36	14.11	13.87	13.12
Total	431.09	554.94	523.58	492.10	430.20

- 23. We have considered the Petitioner's claim. The tariff is allowed in respect of the transmission asset on the basis of the following:
  - a) Admitted capital cost of ₹3003.76 lakh as on 1.4.2004 for transmission asset;
  - b) Weighted Average Rate of Interest on actual loan adopted from order dated 29.4.2008 in Petition No. 69/2004; and
  - c) Weighted Average Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per order dated 29.4.2008 in Petition No. 69/2004.
- 24. In view of the above, the revised transmission charges allowed in respect of the transmission asset for 2004-09 tariff period are as follows:

					(₹ in lakh)
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
epreciation	81.39	81.39	81.39	81.39	81.39

Particulars	2004-05	2005-00	2000-07	2007-00	2000-09
Depreciation	81.39	81.39	81.39	81.39	81.39
Interest on Loan	175.16	141.05	106.94	72.84	47.86
Return on Equity	92.67	92.67	92.67	92.67	92.67
Advance against Depreciation	0.00	152.79	152.79	152.79	113.31

Total	431.10	554.94	523.58	492.11	430.20
O&M Expenses	69.89	72.67	75.68	78.55	81.84
Interest on Working Capital	11.98	14.36	14.11	13.87	13.12

25. Annual Fixed Charges (AFC) allowed for 2004-09 tariff period vide order dated 29.4.2008 in Petition No. 69/2004, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

1					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC approved vide order dated 29.4.2008 in Petition No. 69/2004	430.78	555.18	523.72	492.15	430.05
AFC claimed by the Petitioner in the instant petition	431.09	554.94	523.58	492.10	430.20
AFC allowed in the instant order	431.10	554.94	523.58	492.11	430.20

## 2009-14 Tariff Period

26. The Commission vide order dated 15.9.2010 in Petition No. 7/2010 with I.A. No. 16/2010 approved the tariff in respect of the transmission asset for 2009-14 period and vide order dated 7.10.2015 in Petition No. 162/TT/2014 trued up the tariff allowed for 2009-14 period and the same is as follows:

(₹ in lakh)

<b>Particulars</b>	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	159.06	159.06	159.06	28.28	28.28
Interest on Loan	36.10	23.02	11.37	2.64	0.38
Return on Equity	123.61	128.14	128.26	128.26	129.81
Interest on Working capital	10.13	10.15	10.12	7.44	7.66
O&M Expenses	69.62	73:56	77.80	82.35	87.04
Total	398.51	393.92	386.60	248.96	253.16

27. The Petitioner has claimed the following revised transmission charges in respect of the transmission asset for 2009-14 period in this petition:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	159.06	159.06	159.06	28.28	28.28
Interest on Loan	35.99	22.92	11.25	2.55	0.36
Return on Equity	123.61	128.14	128.26	128.26	129.81



Interest on Working capital	10.12	10.14	10.11	7.43	7.66
O&M Expenses	69.62	73.56	77.80	82.35	87.04
Total	398.41	393.82	386.49	248.87	253.15

- 28. We have considered the Petitioner's claim. The tariff is allowed in respect of the transmission asset on the basis of the following:
  - a) Admitted capital cost of ₹3003.76 lakh for the transmission asset as on 1.4.2009;
  - b) No ACE during 2009-14 period;
  - c) Weighted Average Rate of Interest on actual loan derived/adopted from order dated 7.10.2015 in Petition No. 162/TT/2014; and
  - d) Weighted Average Rate of Depreciation as per order dated 7.10.2015 in Petition No. 162/TT/2014.
- 29. In view of the above, the revised transmission charges allowed in respect of the transmission asset for 2009-14 tariff period are as follows:

/≆ in lakh\

					/ III Idikii
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	159.06	159.06	159.06	28.28	28.28
Interest on Loan	35.99	22.92	11.25	2.55	0.36
Return on equity	123.61	128.14	128.26	128.26	129.81
Interest on Working Capital	10.12	10.14	10.11	7.43	7.66
O&M Expenses	69.62	73.56	77.80	82.35	87.04
Total	398.40	393.81	386.49	248.87	253.14

Annual Fixed Charges (AFC) allowed for 2009-14 tariff period vide order 30. dated 7.10.2015 in Petition No. 162/TT/2014, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC approved vide order dated 7.10.2015 in Petition No. 162/TT/2014	398.51	393.92	386.60	248.96	253.16
AFC claimed by the Petitioner in the instant petition	398.41	393.82	386.49	248.87	253.15
AFC allowed in the instant order	398.40	393.81	386.49	248.87	253.14



## TRUING UP OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

31. The details of the trued up transmission charges claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	28.28	28.28	28.28	28.28	28.28
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on equity	129.91	130.50	130.44	130.44	130.79
Interest on Working Capital	8.03	8.19	8.34	8.49	8.66
O&M Expenses	79.38	82.07	84.80	87.58	90.42
Total	245.60	249.04	251.86	254.79	258.15

32. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner are as follows:

(₹ in lakh)

					1 2 111 10015111
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	6.62	6.84	7.07	7.30	7.54
Maintenance Spares	11.91	12.31	12.72	13.14	13.56
Receivables	40.93	41.51	41.98	42.47	43.03
Total	59.46	60.66	61.77	62.91	64.13
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	8.03	8.19	8.34	8.49	8.66

#### Capital Cost as on 1.4.2014

- 33. The capital cost of the transmission asset has been calculated in accordance with Regulations 9(3) and Regulation 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 7.10.2015 in Petition No. 162/TT/2014 approved the transmission tariff in respect of the transmission asset for 2014-19 period based on admitted capital cost of ₹3003.76 lakh as on 31.3.2014 and the same has been considered for working out the trued up tariff for 2014-19 tariff period.
- 34. The Petitioner has not claimed any ACE during 2014-19 tariff period.

## Capital Cost considered for true up of tariff for 2014-19 period

35. The capital cost considered for truing up of tariff for 2014-19 tariff period is as follows:

		(₹ in lakh)
Capital Cost	ACE	Capital Cost
as on 1.4.2014	during 2014-19 Period	as on 31.3.2019
3003.76	0.00	300.76

## **Debt-Equity Ratio**

36. Debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the admitted debt-equity ratio of 77.96:22.04 for the period ending on 31.3.2014 has been considered as opening debt-equity ratio as on 1.4.2014 for the purpose of truing up of tariff of the 2014-19 period in respect of the transmission asset. The details of debt-equity ratio in respect of the transmission asset as on 1.4.2014 and 31.3.2019 are as follows:

Particulars	Capital cost as on 1.4.2014 (₹ in lakh)	(in %)	Total cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	2341.82	77.96%	2341.82	77.96%
Equity	661.94	22.04%	661.94	22.04%
Total	3003.76	100.00%	3003.76	100.00%

## Depreciation

- 37. The Petitioner has claimed depreciation considering capital expenditure of ₹3003.76 lakh as on 1.4.2014 in respect of the transmission asset. The Petitioner has not claimed any depreciation towards "IT Equipment" in the present petition.
- 38. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Gross Block during 2014-19 tariff

period with regard to the transmission asset has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is attached as Annexure-1. The transmission asset has already completed 12 years of life as on 31.3.2014. The remaining depreciable value of ₹565.53 lakh has been spread across the balance useful life of 20 years in accordance with Regulation 27(5) of the 2014 Tariff Regulations. WAROD has been worked out after taking into account the depreciation rates of asset as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 period in respect of the transmission asset as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	3003.76	3003.76	3003.76	3003.76	3003.76
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	3003.76	3003.76	3003.76	3003.76	3003.76
Average Gross Block	3003.76	3003.76	3003.76	3003.76	3003.76
Weighted average Rate of Depreciation (%)	0.94%	0.94%	0.94%	0.94%	0.94%
Balance useful life (at the beginning of the year) (Year)	20.00	19.00	18.00	17.00	16.00
Aggregate Depreciable Value	565.53	537.25	508.97	480.70	452.42
Depreciation during the year	28.28	28.28	28.28	28.28	28.28
Cumulative Aggregate Depreciation	2166.14	2194.41	2222.69	2250.96	2279.24
Remaining Aggregate Depreciable Value	537.25	508.97	480.70	452.42	424.14

39. The details of depreciation approved vide order dated 7.10.2015 in Petition No. 162/TT/2014, depreciation claimed in the instant petition and trued up depreciation allowed in respect of the transmission asset are as follows:

(₹ in lakh)

							1 4 111 141111
Particulars		2014-15	2015-16	2016-17	2017-18	2018-19	
Approved vid. 7.10.2015 in 162/TT/2014		dated No.	28.28	28.28	28.28	28.28	28.28



Claimed by the Petitioner in the instant petition	28.28	28.28	28.28	28.28	28.28
Allowed after true-up in this order	28.28	28.28	28.28	28.28	28.28

# Interest on Loan (IoL)

40. As the normative loan against the instant assets has already been fully repaid by the year2013-14, Interest on normative loan during the tariff period 2014-19 is NIL.

# Return on Equity ("RoE")

41. The Petitioner has claimed RoE in respect of the transmission asset in terms of Regulation 24 and Regulation 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

42. MPPMCL has submitted that the Petitioner has grossed-up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 periods and has not placed on record the assessment orders for 2016-17 and 2017-18 periods. For 2018-19 period, the Petitioner has grossed-up RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19 period. MPPMCL has further submitted that the Petitioner's Income Tax Assessment orders for Financial Years 2016-17, 2017-18 and 2018-19 periods have not been finalized. MPPMCL has submitted that the Petitioner has neither submitted copy of assessment orders for 2014-15 and 2015-

16 periods nor the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18 periods and in the absence of these essential documents, it is not possible to scrutinize the claim of the Petitioner in a proper way.

- 43. In response, the Petitioner has submitted that the assessment orders for years 2014-15, 2015-16 and 2016-17 periods have been issued by the Income Tax Department and Income Tax returns for years 2017-18 and 2018-19 have been filed. The Petitioner has further submitted that the assessment orders for the years 2014-15 and 2015-16 have already been submitted in Petition No. 20/TT/2020 and a copy of the assessment order for the year 2016-17 has been filed in the instant petition along with the rejoinder.
- 44. We have considered the submissions of the Petitioner and MPPMCL. The Commission vide order dated 2.2.2021 in Petition No. 312/TT/2020 has already dealt with the above issue of MPPMCL observing that the Petitioner has submitted assessment orders issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016-17 and Income Tax Returns have been filed by the Petitioner for the years 2017-18 and 2018-19. The Commission in the said order further observed that the Petitioner has submitted the documents as pointed out by MPPMCL. In view of our finding given in the order dated 2.2.2021 in Petition No. 312/TT/2020, no fresh consideration on this issue is required. Accordingly, the submissions of MPPMCL are rejected.
- 45. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner and the same is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

46. MAT rates as considered vide order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations and the same is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

47. Accordingly, RoE allowed in respect of the transmission asset is as follows:

(₹ in lakh)

				C III Idiani
2014-15	2015-16	2016-17	2017-18	2018-19
661.94	661.94	661.94	661.94	661.94
0.00	0.00	0.00	0.00	0.00
661.94	661.94	661.94	661.94	661.94
661.94	661.94	661.94	661.94	661.94
15.500	15.500	15.500	15.500	15.500
20.961	21.342	21.342	21.342	21.549
19.610	19.705	19.705	19.705	19.758
129.81	130.43	130.43	130.43	130.79
	661.94 0.00 661.94 661.94 15.500 20.961 19.610	661.94 661.94 0.00 0.00 661.94 661.94 661.94 661.94 15.500 15.500 20.961 21.342 19.610 19.705	661.94     661.94     661.94       0.00     0.00     0.00       661.94     661.94     661.94       661.94     661.94     661.94       15.500     15.500     15.500       20.961     21.342     21.342       19.610     19.705     19.705	661.94       661.94       661.94       661.94         0.00       0.00       0.00       0.00         661.94       661.94       661.94       661.94         661.94       661.94       661.94       661.94         15.500       15.500       15.500       15.500         20.961       21.342       21.342       21.342         19.610       19.705       19.705       19.705

48. The details of RoE approved vide order dated 7.10.2015 in Petition No. 162/TT/2014, RoE claimed in the instant petition and trued up RoE allowed in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 162/TT/2014	129.81	129.81	129.81	129.81	129.81
Claimed by the Petitioner in the instant petition	129.91	130.50	130.44	130.44	130.79
Allowed after true-up in this order	129.81	130.43	130.43	130.43	130.79

# Operation & Maintenance Expenses (O&M Expenses)

49. O&M Expenses as claimed by the Petitioner are within the norms specified under the 2014 Tariff Regulations. The allowable O&M Expenses are as follows:

(₹ in lakh)

					1 2 111 100121
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Transmiss	sion Line			
220 kV S/C single conductor (km)	184.00	184.00	184.00	184.00	184.00
Norms (₹ lakh/km)	0.20	0.21	0.22	0.22	0.23
O&M Transmission Line	37.17	38.46	39.74	41.03	42.32
	Sub-stati	on Bays			
220 kV Sub-station bays (number)	1	1	1	1	. 1
Norms (₹ lakh/bay)	42.21	43.61	45.06	46.55	48.10
O&M Expenses for					
Sub-station	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses (₹ in lakh)	79.38	82.07	84.80	87.58	90.42

50. The details of O&M Expenses approved vide order dated 7.10.2015 in Petition No. 162/TT/2014, O&M Expenses claimed in the instant petition and trued up O&M Expenses allowed in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 162/TT/2014	79.38	82.07	84.80	87.58	90.42
Claimed by the Petitioner in the instant petition	79.38	82.07	84.80	87.58	90.42
Allowed after true-up in this order	79.38	82.07	84.80	87.58	90.42

# Interest on Working Capital (IWC)

51. The Petitioner has claimed IWC as per Regulation 28 of the 2014 Tariff Regulations. IWC allowed in respect of the transmission asset is as follows:

(₹ in lakh) 2014-15 2015-16 2016-17 2017-18 **Particulars** 2018-19 O&M Expenses 6.84 7.07 7.54 6.61 7.30 (O&M Expenses for one Month) Maintenance Spares 12.31 12.72 11.91 13.14 13.56 (15% of O&M Expenses) Receivables (Equivalent to two months of 40.91 41.49 41.98 42.46 43.02 annual transmission charges) **Total Working Capital** 59.44 60.64 61.76 62.90 64.12 13.50 13.50 13.50 13.50 13.50 Rate of Interest (%) Interest of working capital 8.02 8.19 8.34 8.49 8.66

52. The details of IWC approved vide order dated 7.10.2015 in Petition No. 162/TT/2014, IWC claimed in the instant petition and trued up IWC allowed in respect of the transmission asset are as follows:

(₹ in lakh)

1				1	
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 7.10.2015 in Petition No. 162/TT/2014	8.02	8.17	8.32	8.48	8.63
Claimed by the Petitioner in the instant petition	8.03	8.19	8.34	8.49	8.66
Allowed after true-up in this order	8.02	8.19	8.34	8.49	8.66

# **Approved Annual Fixed Charges for 2014-19 Tariff Period**

53. Accordingly, Annual Fixed Charges after truing up for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017–18	2018-19
Depreciation	28.28	28.28	28.28	28.28	28.28
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	129.81	130.43	130.43	130.43	130.79
Interest on Working Capital	8.02	8.19	8.34	8.49	8.66
O&M Expenses	79.38	82.07	84.80	87.58	90.42



Total 245.48 248.96 251.85 254.78 258.14
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54. The details of Annual Transmission Charges approved vide order dated 7.10.2015 in Petition No. 162/TT/2014, as claimed in the instant petition and trued up Annual Transmission Charges allowed in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 7.10.2015 in Petition No. 162/TT/2014	245.49	248.33	251.21	254.15	257.14
Claimed by the Petitioner in the instant petition	245.60	249.04	251.86	254.79	258.15
Allowed after true-up in this order	245.48	248.96	251.85	254.78	258.14

# **DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD**

55. The Petitioner has claimed the following transmission charges in respect of the transmission asset for 2019-24 tariff period:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	28.28	28.28	32.39	37.63	32.85
Interest on Loan	0.00	0.00	0.00	0.12	0.12
Return on equity	124.33	124.33	124.40	125.30	126.13
Interest on Working Capital	5.33	5.44	5.58	5.74	5.87
O&M Expenses	69.75	72.01	74.67	77.17	79.89
Total	227.69	230.06	237.04	245.96	244.86

56. The details of IWC claimed by the Petitioner for 2019-24 period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
O&M Expenses	5.81	6.00	6.22	6.43	6.66	
Maintenance Spares	10.46	10.80	11.20	11.58	11.98	
Receivables	27.99	28.36	28.85	29.63	30.11	
Total	44.26	45.16	46.27	47.64	48.75	
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05	
Interest	5.33	5.44	5.58	5.74	5.87	



57. The tariff for the 2019-24 period is allowed as discussed in subsequent paragraphs.

## **Capital Cost**

- Regulation 19 of the 2019 Tariff Regulations provides as follows: 58.
  - "19. Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
  - (2) The Capital Cost of a new project shall include the following:
  - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
  - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed:
  - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
  - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
  - (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
  - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
  - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these reaulations:
  - (h) Adjustment of revenue earned by the transmission licensee by using the asset before the date of commercial operation;
  - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility:
  - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
  - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing:
  - (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
  - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
  - (n) Expenditure on account of change in law and force majeure events; and
  - (o) Capital cost incurred or projected to be incurred by a thermal generating station. on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.



- (3) The Capital cost of an existing project shall include the following:
- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The asset forming part of the project, but not in use, as declared in the tariff petition:
- (b) De-capitalised Asset after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned asset.

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."



59. The capital cost of ₹3003.76 lakh has been considered by the Commission for the transmission asset as on 31.3.2019 and the same has been considered as the opening capital cost as on 1.4.2019 for the purpose of determination of transmission tariff for 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

# Additional Capital Expenditure (ACE)

- 60. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:
  - "24. Additional Capitalization within the original scope and up to the cut-off date:
  - (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) Undischarged liabilities recognized to be payable at a future 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) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
    - (e) Change in law or compliance of any existing law; and
    - (f) 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.

- (2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution."
- "25. Additional Capitalisation within the original scope and after the cut-off date:
- (1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut off date may be admitted by the Commission, subject to prudence check:

- a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
- b) Change in law or compliance of any existing law;
- c) Deferred works relating to ash pond or ash handling system in the original scope of work:
- d) Liability for works executed prior to the cut-off date;
- e) Force Majeure events;
- f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
- g) Raising of ash dyke as a part of ash disposal system."
- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
  - a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
  - (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
  - (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
  - (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 61. The Petitioner has projected net ACE of ₹17.99 lakh after adjustment of decapitalisation during 2019-24 tariff period and the same is as follows:

(₹ in lakh) Net ACE projected Capital Capital Cost as on Cost as on 2022-23 2019-20 2020-21 2021-22 2023-24 31.3.2024 1.4.2019 3021.75 3003.76 0.00 0.00 (-)2.7020.68 0.00

- 62. The Petitioner has submitted that ACE proposed is for replacement of deteriorating component/equipment in the system which may affect the stability and reliability of the grid in case of sudden failures. The Petitioner has further submitted that the same is covered under Regulation 25(2) of the 2019 Tariff Regulations.
- 63. MPPMCL has submitted that the Petitioner has proposed cost towards ACE and de-capitalization during 2019-24 period with respect to replacement of equipments installed long back but the Petitioner has not submitted any study to



arrive at which equipment needs replacement on priority and the reasons for the same. MPPMCL has also submitted that request of the Petitioner may be admitted only after prudence check of pre- study/survey.

- 64. In response, the Petitioner submitted detailed justification for replacement of equipment for 2019-24 period and the same is as follows:
  - a) 220 kV Circuit breaker (1 set): The circuit breakers (CB) were commissioned in 1999 and are going to complete 24 years of operation during 2019-24 tariff period. The hydraulic types are obsolete and have frequent maintenance issues such as hydraulic drive/ magnetic ventil failures, air leakages, SF6 gas leakages etc.
  - b) Isolators (4 sets): These isolators are of horizontal centre break (HCB) type and frequent problems of misalignment are being faced. Current transfer assembly on isolator top and other major spares are now no more available due to old/ obsolete designs. Further due to rusting, many MOM boxes have got damaged and due to obsolescence of technology timely support from O&M design is not available.
  - c) Current transformer (3 numbers): These CT are of BHEL make dead tank type with porcelain housing and about to complete 24 years of service during the 2019-24 period. These CTs are hermetically sealed equipment and therefore major repair at site is not recommended.
  - d) Capacitive voltage transformer (3 numbers CVT): Due to ageing, there is leakage/ seepage from multiple points such as EMU tank, oil level glass, secondary terminal boxes. CVTs are hermetically sealed equipment and therefore major repair at site is not recommended. Further, after 25 years of operation, repairing of CVT at manufacturer works is not techno-economically viable due to change in design by manufacturer.
- 65. We have considered the submission of the Petitioner and MPPMCL. The proposed ACE is towards replacement of isolators, CTs, capacitive voltage

transformers (CVTs), control and relay panels, CB and power and control cables, due to obsolescence of technology. These items are of critical nature and their failure may affect the stability and reliability of the grid. It is observed that the Petitioner has submitted the OEM communications made in respect of equipment that are sought to be replaced in 2019-24 tariff period. As such, the replacement of these obsolete equipment and consequent ACE (and de-capitalization) is approved, subject to true-up on actual basis.

# 66. ACE and de-capitalisation allowed for 2019-24 tariff period is as follows:

(₹ in lakh)

SI. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	Total
1	ACE	0.00	0.00	17.43	53.32	0.00	70.75
2	De-capitalisation	0.00	0.00	20.12	32.64	0.00	52.76
3	Net ACE (3=1-2)	0.00	0.00	(-)2.69	20.68	0.00	17.99

## **Debt-Equity Ratio**

67. Regulation 18 of the 2019 Tariff Regulations provides as follows:

"18. Debt-Equity Ratio: (1) For new projects, the debt: equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

#### Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

**Explanation.-**The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the

competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

- (4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.
- (5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."
- 68. Debt-equity ratio for 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of debt-equity ratio considered for the purpose of tariff for 2019-24 tariff period are as follows:

Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	Total cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	2341.82	77.96%	2364.97	78.26%
Equity	661.94	22.04%	656.79	21.74%
Total	3003.76	100.00%	3021.75	100.00%

## **Depreciation**

- 69. Regulation 33 of the 2019 Tariff Regulations provides as follows:
  - **"33. Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of



all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the asset shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the asset of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the asset of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the asset.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the asset.



- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of asset in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."
- 70. The transmission asset has already completed more than 12 years before 1.4.2019. Accordingly, depreciation has been calculated based on the remaining depreciable value (upto 90% of existing gross block of asset) to be recovered over the balance useful life and thereafter no depreciation is allowed on existing asset. The transmission asset shall complete its useful life beyond 2019-24 tariff period. Further, the Commission vide Technical Validation letter dated 28.3.2021 directed the Petitioner to submit whether ACE claimed during 2019-24 period is for the purpose of life extension. In response, the Petitioner vide letter dated 8.4.2021, has submitted that there is no life extension in respect of the transmission asset.
- 71. Accordingly, depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019 over the remaining useful life of the transmission asset. Depreciation worked out is as follows:

(₹ in lakh)

					(
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	3003.76	3003.76	3003.76	3001.07	3021.75
Addition during 2019-24 due to projected ACE	0.00	0.00	(-) 2.69	20.68	0.00
Closing Gross Block	3003.76	3003.76	3001.07	3021.75	3021.75
Average Gross Block	3003.76	3003.76	3002.42	3011.41	3021.75
Balance useful life at the beginning of the year (Year)	15.00	14.00	13.00	12.00	11.00



Depreciable Value	2703.38	2703.38	2702.17	2710.27	2719.58
Rate of Depreciation (%)	0.94%	0.94%	0.94%	1.00%	1.10%
Depreciation during the year	28.28	28.28	28.18	30.11	33.12
Cumulative Aggregate Depreciation	2307.52	2335.79	2348.90	2355.25	2388.37
Remaining Aggregate Depreciable Value	395.87	367.59	338.20	331.26	331.20

# Interest on Loan (IoL)

- 72. Regulation 32 of the 2019 Tariff Regulations provides as follows:
  - "32.Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.
  - (2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.
  - (3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.
  - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year. (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;



Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing".
- 73. We have considered the submissions of the Petitioner. We observe that there are net add-caps during 2021-22 and 2022-23. The weighted average rates of IoL have been considered as claimed by the Petitioner. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. The floating rate of interest, if any, shall be considered at the time of true up. Accordingly, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset is as follows:

/₹ in lakh\

					1 milani
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	2341.82	2341.82	2341.82	2338.33	2350.21
Cumulative Repayments up to Previous Year	2341.82	2341.82	2341.82	2338.33	2343.00
Net Loan-Opening	0.00	0.00	0.00	0.00	7.21
Additions	0.00	0.00	12.20	37.32	0.00
Repayment during the year	0.00	0.00	12.20	30.11	7.21
Net Loan-Closing	0.00	0.00	0.00	7.21	0.00
Average Loan	0.00	0.00	0.00	3.60	3.60
Weighted Average Rate of Interest on Loan (%)	4.375%	4.375%	4.375%	4.376%	4.376%
Interest on Loan	0.00	0.00	0.00	0.16	0.16

#### Return on Equity (RoE)

- 74. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify as follows:
  - **"30. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.



(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

#### Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019."

- "31. Tax on Return on Equity:(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.
- (2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)



Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

#### Illustration-

- (i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess: Rate of return on equity = 15.50/ (1-0.2155) = 19.758%
- (ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:
  - (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore:
  - (b) Estimated Advance Tax for the year on above is Rs 240 crore:
  - (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%:
  - (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%
- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year 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 income tax authorities pertaining to the tariff period 2019-24 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 return on equity 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."
- 75. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, MAT rate applicable in 2019-20 period has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission asset under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

1 To Teach							
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
Opening Equity	661.94	661.94	661.94	662.74	671.54		
Additions	0.00	0.00	0.80	8.80	0.00		
Closing Equity	661.94	661.94	662.74	671.54	671.54		
Average Equity	661.94	661.94	662.34	667.14	671.54		
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50		
MAT Rate for respective year (%)	17.47	17.47	17.47	17.47	17.47		



Rate of Return on Equity (%)	18.78	18.78	18.78	18.78	18.78
Return on Equity	124.33	124.33	124.40	125.30	126.13

# **Operation & Maintenance Expenses (O&M Expenses)**

76. Regulation 35(3)(a) and 35(4) of the 2019 Tariff Regulations specify the norms for O&M Expenses for the transmission system and the same are as follows:

"(3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station	n Bays (₹ Lakh <sub>I</sub>	per bay)			
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transform	ers (₹ Lakh per	MVA)			
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and H	/DC lines (₹ Lai	kh per km)			
Single Circuit (Bundled Conductor with six or more sub- conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub- conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled Conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433



Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC state	ions				
HVDC Back-to- Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	86 <i>4</i>	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand- Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi- Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath- Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

### Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;



- the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme iii. (2000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW):
- the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme iv. (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- the O&M expenses of Static Synchronous Compensator and Static Var vi. Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.
- The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.
- The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

- (4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."
- 77. O&M Expenses claimed by the Petitioner in respect of the transmission asset are as follows:

(₹ in lakh)

					(X III Iakii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Trans	mission Lin	е		
220 kV S/C Korba-Budhipadar					
Ckt-III (single conductor line)	184.00	184.00	184.00	184.00	184.00
(km)					
Norms (₹ lakh/km)	0.25	0.26	0.27	0.28	0.29
O&M Transmission Line	46.37	47.84	49.68	51.34	53.18
	Sub-	station Bays	3		-
One Number of 220 kV Sub-	1	1	1	1	4
station bay @ korba (number)	'	'	'	'	l
Norms (₹ lakh/bay)	22.51	23.30	24.12	24.96	25.84



O&M Sub-station	22.51	23.30	24.12	24.96	25.84
1	Commur	nication sys	tem		
PLCC (₹ in lakh)	22.54	22.54	22.54	22.54	22.54
Norms (%)	1	1	1	1	1
O&M communication system	22.51	23.30	24.12	24.96	25.84
Total O&M Expenses (₹ in lakh)	69.75	72.01	74.67	77.17	79.89

78. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

79. O&M Expenses approved in respect of the transmission asset for 2019-24 tariff period are as follows:

					(₹ in lakh)
Particulars **	2019-20	2020-21	2021-22	2022-23	2023-24
	Tran	smission Li	ne		
220 kV S/C single conductor line(km)	184.00	184.00	184.00	184.00	184.00
Norms (₹ lakh/km)	0.25	0.26	0.27	0.28	0.29
O&M Transmission Line	46.37	47.84	49.68	51.34	53.18
	Sub	-station Bay	/S		
220 kV Sub-station (number)	1	1	1	1	1
Norms (₹ lakh/bay)	22.51	23.30	24.12	24.96	25.84
O&M Sub-station	22.51	23.30	24.12	24.96	25.84
Total O&M Expenses (₹ in lakh)	68.88	71.14	73.80	76.30	79.02



# Interest on Working Capital (IWC)

- 80. Regulations 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify as follows:
  - "34. Interest on Working Capital

(1)...

- (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
  - i. Receivables equivalent to 45 days of fixed cost;
  - ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
  - iii. Operation and maintenance expenses, including security expenses for one month"
- "(3)Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

- (4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."
- "3.Definitions ...
- (7) 'Bank Rate' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"
- The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) on working capital considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, RoI for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus

350 basis points). The components of the working capital and interest thereon allowed in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M					
Expenses	5.74	5.93	6.15	6.36	6.58
(O&M Expenses for one Month)					
Working Capital for					
Maintenance Spares	10.33	10.67	11.07	11.44	11.85
(15% of O&M)					
Working Capital for Receivables					
(Equivalent to two months of	27.88	28.21	28.55	29.24	29.98
annual transmission charges)					
Total Working Capital	43.95	44.81	45.77	47.04	48.42
Rate of Interest (in %)	12.05%	11.25%	11.25%	11.25%	11.25%
Interest of working capital	5.30	5.04	5.15	5.29	5.45

# **Annual Fixed Charges for 2019-24 Tariff Period**

82. The transmission charges allowed in respect of the transmission asset for 2019-24 period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	28.28	28.28	28.18	30.11	33.12
Interest on Loan	0.00	0.00	0.00	0.16	0.16
Return on Equity	124.33	124.33	124.40	125.30	126.13
Interest on Working Capital	5.30	5.04	5.15	5.29	5.45
O&M Expenses	68.88	71.14	73.80	76.30	79.02
Total	226.78	228.78	231.53	237.16	243.87

# Filing Fee and Publication Expenses

83. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.



# **Licence Fee & RLDC Fees and Charges**

84. The Petitioner has prayed for reimbursement of licence fee and recovery of RLDC fees and charges. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for 2019-24 period.

# **Goods and Services Tax**

- 85. The Petitioner has submitted that 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.
- 86. We have considered the submissions of the Petitioner. Since, GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

### Security Expenses

- 87. The Petitioner has submitted that security expenses for the transmission asset are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.
- 88. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on projected basis for 2019-24 tariff period

Order in Petition No. 326/TT/2020

on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

### Capital Spares

89. The Petitioner has sought reimbursement of capital spares at the end of tariff period. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

# Sharing of Transmission Charges

90. During 2001-04, 2004-09 and 2009-14 tariff periods (upto 30.6.2011), the transmission charges for inter-State transmission systems were being shared in accordance with the tariff regulations for the respective tariff periods. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2010 and with effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (2020 Sharing Regulations). Accordingly, the liabilities of the DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period

shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

### 91. To summarise:

a) The revised AFC allowed in respect of the transmission asset for period from 1.4. 2001 to 31.3.2004 as per the APTEL's judgments are as follows:

			(₹ in lakh)
Particulars	2001-02	2002-03	2003-04
AFC	556.96	561.46	662.19

b) The revised AFC allowed in respect of the transmission asset for the period from 1.4.2004 to 31.3.2009 as per the APTEL's judgments are as follows:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC	431.10	554.94	523.58	492.11	430.20

c) The consequential revision of AFC allowed in respect of the transmission asset for 2009-14 tariff period are as follows:

					(₹ in lakh)
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC	398.40	393.81	386.49	248.87	253.14

d) The trued-up AFC allowed in respect of the transmission asset for 2014-19 tariff period are as follows:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	245.48	248.96	251.85	254.78	258.14

e) AFC allowed in respect of the transmission asset for 2019-24 tariff period in this order are as follows:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	226.78	228.78	231.53	237.16	243.87

92. Annexure-I and Annexure-II given hereinafter shall form part of the order.

Order in Petition No. 326/TT/2020

This order disposes of Petition No. 326/TT/2020 in terms of the above 93. discussions and findings.

sd/-(P. K. Singh) Member

sd/-(Arun Goyal) Member

sd/-(I.S.Jha) Member

sd/-(P. K. Pujari) Chairperson

# Annexure-I

•	Admitted Admitted Capital Cost as	Rate of		Annual Depreciation as per Regulations (₹ in lakh)	ciation as per (₹ in lakh)	r Regulations	
Land         0.00           Building         0.00           Transmission         2697.65           Line         262.60           PLCC         43.51           TOTAL         3003.76	2014 on 31.3.2019 akh) (₹ in lakh)	(%)	2014-15	2015-16	2016-17	2017-18	2018-19
Building         0.00           Transmission         2697.65           Line         262.60           PLCC         43.51           TOTAL         3003.76		00.00					
Transmission         2697.65           Line         262.60           PLCC         43.51           TOTAL         3003.76	0.00	2.17					
Sub Station         262.60           PLCC         43.51           TOTAL         3003.76	697.65	1.16					
43.51 L 3003.76	262.60 262.60	1.16					
3003.76	43.51 43.51	0.61					
	003.76 3003.76		28.28	28.28	28.28	28.28	28.28
AVE	Average Gross	ss Block (₹ in lakh)	2703.38	2703.38	2703.38	2703.38	2703.38

0.94%

0.94%

0.94%

0.94%

0.94%

Weighted Average Rate of Depreciation (%)



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Asset	Particular	Admitted Capital Cost as on	Admitted Capital Cost as on	Rate of		Annual Depr	Annual Depreciation as per Regulations (₹ in lakh)	r Regulations	
		31.3.2019 (₹ in lakh)	31.3.2024 (₹ in lakh)	(%)	2019-20	2020-21	2021-22	2022-23	2023-24
	Land	0.00	0.00	00.00					
	Building	0.00	0.00	2.17					
Asset	Transmission Line	2697.65	2697.65	1.16					
	Sub Station	262.60	280.59	1.16					
	PLCC	43.51	43.51	0.61					
	TOTAL	3003.76	3021.75		28.28	28.28	28.18	30.11	33.12
			Average Gross Block (₹ in lakh)	ock (₹ in lakh)	3003.76	3003.76	3002.42	3011.41	3021.75
			Weighted Average Rate of Depreciation (%)	Rate of	0.94%	0.94%	0.94%	1.00%	1.10%

Annexure-II

Order in Petition No. 326/TT/2020



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sagarandassociates@yahoo.co.in

GST No: TS - 36AAJFS7295N1Z8 AP - 37AAJFS7295N2Z5

### **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 for Korba-Budhipadar Transmission System in Western Region-1 and odisha Project of Power Grid Corporation of India Limited, which is detailed as under:

(₹ in Lakh)

S/N	Particulars	Freeh old Land	Lease hold Land	Buildin g and Civil Works	Tr. Line	Sub Station	OPGW	Commu nicatio n System excl. OPGW	I. T Equipmen t incl. software	Batteri es	Total
1	CAPITAL COST AS ADMITTED BY CERC as on 31.03.2019 for TARIFF BLOCK 2019-24 vide order 326/TT/2020 dated 21.09.2021			-	2697.65	262.6	-	43.51	-	-	3,003.76
2	Estimated Add-cap During 2024-25	8	-	-	2	120.57		-	-	-	120.57
3	Estimated Decap During 2024-25	*	-	-	3	(52.76)	9	-		-	(52.76)
4	Estimated Add-cap During 2026-27	-	-	-		50.63	-	-	2.80	-	53.43
5	Estimated De-cap During 2026-27	-			*	-		-	-	-	-
6	Estimated Add-cap During 2027-28		-			33.75		-	1.87	-	35.62
7	Estimated De-cap During 2027-28	٠	-	-		(36.07)	-	-		2	(36.07)
	Total	-	-	-	2,697.65	378.72	-	43.51	4.67	- 1	3,124.55

We certify that we have verified the expenditure up to 31.03.2024 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-1 & Odisha Project) as on 31.03.2024.

The estimated expenditure is based on Management estimate.

Place:-Hyderabad Date:-30-11-2024 Chartered Accountants
FRN:003510S
AJAY KUMAR
MISHRA

(Ajay Kumar Mishra)
Partner
MRN: 205468

UDIN:24205468BKGPGC3653



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of De-cani	
Statement	

Name of the Petitioner Works-Buddhigader Transmission System in Western Region Name of the Perision of 220 kV S/C line alongwith Extension of 220 kV existing sub-station at Budhigadar and Extension of 220/132 kV existing sub-station at Rorba-Budhigadar 220 kV S/C line alongwith Extension of 220 kV existing sub-station at Rorba-Budhigadar 220 kV S/C line alongwith Extension of 220 kV existing sub-station at Rorba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar 20 kV S/C line alongwith Extension of 220 kV S/C line alongwith Extension of 220 kV S/C line alongwith Extension of 220 kV existing sub-station at Korba-Budhigadar 20 kV S/C line alongwith Extension of 220 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of Campilar S/C S/C line alongwith Extension of 220 kV S/C line alongwith Extension of 220 kV S/C line alongwith Extension of 220 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Korba-Budhigadar and Extension of 220/132 kV existing sub-station at Corba-Budhigadar and Exte		Claremont of L	Statement of Descapitalisation			
of the Region of the Project of the Project of the transmission t or communication  Year of Decapitalisation  (2)	india Ltd					
of the Project of the transmission t or communication  Year of  Decapitalisation  (2)  2024-25						
t or communication t or communication  Year of  Decapitalisation  (2)  2024-25	ission System in Western Region					
tor communication  10.09.1999  Vear of Work/Equipment proposed to be de-capitalised  Y  (2)  (3)  (3)  (3)  (4)  (2)  (4)  (5)  (5)  (6)  (7)  (7)  (8)  (8)  (9)  (9)  (9)  (1)  (1)  (2)  (2)  (3)  (4)  (5)  (5)  (6)  (7)  (7)  (8)  (8)  (8)  (9)  (9)  (9)  (1)  (1)  (2)  (2)  (3)  (4)  (5)  (5)  (6)  (7)  (7)  (8)  (8)  (8)  (9)  (9)  (9)  (1)  (1)  (1)  (1)  (2)  (2)  (3)  (4)  (4)  (5)  (6)  (7)  (7)  (7)  (8)  (8)  (9)  (9)  (9)  (9)  (9)  (9	7 S/C line alongwith Extension of 220 kV existing s	ub-station at Budhipada	r and Extension of 220/132 kV	existing sub-station at Korba		
No. Year of Year of Work/Equipment proposed to be de-capitalised (1) (2) (3) (3) (3) (2024-25 Replacement of Circuit Breakers, CTs, CVTs, Isolaters						
Year of Decapitalisation  (2)  (3)  (3)  (3)  (2024-25  Replacement of Circuit Breakers, CTs, CVTs, Isolaters						
Year of Decapitalisation Work/Equipment proposed to be de-capitalised (2) (3) (3) (2) Replacement of Circuit Breakers, CTs, CVTs, Isolaters			5			Rs in Lakh
(2) (3) 2024-25 Replacement of Circuit Breakers, CTs, CVTs, Isolaters	> "	ear of capitalisation of Original book value of asset/equipment being asset being de capitalised capitalised	Debt Equity ratio at the time of capitalisation	Cumulative(In Rs) Depreciation corresponding to decapitalisation	Cumulative Repayment of Loan corresponding to decapitalisation	Justification
Replacement of Circuit Breakers, CTs, CVTs, Isolaters	(4)	(5)	(9)	(2)	(6)	(10)
	Breakers, CTs, CVTs, 01.09.1999	52.76	77.95:22.05	47.48	41.13	Upgradation of old equipments
1 Replacement of Circuit Breakers, CTS, CVTs. 01.09. Isolaters	Breakers, CTs, CVTs. 01.09.1999 crs	36.07	77.95:22.05	32.46	28.12	Upgradation of old equipments





# **Summary of Tariff**

Form No. - 1

Name of the T	Fransmission Licensee:	Power Grid Corporation of India Limited	
Project	Korba - Budhipadar Tra	nsmision System	
Element Description	Korba - Budhipadar Tra	nsmision System	
Region	Western Region	DOCO Date Sep 1, 1999	

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Year Days	366.00	365.00	365.00	365.00	366.00
Tariff Days	366.00	365.00	365.00	365.00	366.00
Depreciation-Form No. 10A	28.28	28.28	28.28	28.29	28.28
Interest on Loan-Form No. 9E	0.00	0.00	0.00	0.00	0.00
Return on Equity-Form No. 8	124.33	124.33	124.33	124.33	124.33
Int. on Working capital-Form No.11	5.30	5.04	4.80	4.90	5.71
Op. and maintenance-Form No.2	68.88	71.14	73.80	76.30	79.02
Total AFC	226.79	228.79	231.21	233.82	237.34



# Details of Transmission Lines and Substations, Communication System covered in the project scope Form No. - 2 and O&M for instant asset

Name of the Tr	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Korba - Budhipadar Transmision System	ansmision System		
Element Description	Korba - Budhipadar Transmision System	ansmision System		
Region	Western Region		DOCO Date	Sep 1, 1999

1. Transmission Lines

	Type of	S/C or	No of Sub-	Voltage	Line	Line Reactor	Line	Date of	Covere pre	Covered in the present petition
Name of Line	Line AC/ HVDC	D/C	Conductors Level Bays KV	Level	Bays	(Including Switchable Reactor)	Length Km	Length Commercial Yes/No If No, Km operation Petition No.	Yes/No	If No, Petition No.
220KV KORBA-BUDIPADAR CKT III	AC	SC	_	220 KV	220 KV 0.000 0.000	0.000	184.000	184.000 Sep 1, 1999	>	

# Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
SINGLE CIRCUIT (SINGLE CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.252	0.26	0.27	0.279	0.289
No. of Units - ( Length in KM )	184.00	184.00	184.00	184.00	184.00
O&M Claimed // 10 N	46.37	47.84	49.68	51.34	53.18

# 2. Sub Station

					No.	No. of Bays		Σ	VA/MV	MVA/MVAR Capacity	acity		Covered in the present	ered the sent
Manage of State added	Type of Voltage	Voltage										Date of	pet	ition
Name of Sub-Station	Substation	K K	SVC etc. (with capacity)	765 KV	400 K2	220 KV	132 KV	¥ 52	65 5 5	220 KV	132 KV	Comm. operation	S / S	etitic,
Korba:220KV KORBA-BUDHIPADAR CKT-III conventio	Conventio	220 KV				1.000						Sep 1, 1999 Y	>	

# Summary:

O&M Expenses For Substations Covered in the instant petition	2019-20	2020-21	2021-22	2022-23	2023-24
220KV SUB-STATION					
Normative Rate of O&M as per Regulation	22.51	23.30	24.12	24.96	25.84
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	22.51	23.30	24.12	24.96	25.84





Particular	2019-20	2020-21	2021-22	2022-23	2023-24
A) Normative O&M					
Transmission Line	46.37	47.84	49.68	51.34	53.18
Substation	22.51	23.30	24.12	24.96	25.84
Communication System	00.00	00.00	00.00	00.00	0.00
Total Normative O&M	68.88	71.14	73.80	76.30	79.02
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition )					
*Security Expenses	00.00	00.00	00.00	00.00	0.00
*Actual Capital Spare consumed	00.00	00.00	00.00	00.00	0.00
*Insurance Premium Paid	00.00	00.00	00.00	00.00	0.00
Total O&M	68.88	71.14	73.80	76.30	79.02



# Normative parameters considered for tariff computations

Form No. - 3

Name of the T	ransmission Licensee	Power Grid Corporation of India Limited	
Project	Korba - Budhipadar Tran	smision System	
Element Description	Korba - Budhipadar Tran	smision System	
Region	Western Region	DOCO Date Sep 1, 1999	)

(Amount in Rs. Lakh)

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Base Rate of Return of Equity (in %)		1				
Tax Rate (in %)	21.55	17.472	17.472	17.472	17.472	17.472
Effective tax rate (in %)						
Grossed up Rate of ROE (in %)	19.758	18.782	18.782	18.782	18.782	18.782
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	96.20	45.01	46.60	48.23	49.93	51.68
400 kV	68.71	32.15	33.28	34.45	35.66	36.91
220 kV	48.10	22.51	23.30	24.12	24.96	25.84
132 kV and below	34.36	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (Rs Lakh per MVA)					τ.	
765 kV	0.00	0.491	0.508	0.526	0.545	0.564
400 kV	0.00	0.358	0.371	0.384	0.398	0.411
220 kV	0.00	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.00	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (Rs Lakh per km)						
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.806	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub- conductors)	0.691	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.461	0.503	0.521	0.539	0.558	0.578
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0153001 : Truing Up: Korba - Budhipadar Transmision System

Single Circuit (Single Conductor)	0.23	0.252	0.26	0.27	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.21	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.806	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.346	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.123	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.413	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations			1			
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	0.00	834.00	864.00	894.00	925.00	958.00
Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)	0.00	1,666.00	1,725.00	1,785.00	1,848.00	1,913.00
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	0.00	2,252.00	2,331.00	2,413.00	2,498.00	2,586.00
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	0.00	2,468.00	2,555.00	2,645.00	2,738.00	2,834.00
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	0.00	1,696.00	1,756.00	1,817.00	1,881.00	1,947.00
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	0.00	2,563.00	2,653.00	2,746.00	2,842.00	2,942.00



# Financial Package upto COD

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limited	
Project	Korba - Budhipadar Tr	ansmision System		
Element Description	Korba - Budhipadar Tr	ansmision System		
Region	Western Region		DOCO Date	Sep 1, 1999

(Amount in Rs. Lakh)

	Financial F Appro	Package as oved	Financial on COD 0	Package as 1/04/2019	As Admitte 01/04/	ed on COD
Particulars	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	0.00		0.00	INR	2,341.81
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	0.00		0.00	INR	661.94
Total Equity	INR	0.00		0.00	INR	661.94
Debt Equity Ratio					78:22	
Total Cost	INR	0.00		0.00	INR	3,003.75

Particulars	Debt	Equity	Total	
Addcap for 2019 - 2020			0.00	
Addcap for 2020 - 2021			0.00	OPORATION
Addcap for 2021 - 2022			0.00	विक्षि पावरचिड
Addcap for 2022 - 2023			0.00	C. J.S.

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0153001 : Truing Up: Korba - Budhipadar Transmision System

Addcap for 2023 - 2024	0.00	

Particulars	Actual	Normative	
Addcap for 2019 - 2020			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2020 - 2021			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2021 - 2022			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2022 - 2023			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2023 - 2024		=	
Equity		0.00	
Debt		0.00	
Total		0.00	
Total Capital cost with Addcap		3,003.75	



# Statement of Additional Capitalisation after COD

Form No. - 7

Name of the T	ransmission Licensee	Power Grid Corporat	tion of India Limited	d
Project	Korba - Budhipadar Trai	nsmision System		
Element Description	Korba - Budhipadar Trai	nsmision System		
Region	Western Region		DOCO Date	Sep 1, 1999

		1						1	
Particulars	Addition into Gross Block as per books	De-Cap into Gross Block as per books		: Deduction town	ards		Add: Discharge of	ACE on cash basis for tariff	Admitte d Cost in final
Particulars	of Account during the year (2)	of Account during the year	110000000000000000000000000000000000000	pertaini ng to other busines s (If any) (4)	Other Dedu ct ion (if any) (5)	Less: Un- discharge d liability included in (2-4-5)	earlier admitted liability	purpose	tariff (Rs Lakh)
ACE for the year :2019-20 (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/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	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	ORPORO.00	0.00
ACE for the year :2020-21 (Actual/Projected)							(	्र भावस्थाः POWEYSRI	(C)

	0.00	Page 2 o	d	3		Korba - Budhipadar Tra		400 # - Q.20	0.00
Land (Freehold Land)  Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 POWEROUD 0.00	0.00
ACE for the year :2022-23 (Actual/Projected)			2.22		0.00		6	RPORATION	\
Total	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
Batteries	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
Land (Leasehold)	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
Substations	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
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Freehold Land)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACE for the year :2021-22 (Actual/Projected)									
Total	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
Batteries	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
Land (Leasehold)	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
Substations	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
Building & Civil Works	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land (Freehold Land)	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/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	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 :2023-24 (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/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	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

# Financing of Additional Capitalisation

Name of the Tr	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Korba - Budhipadar Transmision Śystem	nsmision System		
Element Description	Korba - Budhipadar Transmision System	nsmision System		
Region	Western Region		DOCO Date	Sep 1, 1999

(Amount in Rs. Lakh)

		A	Actual/Projected	cted				Admitted		
Financial Year ( Starting of COD)	2019-20	2020-21	2021-22	2022-23	2023-24	2019-20	2020-21	2021-22	2022-23	2023-24
Amount capitilized in Work/ Equipment										
	*									
Financing Details										
Total Loan	0.00	00:00	0.00	00.00	00.00					
Equity GRID CO	00.00	00.00	0.00	0.00	0.00					
OORA POWE										
Total (SE)	00.00	00.00	00.00	0.00	00'0					

Mas

# **Calculation of ROE**

Name of the	Fransmission Licensee	Power Grid Corporation of	f India Limited	
Project	Korba - Budhipadar Tra	nsmision System		
Element Description	Korba - Budhipadar Tra	nsmision System		
Region	Western Region	DC	OCO Date	Sep 1, 1999

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the year	366.00	365.00	365.00	365.00	366.00
No. of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Opening Normative Equity	661.94	661.94	661.94	661.94	661.94
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)	661.94	661.94	661.94	661.94	661.94
Add: Increase in Equity due to addition during the year / period	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	661.94	661.94	661.94	661.94	661.94
Average Normative Equity	661.94	661.94	661.94	661.94	661.94
Rate of return on Equity (%)	18.782	18.782	18.782	18.782	18.782
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	15.50	15.50	15.50	15.50	15.50
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	RA7 18.782
Return on Equity	124.33	124.33	124.33	124.33	124.33
Pro rata return on Equity	124.33	124.33	124.33	124.33	124.33
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## Form No. - 9C

# Calculation of WAR of interest on actual loan

Name of the Transmission Licensee Power Grid Corporation of India Limited						
Project Korba - Budhipadar Transmision System						
Element Description	Korna - Kudhinadar Transmision System					
Region	Western Region		DOCO Date	Sep 1, 1999		

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
BOND VII -DOCO					
Gross Loan- Opening	669.00	669.00	669.00	669.00	669.00
Cumulative repayments of Loans upto previous year	669.00	669.00	669.00	669.00	669.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	13.64	13.64	13.64	13.64	13.64
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND - XIII - OPTION - II -DOCO	•				
Gross Loan- Opening	518.00	518.00	518.00	518.00	518.00
Cumulative repayments of Loans upto previous year	518.00	518.00	518.00	518.00	518.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00

Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.85	7.85	7.85	7.85	7.85
Interest on loan	0.00	0.00	0.00	0.00	0.00

CORPORATION BANK -DOCO					
Gross Loan- Opening	334.00	334.00	334.00	334.00	334.00
Cumulative repayments of Loans upto previous year	334.00	334.00	334.00	334.00	334.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	0.00
Interest on loan	0.00	0.00	0.00	0.00	0.00

PUNJAB NATIONAL BANK-I -DOCO					
Gross Loan- Opening	669.00	669.00	669.00	669.00	669.00
Cumulative repayments of Loans upto previous year	669.00	669.00	669.00	669.00	669.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	0.00	0.00	0.00	0.00	0.00
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOI (FOREIGN CURRENCY) -DOCO					
Gross Loan- Opening	148.41	148.41	148.41	148.41	148.41
Cumulative repayments of Loans upto previous year	117.17	124.98	132.79	140.60	148.41
Net loan-Opening	31.24	23.43	15.62	7.81	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	7.81	7.81	7.81	7.81	0.00
Net Loan-Closing	23.43	15.62	7.81	0.00	0.00
Average Net Loan	27.34	19.53	11.72	3.91	0.00
Rate of Interest on Loan on Annual Basis	3.9478	2.3452	1.8187	3.30	0.00
Interest on loan	1.0793	0.458	0.2132	0.129	0.00

# Summary

Gross Loan- Opening	2,338.41	2,338.41	2,338.41	2,338.41	2,338.41
Cumulative repayments of Loans upto previous year	2,307.17	2,314.98	2,322.79	2,330.60	2,338.41
Net loan-Opening	31.24	23.43	15.62	7.81	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of loan during the year	7.81	7.81	7.81	7.81	0.00
Net Loan-Closing	23.43	15.62	7.81	0.00	0.00
Average Net Loan	27.34	19.53	11.72	3.91	0.00
Rate of Interest on Loan on Annual Basis	3.9477	2.3451	1.8191	3.2992	3.2992
Interest on loan	1.0793	0.458	0.2132	0.129	0.00

Name of the	Transmission Licensee	Power Grid Corporation	on of India Limited			
Project Korba - Budhipadar Transmision System						
Element Description	Korba - Budhipadar Transmision System					
Region	Western Region		DOCO Date	Sep 1, 1999		

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
BOI (FOREIGN CURRENCY) -DOCO -USD					
Gross Loan-Opening	3.39	3.39	3.39	3.39	3.39
Cumulative repayments of loans upto previous year	2.6763	2.8547	3.0332	3.2116	3.39
Net Loans-Opening	0.7137	0.5353	0.3568	0.1784	0.00
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.1784	0.1784	0.1784	0.1784	0.00
Net Loan-Closing	0.5353	0.3569	0.1784	0.00	0.00
Average Net Loan	0.6245	0.4461	0.2676	0.0892	0.00
Rate of interest on Loan on Annual Basis	3.9478	2.3452	1.8187	3.30	0.00
Interest on loan	0.024654	0.010462	0.004867	0.002944	0.00

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# on Normative Ioan Form No. - 9E

# **Calculation of interest on Normative Ioan**

Name of the	Fransmission Licensee	ower Grid Corporation of India Limited					
Project	Korba - Budhipadar Transmision System						
Element Description	Korba - Budhipadar Tra	Korba - Budhipadar Transmision System					
Region	Western Region	ı	DOCO Date	Sep 1, 1999			

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Days in the Year	366.00	365.00	365.00	365.00	366.00
No. of days for which Tariff claimed	366.00	365.00	365.00	365.00	366.00
Gross normative loan-Opening	2,341.81	2,341.81	2,341.81	2,341.81	2,341.81
Cumulative repayments of Normative loan upto previous year	2,341.81	2,341.81	2,341.81	2,341.81	2,341.81
Net normative loan-Opening	0.00	0.00	0.00	0.00	0.00
Addition in normative loan towards the ACE	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00
Adjustment of cumulative repayment pertaining to the decapitalised asset	0.00	0.00	0.00	0.00	0.00
Net normative loan - closing	0.00	0.00	0.00	0.00	0.00
Average normative loan	0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of interest on actual loan	3.9477	2.3451	1.8191	3.2992	3.2992
Interest on normative loan	0.00	0.00	0.00	0.00	0.00
Pro rata interest on normative loan	0.00	0.00	0.00	0.00	0.00



# **Calculation of Depreciation Rate on Original Project Cost**

Form No. - 10

Name of the 7	Fransmission Licensee	Power Grid Corporation of India Limited				
Project Korba - Budhipadar Transmision System						
Element Description	Korba - Budhipadar Transmision System					
Region	Western Region DOCO Date Sep 1, 1999					

					(Amount in Rs. Lakn)		
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 31.03.2024	
2019-20							
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	2,697.65	0.00	2,697.65	2,697.65	5.28	25.40	
Sub Station	262.60	0.00	262.60	262.60	5.28	2.47	
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	6.33	0.41	
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	5.28	0.00	
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00	
TOTAL	3,003.76	0.00	3,003.76	3,003.76	0.00	28.28	
Weighted Average Rate of Depreciation(%)					0.941487		

2020-21					CORPORATION
Land(Freehold)	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	2,697.65	0.00	2,697.65	2,697.65	5.28	25.40
Sub Station	262.60	0.00	262.60	262.60	5.28	2.47
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	6.33	0.41
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	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,003.76	0.00	3,003.76	3,003.76	0.00	28.28
Weighted Average Rate of Depreciation(%)					0.941487	

2021-22							
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	2,697.65	0.00	2,697.65	2,697.65	5.28		25.40
Sub Station	262.60	0.00	262.60	262.60	5.28		2.47
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	6.33		0.41
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	5.28		0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33		0.00
TOTAL	3,003.76	0.00	3,003.76	3,003.76	0.00	ATTOR!	28.28
Weighted Average Rate of Depreciation(%)					0.941487		

2022-23						
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	2,697.65	0.00	2,697.65	2,697.65	5.28	25.40
Sub Station	262.60	0.00	262.60	262.60	5.28	2.48
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	6.33	0.41
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	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,003.76	0.00	3,003.76	3,003.76	0.00	28.29
Weighted Average Rate of Depreciation(%)					0.94182	

2023-24						
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	2,697.65	0.00	2,697.65	2,697.65	5.28	25.40
Sub Station	262.60	0.00	262.60	262.60	5.28	2.47
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	6.33	0.41
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	5.28	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,003.76	0.00	3,003.76	3,003.76	0.00	28.28

Page 3 of 4

0153001 : Truing Up: Korba - Budhipadar Transmision System

Weighted Average Rate of			0.941487	
Depreciation(%)			0.341407	

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# **Statement of Depreciation**

Name of the Transmission Licensee Power Grid Corporation of India Limited								
Project	Korba - Budhipadar Transmision System							
Element Description	IK orna - Bulaninadar Transmision Svetom							
Region	Western Region	Western Region DOCO Date Sep 1, 1999						

(Amount in Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Life at the beginning of the year					
1.1 Weighted Average useful life of the Asset/ Project	0.00	0.00	0.00	0.00	0.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	19.00	20.00	21.00	22.00	23.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	15.00	14.00	13.00	12.00	11.00
Capital Base					
1.4 Opening capital cost	3,003.76	3,003.76	3,003.76	3,003.76	3,003.76
1.5 Additional Capital Expenditure dr. the year	0.00	0.00	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	3,003.76	3,003.76	3,003.76	3,003.76	3,003.76
1.8 Average capital cost	3,003.76	3,003.76	3,003.76	3,003.76	3,003.76
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	3,003.76	3,003.76	3,003.76	3,003.76	3,003.76
1.12 Depreciable Value(1.10+90% of 1.11)	2,703.39	2,703.39	2,703.39	2,703.39	2,703.39
Depreciation for the period and Cum.  Depreciation				DE SE STATE	R 5
1.13 Weighted Average Rate of depreciation	0.941487	0.941487	0.941487	0.94182	0.941487

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1.14 Depreciation(for the period)	28.28	28.28	28.28	28.29	28.28
1.15 Depreciation(Annualised)	28.28	28.28	28.28	28.29	28.28
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	2,279.08	2,307.36	2,335.64	2,363.92	2,392.21
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	2,307.36	2,335.64	2,363.92	2,392.21	2,420.49

# Calculation of interest on working Capital

Form No. - 11

Name of the Transmission Licensee		Power Grid Corporation of India Limited						
Project	Korba - Budhipadar Transmision System							
Element Description	Korba - Budhipadar Transmision System							
Region	Western Region		DOCO Date	Sep 1, 1999				

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No of Days in the year	366.00	365.00	365.00	365.00	366.00
No of days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
O&M Expenses-one month	5.74	5.93	6.15	6.36	6.59
Maintenance spares 15% of O&M Expenses	10.33	10.67	11.07	11.45	11.85
Receivables equivalent to 45 days of AFC	27.88	28.21	28.51	28.83	29.18
Total Working capital	43.95	44.81	45.73	46.64	47.62
Bank Rate as on 01.04.2019 or as on 01st April of the COD year,whichever is later.	12.05	11.25	10.50	10.50	12.00
Interest on working capital	5.30	5.04	4.80	4.90	5.71
Pro rata interest on working capital	5.30	5.04	4.80	4.90	5.71



## **Summary of Tariff**

Form No. - 1

Name of the	Transmission Licensee:	Power Grid Corporation of India	_imited	
Project	Korba - Budhipadar Tra	nsmision System		
Element Description	Korba - Budhipadar Tra	nsmision System		
Region	Western Region	DOCO Da	ite	Sep 1, 1999

				(- mile and - mile)	
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	365.00	365.00	365.00	366.00	365.00
Depreciation-Form No. 10A	33.71	39.73	42.77	48.51	51.20
Interest on Loan-Form No. 9E	0.84	1.02	0.27	0.09	0.00
Return on Equity-Form No. 8	126.63	128.93	130.44	132.20	132.46
Int. on Working capital-Form No.11	5.24	5.52	5.73	5.99	6.22
Op. and maintenance-Form No.2	65.93	69.41	72.95	76.91	80.93
Total AFC	232.35	244.61	252.16	263.70	270.81



# Details of Transmission Lines and Substations, Communication System covered in the project scope Form No. - 2 and O&M for instant asset

		:		
Name of the	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Korba - Budhipadar Transmision System	ansmision System		
Element Description	Korba - Budhipadar Transmision System	ansmision System		
Region	Western Region		DOCO Date	Sep 1, 1999

1. Transmission Lines

								(Amount in Rs. Lakh)	า Rs. Lakh	
	Type of	S/C or	No of Sub-	Voltage	Line	S/C or No of Sub- Voltage Line Line Reactor	Line	Date of	Covere pre	Covered in the present petition
Name of Line	Line AC/ HVDC	D/C	Conductors	KV B	Bays	(Including Switchable Reactor)	Length	Length Commercial Yes/No If No, Km operation Petition No.	Yes/No	of No.
220KV KORBA-BUDIPADAR CKT III	AC	SC	<b>←</b>	220 KV	220 KV 0.000 0.000	0.000	184.000	184.000 Sep 1, 1999	>	

Summary:

O&M Expenses For the Transmission Lines Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
SINGLE CIRCUIT (SINGLE CONDUCTOR)					
Normative Rate of O&M as per Regulation	0.246	0.259	0.272	0.287	0.302
No. of Units - ( Length in KM )	184.00	184.00	184.00	184.00	184.00
O&M Claimed (N130	45.26	47.66	50.05	52.81	55.57

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	Type of	Voltage	No. of Transfor ms/		No.	No. of Bays		Z	VA/MV	MVA/MVAR Capacity	acity	Date of	Covered in the present petition
Name of Sub-station	Substation Level KV	Level	Reactor/ SVC etc. (with capacity)	765 KV	400 KV	220 KV	₹3	765 KV	400 KV	220 KV	132 KV	Comm.	Ye If N S/ Deti
Korba:220KV KORBA-BUDHIPADAR CKT-III conventio	Conventio	220 KV				1.000						Sep 1, 1999 Y	>-

## Summary:

O&M Expenses For Substations Covered in the instant petition	2024-25	2025-26	2026-27	2027-28	2028-29
220KV SUB-STATION					
Normative Rate of O&M as per Regulation	20.67	21.75	22.90	24.10	25.36
No. of Units	1.00	1.00	1.00	1.00	1.00
O&M Claimed	20.67	21.75	22.90	24.10	25.36





Particular	2024-25	2025-26	2026-27	2027-28	2028-29
A) Normative O&M					
Transmission Line	45.26	47.66	50.05	52.81	55.57
Substation	20.67	21.75	22.90	24.10	25.36
Communication System	00.00	00.00	00.00	00.00	0.00
Total Normative O&M	65.93	69.41	72.95	76.91	80.93
B) O&M Claimed under Regulation 35 (3)(C) (* The same is not being claimed and will be claimed through separate Petition )					
*Security Expenses	00.00	00.00	0.00	00.00	0.00
*Actual Capital Spare consumed	00.00	00.00	00.00	00.00	0.00
*Insurance Premium Paid	00.00	00.00	00.00	00.00	0.00
Total O&M	65.93	69.41	72.95	76.91	80.93



## Form No. - 3

## Normative parameters considered for tariff computations

Name of the	Transmission Licensee	Power Grid Corporat	tion of India Limite	ed
Project	Korba - Budhipadar Tran	smision System		
Element Description	Korba - Budhipadar Tran	smision System		
Region	Western Region		DOCO Date	Sep 1, 1999

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 %)	,	1)4				
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)				(5)	Rel Coppe	
765 kV	0.00	0.262	0.276	0.29	पावरावाड	0.322
400 kV	0.00	0.262	0.276	0.29	0.305	0.322
		14				

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 subconductors)	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 bipole scheme (Rs Lakh/MW)	0.00	1.04	1.10	1.16	1.22	1.28
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



Name of the	Transmission Licensee	Power Grid Corporation	on of India Limited	
Project	Korba - Budhipadar Tr	ansmision System		
Element Description	Korba - Budhipadar Tr	ansmision System		
Region	Western Region		DOCO Date	Sep 1, 1999

(Amount in Rs. Lakh)

	Financial I	Package as oved		Package as 1/04/2024	As Admitte 01/04/	ed on COD
Particulars	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	0.00		0.00	INR	2,341.81
					· ·	
Equity		0.00		0.00		0.00
Foreign		0.00		0.00		0.00
Domestic	INR	0.00		0.00	INR	661.94
Total Equity	INR	0.00		0.00	INR	661.94
					1.	
Debt Equity Ratio					78:22	
Total Cost	INR	0.00		0.00	INR	3,003.75

Particulars	Debt	Equity	Total	
Addcap for 2024 - 2025			67.81	OORATE
Addcap for 2025 - 2026			0.00	
Addcap for 2026 - 2027			53.43	D POWERGED
Addcap for 2027 - 2028			-0.45	100d to 100

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0153001 : Korba - Budhipadar Transmision System

Addcap for 2028 - 2029	0.00	
	4	

Particulars	Actual	Normative	
Addcap for 2024 - 2025			
Equity		24.54	
Debt		43.27	
Total		67.81	
Addcap for 2025 - 2026			
Equity		0.00	
Debt		0.00	
Total		0.00	
Addcap for 2026 - 2027			
Equity		16.03	
Debt		37.40	
Total		53.43	
Addcap for 2027 - 2028			Sa Carlo
Equity		2.74	
Debt		-3.19	
Total		-0.45	
Addcap for 2028 - 2029			
Equity		0.00	
Debt		0.00	
Total		0.00	
Total Capital cost with Addcap		3,124.54	GRPORATION OF THE PROPERTY OF

### Form No. - 7

## Statement of Additional Capitalisation after COD

Name of the	Transmission Licensee	Power Grid Corporat	tion of India Limit	ed
Project	Korba - Budhipadar Trai	smision System		
Element Description	Korba - Budhipadar Trai	smision System		
Region	Western Region		DOCO Date	Sep 1, 1999

	Addition into Gross Block as	De-Cap into Gross Block as	Less	: Deducti	ons dr.	the year	Add: Discharge of	ACE on cash basis	Admitte d Cost in
Particulars	per books of Account during the year (2)	per books of Account during the year	The state of the s	Asset pertaini ng to other busines s (If any) (4)	Other Dedu ct ion (if any) (5)	Less: Un- discharge d liability included in (2-4-5)	earlier admitted liability	for tariff purpose	final tariff (Rs Lakh)
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	120.57	-52.76	0.00	0.00	0.00	0.00	0.00	120.57	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/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	0.00	0.00	0.00
Total	120.57	-52.76	0.00	0.00	0.00	0.00	0.00	120.57	0.00
ACE for the year :2025-26 (Actual/Projected)							\	S DE POSITION	15

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/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	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 :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	50.63	0.00	0.00	0.00	0.00	0.00	0.00	50.63	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/URTDSM/ SCADA,etc	2.80	0.00	0.00	0.00	0.00	0.00	0.00	2.80	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	53.43	0.00	0.00	0.00	0.00	0.00	0.00	53.43	0.00
ACE for the year :2027-28 (Actual/Projected)							69	PORATION	
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

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0153001 : Korba - Budhipadar Transmision System



Transmission Lines	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Substations	33.75	-36.07	0.00	0.00	0.00	0.00	0.00	33.75	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/URTDSM/ SCADA,etc	1.87	0.00	0.00	0.00	0.00	0.00	0.00	1.87	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	35.62	-36.07	0.00	0.00	0.00	0.00	0.00	35.62	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/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	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



## Financing of Additional Capitalisation

Name of the Tr	Name of the Transmission Licensee	Power Grid Corporation of India Limited		
Project	Korba - Budhipadar Transmision System	nsmision System		
Element Description	Korba - Budhipadar Transmision System	nsmision System		
Region	Western Region		DOCO Date	Sep 1, 1999

(Amount in Rs. Lakh)

		d	Actual/Projected	cted				Admitted	itted	
Financial Year ( Starting of COD)	2024-25	2025-26	2026-27	2027-28	2028-29	2024-25	2025-26	2026-27	2027-28	2028-29
Amount capitilized in Work/ Equipment										
Financing Details	6									
Total Loan	43.27	0.00	37.40	-3.19	00.00					
Equity Co	24.54	00.00	16.03	2.74	00.00					-
G ::	d									
Total	67.81	0.00	53.43	-0.45	00.00					

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## **Calculation of ROE**

Name of the T	Fransmission Licensee	Power Grid Corporation	of India Limited	
Project	Korba - Budhipadar Tra	nsmision System		
Element Description	Korba - Budhipadar Tra	nsmision System		
Region	Western Region	D	OCO Date	Sep 1, 1999

(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	365.00	365.00	365.00	366.00	365.00
Opening Normative Equity	661.94	686.48	686.48	702.51	705.25
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)	661.94	686.48	686.48	702.51	705.25
Add: Increase in Equity due to addition during the year / period	36.17	0.00	16.03	10.69	0.00
Less: Decrease due to de-capitalisation during the year / period	11.63	0.00	0.00	7.95	0.00
Add: Increase due to discharge during the year / period	0.00	0.00	0.00	0.00	0.00
Closing Normative Equity	686.48	686.48	702.51	705.25	705.25
Average Normative Equity	674.21	686.48	694.50	703.88	705.25
Rate of return on Equity (%)	18.782	18.782	18.782	18.782	18.782
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	15.50	15.50	15.50	15.50	15.50
MAT/Corporate Rate	17.472	17.472	17.472	17.472	17.472
Grossed up rate of ROE	18.782	18.782	18.782	18.782	18.782
Return on Equity	126.63	128.93	130.44	132.20	132.46
Pro rata return on Equity	126.63	128.93	130.44	132.20	132.46

## Calculation of WAR of interest on actual loan

Name of the Transmission Licensee Power Grid Corporation of India Limited						
Project Korba - Budhipadar Transmision System						
Element Description  Korba - Budhipadar Transmision System						
Region	Western Region		DOCO Date	Sep 1, 1999		

			(Amount in No. Lakir)		
Particulars Particulars Particulars Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOND VII -DOCO					
Gross Loan- Opening	669.00	669.00	669.00	669.00	669.00
Cumulative repayments of Loans upto previous year	669.00	669.00	669.00	669.00	669.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	13.64	13.64	13.64	13.64	13.64
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOND - XIII - OPTION - II -DOCO					•
Gross Loan- Opening	518.00	518.00	518.00	518.00	518.00
Cumulative repayments of Loans upto previous year	518.00	518.00	518.00	518.00	518.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00

Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	7.85	7.85	7.85	7.85	7.85
Interest on loan	0.00	0.00	0.00	0.00	0.00

CORPORATION BANK -DOCO					
Gross Loan- Opening	334.00	334.00	334.00	334.00	334.00
Cumulative repayments of Loans upto previous year	334.00	334.00	334.00	334.00	334.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	13.00	13.00	13.00	13.00	13.00
Interest on loan	0.00	0.00	0.00	0.00	0.00

PUNJAB NATIONAL BANK-I -DOCO					
Gross Loan- Opening	669.00	669.00	669.00	669.00	669.00
Cumulative repayments of Loans upto previous year	669.00	669.00	669.00	669.00	669.00
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	11.66	11.66	11.66	11.66	11.66
Interest on loan	0.00	0.00	0.00	0.00	0.00

BOI (FOREIGN CURRENCY) -DOCO					
Gross Loan- Opening	148.41	148.41	148.41	148.41	148.41
Cumulative repayments of Loans upto previous year	148.41	148.41	148.41	148.41	148.41
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	3.30	3.30	3.30	3.30	3.30
Interest on loan	0.00	0.00	0.00	0.00	0.00

## Summary

Gross Loan- Opening	2,338.41	2,338.41	2,338.41	2,338.41	2,338.41
Cumulative repayments of Loans upto previous year	2,338.41	2,338.41	2,338.41	2,338.41	2,338.41
Net loan-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of Interest on Loan on Annual Basis	3.2992	3.2992	3.2992	3.2992	3.2992
Interest on loan	0.00	0.00	0.00	0.00	0.00



Name of the	Transmission Licensee	Power Grid Corporation of India Limited				
Project Korba - Budhipadar Transmision System						
Element Description	Korna - Budhinadar Franchicion Syctom					
Region	Western Region	DOCO Date	Sep 1, 1999			

Particulars	2024-25	2025-26	2026-27	2027-28	2028-29
BOI (FOREIGN CURRENCY) -DOCO -USD					
Gross Loan-Opening	3.39	3.39	3.39	3.39	3.39
Cumulative repayments of loans upto previous year	3.39	3.39	3.39	3.39	3.39
Net Loans-Opening	0.00	0.00	0.00	0.00	0.00
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	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Net Loan	0.00	0.00	0.00	0.00	0.00
Rate of interest on Loan on Annual Basis	3.30	3.30	3.30	3.30	3.30
Interest on loan	0.00	0.00	0.00	0.00	0.00

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Name of the Transmission Licensee Power Grid Corporation of India Limited						
Project	oject Korba - Budhipadar Transmision System					
Element Description	IKOTO - BUIDDIDADA UTANSMISION SVSTAM					
Region	Western Region		DOCO Date	Sep 1, 1999		

Double of the section	0004.05	0005.00	70 2000	(Amount in 13		
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	365.00	365.00	365.00	366.00	365.00	
Gross normative loan-Opening	2,341.81	2,385.08	2,385.08	2,422.48	2,419.29	
Cumulative repayments of Normative loan upto previous year	2,341.81	2,334.39	2,374.12	2,416.89	2,419.29	
Net normative loan-Opening	0.00	50.69	10.96	5.59	0.00	
Addition in normative loan towards the ACE	84.40	0.00	37.40	24.93	0.00	
Adjustment of normative gross loan pertaining to the decapitalised asset	41.13	0.00	0.00	28.12	0.00	
Normative repayments of normative loan during the year	33.71	39.73	42.77	30.52	0.00	
Adjustment of cumulative repayment pertaining to the decapitalised asset	41.13	0.00	0.00	28.12	0.00	
Net normative loan - closing	50.69	10.96	5.59	0.00	0.00	
Average normative loan	25.35	30.83	8.28	2.80	0.00	
Weighted Average Rate of interest on actual loan	3.2992	3.2992	3.2992	3.2992	3.2992	
Interest on normative loan	0.84	1.02	0.27	0.09	0.00	
Pro rata interest on normative loan	0.84	1.02	0.27	0.09	0.00	



## **Calculation of Depreciation Rate on Original Project Cost**

Form No. - 10

Name of the	Transmission Licensee	Power Grid Corporation of India Lim	nited				
Project	Korba - Budhipadar Trans	mision System					
Element Description	Korba - Budhipadar Transmision System						
Region	Western Region	DOCO Date	Sep 1, 1999				

(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	2,697.65	0.00	2,697.65	2,697.65	5.28	25.40
Sub Station	262.60	67.81	330.41	296.51	5.28	7.90
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	15.00	0.41
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	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,003.76	67.81	3,071.57	3,037.67	0.00	33.71
Weighted Average Rate of Depreciation(%)					1.109732	

2025-26					S CONTROL OF THE STATE OF THE S
Land(Freehold)	0.00	0.00	0.00	0.00	0.00

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Civil & Building	0.00	0.00	0.00	0.00	3.34	0.00
Transmission Line	2,697.65	0.00	2,697.65	2,697.65	5.28	25.39
Sub Station	330.41	0.00	330.41	330.41	5.28	13.93
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	15.00	0.41
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	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,071.57	0.00	3,071.57	3,071.57	0.00	39.73
Weighted Average Rate of Depreciation(%)					1.293475	

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	2,697.65	0.00	2,697.65	2,697.65	5.28	25.40
Sub Station	330.41	50.63	381.04	355.73	5.28	16.78
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	15.00	0.41
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	0.00	2.80	2.80	1.40	15.00	0.18
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,071.57	53.43	3,125.00	3,098.29	0.00	42.77
Weighted Average Rate of Depreciation(%)					1.380439	

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	2,697.65	0.00	2,697.65	2,697.65	5.28	25.39
Sub Station	381.04	-2.32	378.72	379.88	5.28	22.20
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	15.00	0.41
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	2.80	1.87	4.67	3.74	15.00	0.51
Batteries	0.00	0.00	0.00	0.00	9.50	0.00
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	0.00
TOTAL	3,125.00	-0.45	3,124.55	3,124.78	0.00	48.51
Weighted Average Rate of Depreciation(%)					1.552429	

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	2,697.65	0.00	2,697.65	2,697.65	5.28	25.40
Sub Station	378.72	0.00	378.72	378.72	5.28	24.73
Comm. Sys. excluding Fiber Optic	43.51	0.00	43.51	43.51	15.00	0.41
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00
IT/Software/UNMS/URTDSM/ SCADA,etc	4.67	0.00	4.67	4.67	15.00	0.66
Batteries	0.00	0.00	0.00	0.00	9.50	O.OO
Fiber Optic/OPGW	0.00	0.00	0.00	0.00	6.33	वाराचारीक अध्याप्तराज्य
TOTAL	3,124.55	250	3,124.55 30	3,124.55	0.00	51.20

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0153001 : Korba - Budhipadar Transmision System



Weighted Average Rate of	1 6386	26
Depreciation(%)	1.0300	130



## **Statement of Depreciation**

Name of the Transmission Licensee Power Grid Corporation of India Limited								
Project	Korba - Budhipadar Tra	nsmision System						
Element Description	Korba - Budhipadar Transmision System							
Region	Western Region		DOCO Date	Sep 1, 1999				

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	365.00	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	0.00	0.00	0.00	0.00	0.00
1.2 Lapsed Weighted Average useful life of the Asset/Project(in completed no. of year)	24.00	25.00	26.00	27.00	28.00
1.3 Balance Weighted Average useful life of the Asset/Project(in completed no. of year)	10.00	9.00	8.00	7.00	6.00
Capital Base					
1.4 Opening capital cost	3,003.76	3,071.57	3,071.57	3,125.00	3,124.55
1.5 Additional Capital Expenditure dr. the year	120.57	0.00	53.43	35.62	0.00
1.6 De-Capitalisation During the year	52.76	0.00	0.00	36.07	0.00
1.7 Closing capital cost	3,071.57	3,071.57	3,125.00	3,124.55	3,124.55
1.8 Average capital cost	3,037.67	3,071.57	3,098.29	3,124.78	3,124.55
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	1.40	3.74	4.67
1.11 Asset having 10% salvage value included in 1.8	3,037.67	3,071.57	3,096.89	3,121.04	3,119.88
1.12 Depreciable Value(1.10+90% of 1.11)	2,733.91	2,764.42	2,788.61	2,812.68	2,812.57
Depreciation for the period and Cum. Depreciation		1.1		/0/	
1.13 Weighted Average Rate of depreciation	1.109732	1.293475	1.380439	1.552429	1.638636
				100	715.7

1.14 Depreciation(for the period)	33.71	39.73	42.77	48.51	51.20
1.15 Depreciation(Annualised)	33.71	39.73	42.77	48.51	51.20
Unrecovered Depreciation for DECAP	0.00	0.00	0.00	0.00	0.00
1.16 Cumulative depreciation at the beginning of the period	2,420.62	2,406.85	2,446.58	2,489.35	2,505.40
1.17 Less:Adj of Cum. Dep pertaining to decapitalised Asset	47.48	0.00	0.00	32.46	0.00
1.18 Cumulative depreciation at the end of the period	2,406.85	2,446.58	2,489.35	2,505.40	2,556.60

Name of the T	Fransmission Licensee	Power Grid Corpora	ation of India Limite	ed
Project	Korba - Budhipadar Transmision System			
Element Description	Korba - Budhipadar Tran	smision System		
Region	Western Region		DOCO Date	Sep 1, 1999

(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	365.00	365.00	365.00	366.00	365.00
O&M Expenses-one month	5.49	5.78	6.08	6.41	6.74
Maintenance spares 15% of O&M Expenses	9.89	10.41	10.94	11.54	12.14
Receivables equivalent to 45 days of AFC	28.65	30.16	31.09	32.42	33.39
Total Working capital	44.03	46.35	48.11	50.37	52.27
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	5.24	5.52	5.73	5.99	6.22
Pro rata interest on working capital	5.24	5.52	5.73	5.99	6.22

		Summary of issue inv in the petition	olved PART-III FORM-15		
	ne of the Pe		Power Grid Corporation of India Limited		
2. Petition Category			Transmission		
3. Tariff Period			2019-24 and 2024-29		
4. Nam	ie of the Pr	roject	Korba-Budhipadar Transmission System in Western Region		
5. Inve	stment Ap	proval date	-		
6. SCO	D of the Pr	roject	-		
7. Actu	al COD of	the project	-		
8. Whether entire scope is covered in the present petition.		scope is covered in the present petition.	Yes		
9. No. of Assets covered in instant petition		overed in instant petition	1		
10. No.	of Assets	having time over run	-		
11. Esti	mated Pro	ject Cost as per IA	-		
12. Is t	here any R	RCE? if so, provide the date	•		
13. Rev	rised Estim	nated Project Cost (if any)	-		
14. Cor	npletion co	ost for all the assets covered in the instant petition.	3124.55		
15. No.	of Assets	covered in instant petition and having cost overrun.	-		
16	Prayer in	brief			
17	Key deta	ils and any Specific issue involved			
18	Respond	ents			
	Name of	Respondents			
	1	MADHYA PRADESH POWER MANAGEMENT COMPANY LTD			
	2	CHHATTISGARH STATE POWER DISTRIBUTION CO.			
	3	MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.			
	4	GUJARAT URJA VIKAS NIGAM LTD.			
	5	ELECTRICITY DEPARTMENT, GOA			
	6	DNH and DD Power Corporation Ltd			

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

PART-III Check List

FORM-1	Title of Tariff Filing Forms (Transmission& Communication System)  Summary of Tariff	Tick
ORM-1A	Summary of Asset level cost	/
ORM-1A	Details of Transmission Lines and Substations and Communication	N.A.
	System covered in the project scope and O&M for instant asset	1
FORM-3	Normative parameters considered for tariff computations	1
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.	
FORM- 4A	Statement of Capital cost	N.A.
FORM- 4B	Statement of Capital Works in Progress	N.A.
FORM-4C	Abstract of Capital Cost Estimates and Schedule of Commissioning for	N.A.
	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		N.A.
	Break-up of Construction/Supply/Service packages	N.A.
FORM-5B	Details of all the assets covered in the project	N.A.
FORM- 6	Actual Cash Expenditure and Financial Package up to COD	1
FORM- 7	Statement of Additional Capitalisation after COD	1
ORM-7A	Financing of Additional Capitalisation	1
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	V
FORM-8A	Details of Foreign Equity	N.A.
FORM-9	Details of Allocation of corporate loans to various transmission elements	
ORM-9A	Details of Project Specific Loans	N.A.
ORM-9B	Details of Foreign loans	N.A.
FORM-9C	Calculation of Weighted Average Rate of Interest on Actual Loans	N.A.
FORM-9D	Loans in Foreign Currency	·
ORM-9E	Calculation of Interest on Normative Loan	/
ORM-10		V
	Calculation of Depreciation Rate on original project cost	/
FORM- 10A FORM- 10B	Statement of De-capitalisation	1
FORM- 11	Calculation of Interest on Working Capital	·
ORM- 12	Details of time over run	✓
ORM- 12A	Incidental Expenditure during Construction	N.A.
FORM- 12B	Calculation of IDC & Financing Charges	N.A.
ORM- 13	Details of Initial spares	N.A.
FORM- 14	Non-Tariff Income	N.A.
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/ Document		
5. No.	Information/Document	Tie
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.
<u> </u>		N.A.
3	Copies of relevant loan Agreements	
3 4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	Yes
3	Copies of the approval of Competent Authority for the Capital Cost and Financial package.  Copies of the Equity participation agreements and necessary approval for the foreign equity.	Yes N.A.
3 4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	
3 4 5	Copies of the approval of Competent Authority for the Capital Cost and Financial package.  Copies of the Equity participation agreements and necessary approval for the foreign equity.  Copies of the BPTA/TSA/PPA with the beneficiaries, if any  Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted:  a. Detailed Project Report	N.A.
3 4 5 6	Copies of the approval of Competent Authority for the Capital Cost and Financial package.  Copies of the Equity participation agreements and necessary approval for the foreign equity.  Copies of the BPTA/TSA/PPA with the beneficiaries, if any  Detailed note giving reasons of cost and time over run, if applicable. List of supporting documents to be submitted:	N.A.
3 4 5 6	Copies of the approval of Competent Authority for the Capital Cost and Financial package.  Copies of the Equity participation agreements and necessary approval for the foreign equity.  Copies of the BPTA/TSA/PPA with the beneficiaries, if any  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	N.A.
3 4 5 6	Copies of the approval of Competent Authority for the Capital Cost and Financial package.  Copies of the Equity participation agreements and necessary approval for the foreign equity.  Copies of the BPTA/TSA/PPA with the beneficiaries, if any  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  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 Covt. 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	N.A. 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.