CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 74/TT/2021

Coram:

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

Date of Order: 09.06.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and determination of transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Establishment of 2x500 MVA, 400/220 kV Pooling Station at Banaskantha (Radhanesda) (GIS) along with 1X125 MVAR bus reactor, 2 numbers of 400 kV line bays at Banaskantha (Radhanesda) (GIS) for interconnection of Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) 400 kV D/C (twin AL59) line and 4 numbers 220 kV line bays at 400/220 kV at Banaskantha (Radhanesda) Pooling Station under "Supplementary Transmission System for Ultra Mega Solar Power Park (700 MW) at Banaskantha (Radhanesda), Gujarat" in Western Region.

And in the matter of:

Power Grid Corporation of India Limited,
'SAUDAMINI', Plot No-2, Sector 29,
Gurgaon – 122 001 (Haryana). **…..Petitioner**

Versus

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.

3. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road,
Indore – 452 008.

4. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,

M.G. Road, Fort,
Mumbai – 400 001.

5. Maharashtra State Electricity Transmission Company Limited,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
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. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel,
Goa – 403 001.

8. Electricity Department,
Administration of Daman & Diu,
Daman – 396 210.

9. DNH Power Distribution Corporation Limited,
Vidyut Bhawan, 66 kV road, near Secretariat Amli,
Silvassa – 396 230.

10. Chhattisgarh State Power Transmission Company Limited,
Office of The Executive Director (C&P),
State Load Despatch Building, Dangania,
Raipur – 492 013.

11. Chhattisgarh State Power Distribution Company Limited,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh – 492 013.

12. Gujarat Power Corporation Limited,
Block No. 8, Sixth Floor,
Udhyog Bhawan, Sector 11,
Gandhinagar – 382 011. **.....Respondent(s)**

For Petitioner	**:**	Shri S. S. Raju, PGCIL Shri D. K. Biswal, PGCIL Shri Ved Prakash Rastogi, PGCIL Shri A. K. Verma, PGCIL
For Respondents	**:**	Shri Anindya Khare, MPPMCL

ORDER

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for determination of transmission tariff for the period from COD 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 Establishment of 2x500 MVA, 400/220 kV Pooling Station at Banaskantha (Radhanesda) (GIS) along with 1X125 MVAR bus reactor, 2 numbers of 400 kV line bays at Banaskantha (Radhanesda) (GIS) for interconnection of Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) 400 kV D/C (twin AL59) line and 4 numbers 220 kV line bays at 400/220 kV at Banaskantha (Radhanesda) Pooling Station (hereinafter referred to as “the transmission asset”) under “Supplementary Transmission System for Ultra Mega Solar Power Park (700 MW) at Banaskantha (Radhanesda), Gujarat” in Western Region (hereinafter referred to as “the transmission system”).

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

> *“1) Tariff may be allowed as claimed based on 30% of the cost considered as equity and 70% of the cost as Loan, after adjustment of grant.*
>
> *2) Approve the Transmission Tariff for the tariff block 2019-24 block for the assets covered under this petition as per para –8.0 above.*
>
> *3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred / projected to be incurred.*
>
> *4) 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 2019 as per para 8 above for respective block.*
>
> *5) 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.

6) 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.

7) 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 beneficiaries.

8) 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.

9) Allow interim tariff in accordance with Regulation 10(3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.

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

3. **Backdrop of the case**

a) The Petitioner has been entrusted with the implementation of transmission system and Supplementary Transmission System for Ultra Mega Solar Power Park (700 MW) at Banaskantha (Radhanesda), Gujarat. The complete scope consists of 400 kV D/C Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) line and 400/220 kV Banaskantha (Radhanesda) GIS Pooling Station including 2x500 MVA ICTs and associated 400 kV and 220 kV bays.

b) The scope of the scheme was discussed and agreed in the 41st SCM meeting of WR held on 21.12.2016 (and subsequent meeting held on 17.1.2017) and 34th WRPC meeting held on 28.7.2017.

c) The Commission *vide* order dated 30.3.2017 in Petition No. 143/MP/2016 granted regulatory approval for execution of the transmission asset.

d) The Petitioner has filed two petitions in respect of the transmission asset covered for the evacuation of power from the same generation project namely, Ultra Mega Solar Power Park (700 MW) at Banaskantha (Radhanesda), Gujarat. Petition No. 74/TT/2021 has been filed w.r.t. the Sub-station portion (400/220 kV Banaskantha (Radhanesda) GIS Pooling Station including 2x500 MVA ICTs and associated 400 kV and 220 kV bays) of the evacuation system. Whereas, Petition No. 203/TT/2021 has been filed w.r.t. the transmission line portion (400 kV D/C Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) line along with associated bays) of the evacuation system.

e) In response to a query of the Commission, during the course of hearing dated 22.6.2021 and subsequent hearing dated 25.11.2021, regarding reasons for obtaining separate IAs and filing separate tariff petitions for Pooling Station and transmission line covered under the same transmission system, the representative of the Petitioner submitted that initially GPCL was to execute the Pooling Station. However, later in the 41st meeting of Standing Committee on Power System Planning in WR, it was decided that Banaskantha (Radhanesda) GIS 400/220 kV Pooling Station will be developed as part of ISTS along with Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) 400 kV D/C (twin AL 59) line. Therefore, though the transmission asset covered in Petition No. 74/TT/2021 and Petition No. 203/TT/2021 are part of same transmission system their Investment Approvals (IAs) are different. Accordingly, two different petitions are filed on the basis of IAs.

f) IA w.r.t. to the instant transmission system was accorded by Board of Directors of the Petitioner in its 347th meeting held on 8.12.2017 and notified vide Memorandum Ref.: C/CP/PA1718-12-0B-IA009 dated 20.12.2017 at an estimated cost of ₹19314 lakh including IDC of ₹1003 lakh at June, 2017 price level.

g) The broad scope of work covered under the transmission system is as follows:

Sub-station:

a) 400/220 kV Banaskantha (Radhanesda) Pooling station (GIS)*

400 kV

- Line bays : 2 numbers
- 500 MVA, 400/220 kV transformer : 2 numbers

- Transformer bays : 2 numbers
- 125 MVAR Bus reactor : 1 number
- Bus reactor bay : 1 number

220 kV

- Line bays : 4 numbers
- Transformer bays : 2 numbers

** **Note** : Space provision for 1x500 MVA, 400/220 kV transformer and 8 Numbers 220 kV bays included in scope*

Reactive Compensation

Sl. No.	Sub-station	Bus Reactor
1	400/220 kV Banaskantha (Radhanesda) Pooling Station	1X125 MVAR

h) The entire scope of the work as per IA under the transmission system is covered in the instant petition.

i) The transmission asset was scheduled to be put into commercial operation within 18 months from the date of IA i.e., 8.12.2017. Accordingly, the transmission asset was scheduled to be put into commercial operation on 8.6.2019. However, it was put into commercial operation on 5.9.2020. Thus, there was time over-run of 455 days.

j) The Petitioner has submitted that LTA granted to GPCL at Banaskantha (Raghanesda) for 750 MW was operationalized with effect from 12.8.2021. The Petitioner has also submitted the details of the status of the generators, within the solar park of GPCL, covered in the transmission system. The details and status of the generators covered in the main and supplementary transmission system is as follows:

Details of Generating Plants	Capacity (MW)	COD
Gujarat Industries Power Company Limited	100	10.8.2021
Tata Power Renewable Energy Limited	100	10.8.2021
Electro Solaire Private Limited	150	10.8.2021
	50	13.8.2021
GSECL	200	Yet to be commissioned
Selection of Developer is under Process	100	
Total	**700**	

4. The Respondents are distribution licensees, power departments and transmission licensees, which are procuring transmission services from the Petitioner, mainly beneficiaries of 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. MP Power Management Company Limited, Jabalpur (MPPMCL), Respondent No. 1, has filed its reply *vide* affidavit dated 7.6.2021 and has raised issues of time over-run, completion cost, Additional Capital Expenditure (ACE) and GST. The Petitioner *vide* affidavit dated 17.6.2021 has filed rejoinder to MPPMCL's reply. The submissions of the Petitioner and issues raised by MPPMCL and the clarifications given by the Petitioner are discussed at relevant paragraph of this order.

6. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 19.11.2020; the Petitioner's affidavits dated 3.3.2021, 17.6.2021, 21.6.2021, 24.11.2021 and 16.12.2021; MPPMCL's reply vide affidavit dated 7.6.2021 and the Petitioner's rejoinder vide affidavit dated 17.6.2021 thereto.

7. The hearing in this matter was held through video conference on 25.11.2021 and the order was reserved.

8. Having heard the representatives of the Petitioner and MPPMCL and perused the materials on record, we proceed to dispose of the petition.

Determination of Annual Fixed Charges from COD to 31.3.2024 for the 2019-24 Tariff Period

9. The details of the transmission charges claimed by the Petitioner for 2019-24 tariff period is as follows:

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 208 days)	2021-22	2022-23	2023-24
Depreciation	304.86	566.21	590.97	590.97
Interest on Loan	286.07	503.39	487.24	445.12
Return on Equity	328.61	613.55	641.68	641.68
O&M Expenses	26.58	48.46	49.86	50.04
Interest on Working Capital	335.51	609.29	631.03	652.11
Total	**1281.63**	**2340.90**	**2400.78**	**2379.92**

10. The details of the Interest on Working Capital (IWC) as claimed by the Petitioner for 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 208 days)	2021-22	2022-23	2023-24
O&M Expenses	49.06	50.77	52.59	54.34
Maintenance Spares	88.31	91.39	94.65	97.82
Receivables	277.27	288.60	295.99	292.61
Total Working Capital	414.64	430.76	443.23	444.77
Rate of Interest (in %)	11.25	11.25	11.25	11.25
Interest on Working Capital	**26.58**	**48.46**	**49.86**	**50.04**

Date of Commercial Operation ("COD")

11. The Petitioner has claimed COD of the transmission asset as 5.9.2020 under Regulation 5(2) of the 2019 Tariff Regulations as the associated generating station under the scope of Gujarat Power Corporation Limited (GPCL) is not ready. In support of the proposed COD of 5.9.2020, the Petitioner has submitted CEA energisation certificate dated 7.8.2020 for Energizing Electrical Installations under

Regulation 43 of the Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010 (as amended to date), WRLDC 'idle charging' Certificate dated 20.9.2020 and 21.9.2020 for successful completion of trial operation, issued by Power System Operation Corporation Limited; CMD Certificate and notice dated 24.8.2020 issued to GPCL regarding readiness of transmission asset in accordance with Regulation 5(2) of the 2019 Tariff Regulations and the Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016 (for Inter State Transmission System).

12. We have considered the submissions of the Petitioner. Regulation 5 of the 2019 Tariff Regulations provides as follows:

> *"**5. Date of Commercial Operation:** (1) The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.*
>
> *(2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:*
>
> *Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long-term customers of its transmission system, as the case may be, regarding the date of commercial operation:*
>
> *Provided further that the transmission licensee seeking the approval of the date of commercial operation of the transmission system under this clause shall be required to submit the following documents along with the petition:*
>
> *(a) Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;*
> *(b) Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;*
> *(c) Implementation Agreement, if any, executed by the parties;*
> *(d) Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;*

(e) Notice issued by the transmission licensee as per the first proviso under this clause and the response;
(f) Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.

(3) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —

a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
b) the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 7A of these regulations, exceeds total expenditure in that year; or
c) the date of two years from the date of commencement of production:

Provided that on earliest occurrence of any of the events under sub-clauses (a) to (c) of Clause (3) of this Regulation, the generating company shall declare the date of commercial operation of the integrated mine(s) under the relevant sub-clause with one-week prior intimation to the beneficiaries of the end-use or associated generating station(s);

Provided further that in case the integrated mine(s) is ready for commercial operation but is prevented from declaration of the date of commercial operation for reasons not attributable to the generating company or its suppliers or contractors or the Mine Developer and Operator, the Commission, on an application made by the generating company, may approve such other date as the date of commercial operation as may be considered appropriate after considering the relevant reasons that prevented the declaration of the date of commercial operation under any of the sub-clauses of Clause (3) of this Regulation;

Provided also that the generating company seeking the approval of the date of commercial operation under the preceding proviso shall give prior notice of one month to the beneficiaries of the end-use or associated generating station(s) of the integrated mine(s) regarding the date of commercial operation."

13. The Petitioner has submitted that the associated generating station i.e. Banaskantha (Radhanesada) Solar Power Park is being executed by GPCL and the same is yet to be commissioned whereas the instant transmission asset is ready. GPCL, *vide* letter dated 26.10.2020, informed the Petitioner that the generating station will be commissioned by April, 2021. Accordingly, as the generating stations were not commissioned in April, 2021 as informed by GPCL, the Petitioner has claimed COD of the transmission asset as 5.9.2020 under Regulation 5(2) of the 2019 Tariff Regulations.

14. We have considered the submissions of the Petitioner. The Petitioner has claimed the COD of the transmission asset as 5.9.2020 under Regulation 5(2) of the 2019 Tariff Regulations. The Petitioner has submitted that the associated generation under the scope of GPCL is not ready.

15. In support of the COD of the transmission asset, the Petitioner has submitted CEA energisation certificate dated 7.8.2020, RLDC idle charging certificate dated 20.9.2020 and 21.9.2021, CMD certificate and notice dated 24.8.2020 issued to GPCL regarding readiness of transmission asset.

16. Taking into consideration the CEA energisation certificate, idle RLDC charging certificate, CMD certificate and notice dated 24.8.2020 issued to GPCL regarding readiness of transmission asset, COD of the transmission asset is approved as 5.9.2020 under Regulation 5(2) of the 2019 Tariff Regulations for 2019-24 tariff period.

Capital Cost

17. Regulations 19 of the 2019 Tariff Regulations provides as follows:

> ***"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 regulations;
(h) Adjustment of revenue earned by the transmission licensee by using the assets 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 upto 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;
(l) 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 renovation and modernisation as admitted by this Commission in accordance with these regulations;
(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 upto 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 assets forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalised Assets 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 de-capitalised 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 assets.

(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."

18. The Petitioner has claimed approval of tariff based on actual expenditure incurred up to COD and projected ACE from COD to 31.3.2022. The details of capital cost incurred up to COD and projected ACE during 2020-21 and 2021-22 as duly certified *vide* Auditor's Certificate dated 6.10.2020 are as follows:

(₹ in lakh)

Apportioned Approved Cost (as per FR)	Expenditure up to COD	Projected ACE		Estimated Completion Cost (as on 31.3.2024)
		2020-21	2021-22	
19314.34	12629.54	2818.97	877.34	16325.85

Cost Over-run

19. The Petitioner has submitted the details of estimated completion cost *vis-à-vis* apportioned approved cost (FR) in respect of the transmission asset as follows:

(₹ in lakh)

Approved Cost (a)	Estimated Completion Cost (b)	Cost Variation (c)=(b-a)
19314.34	16325.85	-2988.49

20. The Petitioner has submitted that the estimated completion cost of the transmission asset based on the Auditor's Certificate works out to ₹16325.85 lakh including IEDC and IDC, which is within the FR approved cost. Further, the item-wise cost variation between FR approved cost and estimated completion cost as detailed in Form-5 is as follows:

(₹ in lakh)

Particulars	Cost Details		Variation w.r.t. FR (+ within, - increase)
	FR	Completion	
Sub-station	16109.78	15090.37	1019.41
Communication System	125.98	101.80	24.18
Overheads	2075.58	717.69	1357.89
IDC	1003.00	415.63	587.37
Total	**19314.34**	**16325.49**	**2988.85**

21. The Petitioner has submitted the following reasons for reduction in capital cost:

(i) Sub-station:

(a) Preliminary works, land and civil works:

The cost under this head has decreased as per actual site conditions.

(b) Sub-station equipment including custom duty:

The reason for decrease in the cost of Sub-station equipment is mainly due to decrease in the cost of Switchgear equipment from about ₹4628 lakh/equipment to about ₹2899 lakh/equipment. There is increase in the cost of bus reactor from about ₹713 lakh to about ₹1695 lakh. Also, there is increase in the cost of ICTs from about ₹2797 lakh to about ₹5813 lakh. Similarly, there is variation in the cost of other Sub-station equipment as well. Further, the actual cost of the Sub-station includes the associated custom duty. The variation in cost is attributable to variation in awarded cost received in competitive bidding w.r.t. unit rates considered in FR.

(ii) Communication system:

There is minor decrease under this head due to variation in awarded cost received in competitive bidding w.r.t unit rates considered in FR.

(iii) Decrease in IDC:

Decrease in IDC is attributable to variation in rate of interest considered in FR v/s actuals, decrease in overall capital cost w.r.t. FR and deployment of funds based on actuals. It may be mentioned that in FR, IDC was calculated considering rate of interest for domestic loans @10.5%. However, in actual, the weighted average rate of interest of loans is around 7.16%. The actual IDC accrued upto COD has been considered in the Auditor's Certificate.

(iv) Decrease in IEDC and contingency:

Decrease in IDC is attributable to variation in rate of interest considered in FR vis-à-vis actuals, decrease in overall capital cost w.r.t. FR and deployment of funds based on actuals.

22. MPPMCL has submitted that the Petitioner has not practised due diligence and market study at the time of calculation of IDC in FR before provisioning of such a high interest rate. As the Petitioner frequently arranges loans for its projects, its failure to practice due diligence is unacceptable. Furthermore, such an act gives a perception that the intention behind the said act of the Petitioner was to increase the cost from the original estimate so as to hide the cost over-run in future. Therefore, it is a clear case of over-estimation.

23. In response, the Petitioner while reiterating its submissions has also submitted that for procurement, open competitive bidding route is followed by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. Regarding variation in cost of individual item in Sub-station

packages, the Petitioner has submitted that the packages under subject scope of works comprise of a large number of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, the lowest bidder can be arrived at/ evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner. Accordingly, tariff may be allowed from COD based on estimated completion cost.

24. We have considered the submissions of the Petitioner and MPPMCL and observe that the cost variation is primarily on account of variation in estimated prices and final competitive prices. Further, against the total apportioned approved cost as per FR of ₹19314.34 lakh, the estimated completion cost (including projected ACE during 2019-24 period) is ₹16325.85 lakh, which is within the apportioned approved cost. Accordingly, the cost variation is allowed.

Time Over-run

25. As per IA dated 8.12.2017, the transmission asset was scheduled to be put into commercial operation within 18 months from the date of I.A. i.e. by 8.6.2019 against which COD has been approved as 5.9.2020. Therefore, there is a time over-run of 455 days in execution of the transmission asset.

26. The Petitioner has submitted that the time over-run is mainly on account of (i) delay in acquisition of land for sub-station, (ii) execution of the matching line on account of Right of Way (RoW) issues and (iii) delay in receipt of forest clearance. The reasons for delay submitted by the Petitioner are as follows:

(I) Delay in land acquisition for 400/220 kV GIS Banaskantha (Radhanesada) Sub-station proposal (6.25 Hct/ 15.44 Acr)

IA of the transmission system was accorded on 8.12.2017. The proposal for land acquisition was submitted, well in advance, on 5.5.2017 and the desired land was expected to be handed over by December, 2017 for timely commencement of the transmission system. However, the approval of land acquisition was received on 24.5.2018 causing a delay of about 5 months in the execution of the transmission asset. Chronology of approval of land acquisition is submitted along with the petition.

(II) Delay in associated transmission line i.e. 400 kV D/C Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) (twin AL59) line ('associated transmission line')

(a) RoW Issues

(i) The Ministry of Power, Government of India *vide* Order No. 3/7/2015-Trans dated 15.10.2015 issued guidelines for land compensation for transmission lines to be paid to the affected parties towards diminution of land value occupied by tower base and transmission line corridor as 85% and 15% of the land value respectively and requesting the States/UTs etc. to take suitable decision regarding adoption of the guidelines. Pursuant to which Government of Gujarat vide Resolution No. GET-11-2015-GOI-199-K dated 14.8.2017, notified land compensation for transmission lines to be paid to the affected parties towards diminution of land value occupied by tower base and transmission line corridor as 85% and 7.5% of the land value respectively. Thereafter, severe RoW issues surfaced owing to obstruction of works by the land owners as a result of reduction in diminution value of land for corridor compensation. The progress of works as such was severely impacted due to non-availability of right of way consequent to the notification.

(b) Delay in land rate finalization

(i) There was delay in finalization of land rate of Vav, Tharad, Deodar, Lakhani, Deesa and Kankarej talukas in Banaskantha District. Various letters /communications were sent to local administration for the finalization of land rate. After various meetings with local administration and farmers, orders for land rate were issued up till 20.7.2020. Chronology for the land rate finalization is given in the instant petition.

(c) Civil suits filed at District and Sessions Court of Gujarat

(i) Even after land rate finalization, there was continuous obstruction due to RoW issues, hampering the construction works and a total of 6 cases were filed for the finalisation of RoW issues in Taluka Court, Deesa. After various proceedings with court and farmers, the cases were finally disposed of on 8.2.2020. The Petitioner has placed on record the details of the court cases along with the date of disposal of the said cases in the instant petition.

(d) Cases in the Court of District Magistrate under Section-16(1) of EA, 2003:

(1) Tharad Taluka:

(i) Even after land rate finalization, there was continuous obstruction in RoW hampering the construction works and a total of 12 cases were filed for various locations due to severe RoW issues in the District Magistrate Court of Tharad Taluka on 15.4.2019. Even after the decision, there was resistance from farmers which severely impacted the progress of the works. The works were completed in continuous coordination with local administration in the presence of SDM, Tharad and Mamlatdar, Vav until 24.7.2020.

(ii) The non-availability of RoW at the afore-mentioned specific locations not only held up the work at those locations, but stiff resistance was faced from landowners of the adjoining locations along the transmission line which could be constructed only after the disposal of the court cases. The afore-mentioned court cases filed at District Courts and High Court of Gujarat impacted the availability of RoW for undertaking construction activities. The impact on progress of works due to non-availability of RoW consequent court cases were beyond the control of the Petitioner.

(e) Incidents of local disturbances and works completed under Police protection:

(1) Obstruction of works by local villagers:

(i) There were many cases of obstruction works by the local villagers and issues were resolved with the intervention of officials at various levels of administration of Government of Gujarat. The Petitioner in support of its submissions has placed on record the details of the correspondence with the officials.

(2) Police Protection regarding RoW:

(i) Hindrance in the construction of the 400 kV D/C Banaskantha (Radhanesda)-Banaskantha (PGCIL) Station Transmission Line was created for which police protection was sought and the work was completed under police protection. The chronology of work completed under the police protection has been placed on record in the instant petition by the Petitioner.

(f) Forest Clearance

(i) A total of 0.414 Ha Social Forest of 400 kV D/C (Twin) Banaskantha (Radhanesada)– Banaskantha (PG) Transmission Line having 4x2 Road crossings were involved for which online application for obtaining Forest Clearance of Gujarat State was submitted on 12.12.2017 through the online portal. The Stage-I clearance for all the three divisions were received on 23.1.2019. However, permission for tree cutting for tower foundation works was received on 19.5.2019 from the forest department. The non-availability/ delay of forest clearance was beyond the control of the Petitioner. The total time period from 12.12.2017 to 19.5.2019 works out to about 523 days. Taking into account six months as the procedural time charted for forest clearance (Reference as per MoEF Gazette Notification dated 14.3.2014 and 10.10.2014) the time period impacting the progress owing to additional time taken for forest clearance works out to 342 days i.e. reckoning from 6 months after application 12.6.2018 to 19.5.2019. The Petitioner has submitted the chronology of events leading to delay in getting forest clearance in the instant petition.

(III) Delay due to COVID 19 impact on Transmission System

(i) The transmission system was completed and CEA clearance was received in March, 2020 but the transmission asset was able to be commissioned in September, 2020. This delay was due to the worldwide pandemic situation.

Also, as per the Ministry of New and Renewable Energy (MNRE) order dated 13.8.2020, all RE projects under implementation as on date of lockdown, i.e. 25.3.2020, through RE Implementing Agencies designated by MNRE or under various schemes of the MNRE, have been given a time extension of 5 months from 25.3.2020 to 24.8.2020.

27. The Petitioner has submitted that due to continuous efforts, the transmission system was meticulously expedited so as to minimize the impact of the '*force majeure'* conditions and eventually completed the project with a shift in timeline of 23 months and 25 days. The Petitioner has submitted that the time over-run was beyond the control of the Petitioner and has been placed on record the documents justifying the same and has prayed to condone the time over-run.

28. MPPMCL has submitted that the Petitioner has attributed the time over-run due to land acquisition which could be easily avoided with proper liaising and day to day persuasion with local administration. The Petitioner is a Central Utility and well aware about the procedure of land acquisition and reasonable time required to acquire it and accordingly time of completion of project should have been decided at the time of envisaging project. MPPMCL has further submitted that the various reasons submitted by the Petitioner for delay are RoW issues, delay in land rate finalization, civil suits, incidents of local disturbances, forest clearance and Covid-19 etc. and the Petitioner has not submitted any documentary evidence regarding the same. The delay in completion is solely on account of the lackadaisical approach of the Petitioner, had timely and rigorous persuasion been made with the District Administration and the Forest Department, the RoW issues, land rate finalization issues, forest clearance issues etc. would have been resolved earlier. MPPMCL has requested to disallow the time over-run.

29. In response, the Petitioner has submitted that the English translation of all the Gujarati documents has been submitted in the petition *vide* affidavit dated 3.3.2021. The Petitioner has reiterated its submissions as made in the petition as regard to detailed justifications which lead of delay in declaring the time over-run.

30. The Commission *vide* RoP of hearing dated 25.11.2021 directed the Petitioner to submit Form-12 in respect of the transmission asset. In response, the Petitioner *vide* affidavit dated 16.12.2021 has submitted the activity wise details of time over-run of scheduled date vis-a-vis actual completion date of various activities involved in the implementation of the transmission asset including reasons of delay. The Petitioner has also submitted chronology of activity wise completion of asset in respect of Banaskantha (Radhanesda) Sub-station and associated Transmission Line from Banaskantha (Radhanesda) pooling Sub-station to Banaskantha (PGCIL) Sub-station.

31. We have considered the submissions of the Petitioner and MPPMCL. As per IA dated 8.12.2017, the transmission asset is scheduled to be put into commercial operation within 18 months from the date of I.A. i.e. by 8.6.2019 against which COD is 5.9.2020. Therefore, there is a time over-run of 455 days. The Petitioner *vide* affidavit dated 3.3.2021 has filed the documents pertaining to time over-run duly translated in English language from Gujarati language.

32. The Petitioner has submitted that the main reasons of time over-run was on account of (a) delay due to acquisition of sub-station land, (b) delay in grant of forest clearance of associated transmission line, (c) RoW and law and order problem on account of change in policy regarding land compensation in the State

of Gujarat and (d) Covid-2019 related lockdown etc. The item-wise reasons of time over-run are discussed as follows:

(a) Delay due to acquisition of land (6.25 Hectare) for 400/220 kV Banaskantha (Radhanesada) Pooling station

It is observed from the chronology of land acquisition submitted by the Petitioner, i.e. the land acquisition proposal on 5.5.2017, which is about 7 months prior to the investment approval (8.12.2017). The land acquisition was scheduled to be completed by 22.12.2017 against which the approval was received on 24.5.2018 causing a delay of about 153 days. It is evident from the chronology and correspondence dates made available by the Petitioner that the Petitioner applied for land acquisition about 7 months prior to the IA, carried out regular follow-up with the concerned Authority and promptly complied to the directives of land acquisition department like timely payment as per demand note etc. The additional time delay of 153 days in availability of sub-station land had a cascading effect on the execution of sub-station. Therefore, the time over-run of 153 days due to delay caused by land acquisition is beyond the control of the Petitioner and the same is condoned.

(b) Delay due to forest clearance for 400 kV D/C Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) line

It is observed that the Petitioner has submitted the forest clearance proposal on 12.12.2017 and obtained the stage-I clearance on 23.1.2019. However, working permission/ permission for tree cutting for tower foundation works was received on 19.5.2019 from the DFC, Banaskantha of Forest department. Therefore, the total period of 553 days was taken on account of forest clearance related issues. As per the Forest (Conservation) Amendment Rules, 2014 notified by MoE&F in the Official Gazette on 14.3.2014, the timeline for forest approval after submission of proposal is 180 days or 6 months (including processing by State Government and Central Government officials) for the forest area upto 5 Hectare (the instant case covers about 0.414 hectare affected area). The forest clearance took about 343 days more than the stipulated 180 days. It is observed that IA of associated transmission line was accorded on 11.5.2017, whereas the Petitioner has submitted the forest proposal on 12.12.2017, after a time gap of about 7 months. The Petitioner, in response to the reply of MPPMCL, has submitted that there was delay in finalisation of location of pooling sub-station land due to which the Petitioner could not finalise the route of associated transmission line. It is observed from the chronology of land acquisition submitted by the Petitioner that the District Inspector Land Record (DILR) has submitted his report, related to proposed land, to the Collector of Banaskantha on 14.11.2017. In this report, the DLIR has mentioned that demarcation of the land for construction of 400 kV GIS Sub-station has been done by the Departmental Surveyor on 2.11.2017. Therefore, we are willing to accept the justification submitted by the Petitioner for submission of forest proposal after a period of 7 months of IA dated 11.5.2017. Also, it is observed that the Petitioner promptly complied to the directives of the Authorities like timely payment as per demand note etc. In view of above, the additional time delay of 343 days in availability of sub-station land had a cascading effect on the execution of sub-station. Therefore, the time over-run of 343 days due to delay caused by forest clearance is beyond the control of the Petitioner and is condoned.

33. It is seen that the combined effect of the delay due to land acquisition (153 days) and forest clearance (343 days) adds up to 496 days. Out of 496 days, there is an overlap of about 18 days between 24.5.2018 (land acquisition date) to 12.6.2018 (6 months after forest proposal dated 12.12.2017). Thus, the net delay on the above two count is about 478 days which is above the total time overrun of 455 days. Therefore, the time over-run of 455 days in execution of 400/220 kV Banaskantha (Radhanesada) Pooling Station due to hindrance caused by delay in acquisition for sub-station land and delay in obtaining forest clearance of associated transmission line is beyond the control of the Petitioner and is condoned in line with Regulation 22 (2) of the 2019 Tariff Regulations.

34. The other issues of delay due to RoW and law and order problem on account of change in policy regarding land compensation in the State of Gujarat and Covid-

2019 related lockdown etc. are partially subsumed in the delay due to forest clearance deliberated above. Therefore, the same is not being discussed.

35. Accordingly, the decision with regard to time over-run in respect of the transmission asset is as follows:

SCOD	COD	Time over-run	Time over-run condoned	Time over-run not condoned
8.6.2019	5.9.2020	455 days	455 days	-

Central Financial Assistance (CFA)

36. Regulation 19(5) of the 2019 Tariff Regulations provides for exclusion of grant (from the capital cost) 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.

37. The Petitioner has submitted as follows:

a) The external power evacuation plan consists of following two projects:

1. Transmission System for Ultra Mega Solar Power Park (700 MW) at Banaskantha (Radhanesda), Gujarat (instant project) consisting 400 kV Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) D/C line along with 2 numbers 400 kV line bays at Banaskanta (PG)

2. Supplementary Transmission System for Ultra Mega Solar Power Park (700MW) at Banaskantha (Radhanesda), Gujarat consisting 2x500 MVA, 400/220 kV Pooling Station at Banaskantha (Radhanesda) (GIS) along with 1X125 MVAR bus reactor, 2 numbers of 400 kV line bays at Banaskantha (Radhanesda) (GIS) for interconnection of Banaskantha (Radhanesda) Pooling Station-Banaskantha (PG) 400 kV D/C (twin AL 59) line and 4 numbers 220 kV line bays at 400/220 kV at Banaskantha (Radhanesda) Pooling Station.

b) CFA for development of Solar Park and associated external transmission system was provided by MNRE and vide order ref: 30/26/2014-15/NSM dated 12.12.2014 issued administrative guidelines for release of fund for implementation of scheme for development of Solar Park and Ultra Mega Solar Power projects which were amended vide Office Memorandum No. F. No. 30/26/2014-15/NSM dated 29.9.2016, the relevant extracts of which are as follows:

> *"The CFA for development of solar park and for development of external transmission system will be apportioned in the ratio of 60:40 i.e. Rs 12 lakh per MW or 30% of the project cost, whichever is lower may be provided to the Solar Power Park Developers (SPPDs) towards development of solar parks and Rs. 8 lakh per MW or 30% of the project cost, whichever is lower will be provided to the CTU or STU towards development of external transmission system……….."*

c) The Ministry of New & Renewable Energy sanctioned the CFA grant of ₹5600 lakh for setting up of external power evacuation system for Radhanesada Solar Park, Gujarat by POWERGRID for evacuation of 700MW solar power from Radhanesada Solar Park (700 MW), Gujarat vide Office Memorandum No. F. No. 320/5/2018/NSM dated 22.3.2018, the relevant extracts are as follows:

> *"3. As per Administrative Guidelines of Solar Park Scheme vide order no. 30/26/2014-15/NSM, dated 21.03.2017 and further clarification vide OM no. 320/14/2017-NSM dated 18.01.2018, an amount of Rs 28,28,00,000/- (Rupees Twenty eight Crore and twenty eight Lakh only) is due to SECI, New Delhi towards award of work for external power evacuation system of Radhanesada Solar Park. The amount of Rs 28,28,00,000/- (Rupees Twenty eight Crore and twenty eight Lakh only) includes Rs 28,00,00,000/- (Rupees Twenty eight Crore only) towards award of development of external power evacuation system for Radhanesada Solar Park to PGCIL and Rs 28,00,000/- (Rupees Twenty eight Lakh only) towards fund handling charges to SECI.*
>
> *4. Based on Scheduled Tribe population in Gujarat (14.75% of total population in Gujarat as per Census 2011), sanction of the President of India is hereby conveyed for release of Rs. 4,17,13,000/- (Rupees Four Crore Seventeen Lakh and Thirteen Thousand only) out of ₹28,28,00,000/- (Rupees Twenty eight Crore and twenty eight Lakh only) to Solar Energy Corporation of India (SECI), New Delhi as CFA towards development of external power evacuation system of Radhsnesada Solar Park in Gujarat.*

d) Further the Ministry of New & Renewable Energy sanctioned the CFA grant ₹417.13 lakh towards award of work for external power evacuation system of Radhanesada Solar Park vide Office Memorandum No. F. No.

320/5/2018-NSM dated 29.6.2018, the relevant extracts of which as submitted, are as follows:

"2. Ministry vide its sanction order no. 320/5/201 7-NSM dated 22-03-2018 has already released Central Financial Assistance (CFA) of Rs. 4,17,13,000/- (Rs. Four Crore Seventeen Lakh and Thirteen Thousand only) to SECI, New Delhi towards award of work for external power evacuation system for Radhanesada Solar Park (700 MW) in Gujarat by PGCIL. The above CFA of Rs. 4,17,13,000/- (Rs. Four Crore Seventeen Lakh and Thirteen Thousand only) includes Rs. 4,13,00,000 (Rs. Four Crore Thirteen Lakh only) to PGCIL and Rs. 4,13,000 (Rs. Four Lakh Thirteen Thousand only) to SECI as fund handling charges @1%.

3. As per Administrative Guidelines of the Solar Park Scheme vide order no. 30/26/2014-15/NSM dated 21-03-2017 & further clarification vide OM no. 320/1 4/201 7-NSM dated 18-01-2018, an amount of Rs.24,10,87,000/- (Rs. Twenty Four Crore Ten Lakh and Eighty Seven Thousand only) is due to the SECI, New Delhi towards award of work for external power evacuation system of Radhanesada Solar Park. The amount of Rs. 24,10,87,000/- (Rs. Twenty Four Crore Ten Lakh and Eighty Seven Thousand only) includes Rs. 23,87,00,000/- (Rs. Twenty Three Crore and Eighty Seven Lakh only) towards award of development of external power evacuation system for Radhanesada Solar Park to PGCIL and Rs.23,87,000/- (Rs. Twenty Three Lakh and Eighty Seven Thousand only) towards fund handling charges to SECI.

4. Accordingly, sanction of the President of India is hereby conveyed for release of Rs. 24,1 0,87,000/- (Rs. Twenty Four Crore Ten Lakh and Eighty Seven Thousand only) to the Solar Energy Corporation of India (SECI) Ltd., New Delhi as CFA towards award of work for development of external power evacuation system of Radhanesada Solar Park in Gujarat."

e) Out of the total grant of ₹5600 lakh approved towards award of work for external power evacuation system of Radhanesada Solar Park, ₹2800 lakh has been disbursed as of now. The balance amount of grant of ₹2800 lakh is yet to be disbursed.

f) The Petitioner has further submitted that out of total grant received as of now, ₹2428.03 lakh has been considered in Supplementary Transmission System for Ultra Mega Solar Power Park (700MW) at Banaskantha (Radhanesda), Gujarat, i.e. the instant transmission system. The balance amount of grant received will be considered in Transmission System for Ultra Mega Solar Power Park (700MW) at Banaskantha (Radhanesda), Gujarat.

38. We have considered the submissions of the Petitioner. The details of grant allocated and adjustment in the capital cost of the transmission asset are as follows:

(₹ in lakh)

Adjusted from COD	Adjusted from accrued IDC discharged in 2020-21
2428.03	2509.52*

**Proposed Grants*

39. Proviso (iii) of Regulation 18(1) of the 2019 Tariff Regulations provides as follows:

> ***"18. Debt-Equity Ratio:***
> *……*
>
> *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."*

40. We note that the Commission vide order dated 14.4.2020 in Petition No. 34/TT/2019 had already decided to adjust the grant received from the capital cost. The relevant paragraphs of the order dated 14.4.2020 in Petition No. 34/TT/2019 are as follows:

> *"29. We have considered the submission of the Petitioner and noted that in line with the above provisions, funding through grant is not required to be considered for debt:equity ratio. Therefore, funding sans any grant would form remaining capital structure for the purpose of debt: equity ratio as per Regulation 19 of the 2014 Tariff Regulations and the same has been considered in the relevant para of this Order."*

41. In view of the foregoing, the funding other than the grant would form capital structure for the purpose of debt-equity ratio as per Regulation 18 of the 2019 Tariff Regulations and the same has been considered in the relevant portion of this order.

<u>Interest During Construction ("IDC")</u>

42. The Petitioner has claimed IDC of ₹415.99 lakh in respect of the transmission asset and has submitted the Auditor's Certificate dated 6.10.2020 in

support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.

43. The loan details submitted in Form-9C for 2019-24 tariff period and IDC computation sheet have been considered for the purpose of IDC calculation on cash basis and accrual basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

44. Accordingly, based on the information furnished by the Petitioner, IDC considered is as follows:

(₹ in lakh)

IDC as per Auditor's Certificate	IDC allowable	IDC disallowed due to computational difference	IDC discharged as on COD	IDC Un-discharged as on COD	IDC discharged during	
					2020-21	2021-22
A	B	C=(A-B)	D	E=(B-D)	F	G
415.99	415.99	0.00	292.95	123.04	1.87	121.17

Incidental Expenditure During Construction ("IEDC")

45. The Petitioner has submitted that the entire IEDC amount mentioned in the Auditor's Certificate is on cash basis and is paid up to COD.

46. There is an error in apportionment of IEDC as submitted by the Petitioner in the Abstract Cost Estimate. The Petitioner is directed to submit the correct copy of Abstract Cost Estimate along with IA at the time of truing-up.

47. We have considered the submissions of the Petitioner and note that IEDC of ₹717.69 lakh has been claimed by the Petitioner in support of which the Auditor's Certificate has been submitted and entire IEDC of ₹717.69 lakh has been discharged as on COD in respect of the transmission asset. The IEDC of ₹717.69 lakh is allowed.

Initial Spares

48. Regulation 23(d) of the 2019 Tariff Regulations provides as follows:

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

(d) Transmission system

(i) Transmission line - 1.00%
(ii) Transmission Sub-station
- *Green Field - 4.00%*
- *Brown Field - 6.00%*

(iii) Series Compensation devices and HVDC Station - 4.00%
(iv) Gas Insulated Sub-station (GIS)
- *Green Field - 5.00%*
- *Brown Field - 7.00%*

(v) Communication system - 3.50%
(vi) Static Synchronous Compensator - 6.00%
……………………………………………………….."

49. The Petitioner has claimed Initial Spares as follows:

Particulars	Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Percentage Claimed	Ceiling (in %)
Sub-station	13549.87	389.27	2.67	5.00
PLCC	156.64	2.46	1.52	3.50

50. The Petitioner has claimed Initial Spares on PLCC under communication system separately.

51. We have considered the submissions of the Petitioner. 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. Form 5 under Part-III of the 2019 Tariff Regulations requires a transmission licensee to provide "Element-wise Break-up of Project/ Asset/ Element Cost for Transmission System or Communication System". The details which are required to be furnished with regard to (a) for transmission line: preliminary works, transmission lines material, taxes and duties; (b) for sub-

stations: preliminary works & land, civil works, sub-station equipment, spares, taxes and duties; and for (c) communication system: preliminary works, communication system equipment, taxes and duties. PLCC is a part of sub-station equipment at Sl. No. 6.5 of Form 5 under the head 'Sub-station equipment‟ and PLCC has not been mentioned under communication system.

52. Further, it is observed that the Petitioner has computed allowable Initial Spares in accordance with Brown Field GIS Sub-station. Since the transmission system in the instant petition is Green Field, accordingly Initial Spares allowed considering the transmission asset as Green Field GIS Sub-station.

53. Therefore, we are not inclined to grant Initial Spares separately towards PLCC under communication system since Initial Spares claimed towards PLCC are included in the sub-station. Initial Spares allowed in respect of the transmission asset are as follows:

Particulars	Plant & Machinery Cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Allowable Initial Spares (₹ in lakh)	Ceiling limit (in %)	Initial Spares claimed (₹ in lakh)	Initial Spares allowed (₹ in lakh)	Discharge of Initial Spares (₹ in lakh)	
						As on COD	2021-22
Sub-station	13706.51	700.78	5	391.73	391.73	367.14	24.60

Capital Cost allowed as on COD

54. In view of the above, the capital cost in respect of the transmission asset allowed (as on COD) is as follows:

(₹ in lakh)

Capital Cost claimed in Auditor's Certificate (as on COD)	Less: Un-discharged IDC (as on COD)	Less: Adjustment of Grant Received	Capital Cost (as on COD)
A	B	D	E= (A-B-C-D)
12629.54	123.04	2428.03	10078.46

Additional Capital Expenditure (“ACE”)

55. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provides as follows:

“24. Additional Capitalisation within the original scope and upto 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 additional capital expenditure 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;
(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."

56. Based on the Auditor's Certificate dated 14.10.2020, details of ACE claimed by the Petitioner are as follows:

(₹ in lakh)

Year	Particulars	Land	Building	Transmission Line	Sub-station	PLCC	IT Equipment and Software	Total
2020-21	ACE	43.91	72.27	0.00	188.20	4.75	2.19	311.32
2021-22	ACE	0.00	169.27	0.00	826.86	1.24	0.74	988.51

57. The Petitioner has submitted that the admissibility of ACE incurred after COD is to be dealt in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations. Further, ACE incurred/ projected to be incurred is mainly on account of Balance and Retention Payments and therefore the same may be allowed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations.

58. MPPMCL has submitted that the Petitioner has failed to substantiate its claim for balance and retention payments with proper justification and documents and hence the same may be considered only at the time of truing up when the Petitioner submits the details of actual expenses incurred.

59. In response, the Petitioner has submitted that head wise and contractor-wise details of ACE claimed under the instant petition have been already submitted vide affidavit dated 17.6.2021 and ACE is claimed in line with the 2019 Tariff Regulations, hence, the same may be allowed.

60. We have considered the submissions of the Petitioner and MPPMCL and note that ACE projected for 2019-24 tariff period is on account of balance and retention payments due to un-discharged liability projected for works executed within the cut-off date (31.3.2023), and, accordingly, ACE claimed is allowed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations and it is as follows:

(₹ in lakh)

Particulars	ACE	
	2020-21	**2021-22**
ACE to extent of Balance & Retention Payments and work deferred for execution before cut-off date/ after cut-off date,	2818.97	877.34
Add: Un-Discharged of IDC as on COD	1.87	121.17
Less: Grants(proposed)	2509.52	0.00
Total	**311.32**	**998.51**

<u>Capital Cost for 2019-24 tariff period</u>

61. In view of the above, the capital cost considered in respect of the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

Capital Cost (as on COD)	ACE allowed		Capital Cost allowed as on 31.3.2024
	2020-21	**2021-22**	
10078.46	311.32	998.51	11388.29

<u>Debt-Equity Ratio</u>

62. Regulations 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.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation."

63. Debt-equity ratio considered for the purpose of computation of tariff for the 2019-24 period is as follows:

Funding	**Capital Cost (₹ in lakh) (as on COD)**	**(in %)**	**Capital Cost (₹ in lakh) (as on 31.3.2024)**	**(in %)**
Debt	7054.93	70.00	7971.81	70.00
Equity	3023.53	30.00	3416.48	30.00
Total	**10078.46**	**100.00**	**11388.29**	**100.00**

Depreciation

64. 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 assets 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 assets 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 assets 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 assets.

(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 upto 31.3.2019 from the gross depreciable value of the assets.

(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 assets 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.

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life."

65. The IT equipment has been considered as part of the Gross Block and depreciated using Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I has been worked out after considering the depreciation rates of IT and non-IT assets as specified in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100% depreciable. Depreciation allowed in respect of the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)

	Particulars	2020-21 (Pro-rata for 208 days)	2021-22	2022-23	2023-24
A	Opening Gross Block	10078.46	10389.78	11388.29	11388.29
B	Addition during the year 2019-24 due to projected ACE	311.32	998.51	0.00	0.00
C	Closing Gross Block (A+B)	10389.78	11388.29	11388.29	11388.29
D	Average Gross Block [(A+C)/2]	10234.12	10889.04	11388.29	11388.29
E	Average Gross Block (90% depreciable assets)	9955.18	10586.68	11085.56	11085.56
F	Average Gross Block (100% depreciable assets)	61.46	62.93	63.30	63.30
G	Depreciable value (excluding IT equipment and software) (E*90%)	8959.66	9528.01	9977.01	9977.01
H	Depreciable value of IT equipment and software	61.46	62.93	63.30	63.30
I	Total Depreciable Value (G+H)	9021.13	9590.94	10040.30	10040.30
J	Weighted average rate of Depreciation (WAROD) (in %)	5.23	5.20	5.19	5.19
K	Lapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	2.00
L	Balance useful life at the beginning of the year (Year)	25.00	25.00	24.00	23.00
M	**Depreciation during the year**(D*J)	**304.86**	**566.21**	**590.97**	**590.97**
N	Aggregate Cumulative Depreciation at the end of the year	304.86	871.07	1462.04	2053.01
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	8716.27	8719.87	8578.26	7987.29

<u>Interest on Loan ("IoL")</u>

66. 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 assets, 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 upto 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.

(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company 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."

67. The Petitioner has submitted that Weighted Average Rate of Interest (WAROI) on loan has been calculated on the basis of the rates prevailing as on 1.4.2019 and has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period may be adjusted.

68. We have considered the submissions of the Petitioner. The floating rate of interest, if any, will be considered at the time of true-up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset for 2019-24 tariff period is follows:

(₹ in lakh)

	Particulars	**2020-21 (Pro-rata for 208 days)**	**2021-22**	**2022-23**	**2023-24**
A	Gross Normative Loan	7054.93	7272.85	7971.81	7971.81

B	Cumulative Repayments up to Previous Year	0.00	304.86	871.07	1462.04
C	Net Loan-Opening (A-B)	7054.93	6968.00	7100.74	6509.77
D	Addition due to ACE	217.92	698.96	0.00	0.00
E	Repayment during the year	304.86	566.21	590.97	590.97
F	Net Loan-Closing(C+D-E)	6968.00	7100.74	6509.77	5918.80
G	Average Loan [(A+F)/2]	7011.46	7034.37	6805.26	6214.29
H	Weighted Average Rate of Interest on Loan (in %)	7.160	7.156	7.160	7.163
I	**Interest on Loan (GxH)**	**286.07**	**503.39**	**487.24**	**445.12**

Return on Equity ("RoE")

69. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide 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 cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.*
>
> *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.

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%;"

"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."

70. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate specified under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has been calculated @18.782% after grossing up RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations for 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, 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 2019-24 tariff period on actual gross income. However, if any penalty arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the Petitioner. 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 on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

71. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which will 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 for 2019-24 tariff period is as follows:

(₹ in lakh)

	Particulars	2020-21 (Pro-rata for 208 days)	2021-22	2022-23	2023-24
A	Opening Equity	3023.53	3116.93	3416.48	3416.48
B	Addition due to ACE	93.40	299.55	0.00	0.00
C	Closing Equity (A+B)	3116.93	3416.48	3416.48	3416.48
D	Average Equity[(A+B)/2]	3070.23	3266.70	3416.48	3416.48
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782
H	**Return on Equity (Pre-tax)**	**328.61**	**613.55**	**641.68**	**641.68**

Operation & Maintenance Expenses ("O&M Expenses")

72. O&M Expenses claimed by the Petitioner for the elements included in the transmission asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset	
Sub-station	
Sl. No.	**400 kV Sub-station bay**
1	Banaskantha - Banaskantha (PG) Bays
2	Banaskantha - ICT Bays
3	Banaskantha – Bus Reactor Bay
Sl. No.	**220 kV Sub-station bay**
1	Banaskantha - ICT Bays
2	Banaskantha - Line Bays

O&M Expenses				
	2020-21	**2021-22**	**2022-23**	**2023-24**
Sub-station				
400 kV				
Number of bays	5	5	5	5
220 kV				
Number of bays	6	6	6	6
Transformer				
400 kV ICT				
Number of units	2x500	2x500	2x500	2x500
PLCC				

Original project cost (₹ in lakh)	169.89	169.89	169.89	169.89
Total O&M Expense (₹ in lakh)	**335.51**	**609.29**	**631.03**	**652.11**

73. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provide 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 Bays (Rs Lakh 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 Transformers (Rs 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 HVDC lines (Rs Lakh 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 stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (Rs. 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;

(iii) the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2500 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);

(iv) the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;

(v) 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

(vi) the O&M expenses of Static Synchronous Compensator and Static Var 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.

(b) 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.

(c) 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."*

74. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for 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.

75. We have considered the submissions of the Petitioner. O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and the same is as follows:

(₹ in lakh)

Details	**2020-21 (Pro-rata for 208 days)**	**2021-22**	**2022-23**	**2023-24**
5 Numbers of 400 kV GIS Sub-station bays at Banaskantha Sub-station	66.38	120.58	124.81	129.19
6 Numbers of 220 kV GIS Sub-station bays at Banaskantha Sub-station	55.77	101.30	104.83	108.53
2 Numbers of 400 kV GIS Sub-station ICT bays at Banaskantha Sub-station	211.42	384.00	398.00	411.00
Total	**333.56**	**605.88**	**627.64**	**648.71**

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

<u>Interest on Working Capital ("IWC")</u>

76. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide as follows:

*“**34. Interest on Working Capital**: (1) The working capital shall cover:*

…..

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

(i) Receivables equivalent to 45 days of annual 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;”*

77. The Petitioner has considered the rate of IWC as 11.25%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of interest considered is 11.25 % (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, for 2021-22 has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) whereas 2022-23 onwards has been considered as 10.60% (SBI 1 year MCLR applicable as on 1.4.2022 of 7.10% plus 350 basis points). The components of the working capital and interest allowed thereon in respect of the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 208 days)	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for One month)	48.78	50.49	52.30	54.06
Working Capital for Maintenance Spares (15% of O&M expenses)	87.80	90.88	94.15	97.31
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	276.84	287.76	295.19	291.82
Total Working Capital	**413.42**	**429.14**	**441.64**	**443.19**
Rate of Interest of Working Capital (in %)	11.25	10.50	10.60	10.60
Interest of Working Capital	**26.50**	**45.06**	**46.81**	**46.98**

Annual Fixed Charges of 2019-24 Tariff Period

78. The transmission charges allowed for the transmission asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 208 days)	2021-22	2022-23	2023-24
Depreciation	304.86	566.21	590.97	590.97
Interest on Loan	286.07	503.39	487.24	445.12
Return on Equity	328.61	613.55	641.68	641.68
O&M Expenses	333.56	605.88	627.64	648.71
Interest on Working Capital	26.50	45.06	46.81	46.98
Total	**1279.61**	**2334.09**	**2394.35**	**2373.47**

Filing Fee and Publication Expenses

79. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner is 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

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

Goods and Services Tax

81. 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 and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory Authorities, the same may be allowed to be recovered from the beneficiaries.

82. MPPMCL has submitted that GST is not applicable on the electricity sector and hence the same cannot be allowed. In response, the Petitioner has reiterated its submissions.

83. We have considered the submissions of the Petitioner. Since GST is not levied on transmission services at present, we are of the view that Petitioner's prayer is pre-mature.

Sharing of Transmission Charges

84. The Petitioner has prayed that tariff for 2019-24 period may be allowed to be recovered on monthly basis in accordance with Regulation 57 of the 2019 Tariff

Regulations and may be shared by the beneficiaries and long-term transmission customers as per 2010 Sharing Regulations.

85. The Petitioner has submitted that LTA granted to GPCL at Banaskantha (Raghanesda) for 750 MW was operationalized with effect from 12.8.2021. The Petitioner has also submitted the details of the status of the generators, within the solar park of GPCL, covered in the transmission system. The details and status of the generators covered in the main and supplementary transmission system is as follows:

Details of Generating Plants	Capacity (MW)	Date of Commercial Operation
Gujarat Industries Power Company Limited	100	10.8.2021
Tata Power Renewable Energy Limited	100	10.8.2021
Electro Solaire Private Limited	150	10.8.2021
	50	13.8.2021
GSECL	200	Yet to be commissioned
Selection of Developer is under Process	100	Yet to be commissioned
Total	**700**	

86. The Petitioner has submitted that idle charging of the transmission system for LTA on 'no load' has been completed on 4.9.2020 and GPCL should be liable for payment of transmission charges from COD (5.9.2020) of the subject transmission asset as per Commission's Extant Regulations. The relevant extract of minutes of 30th and 31st JCC meeting held on 24.12.2020 and 26.3.2021, respectively, to review the status of upcoming generation and transmission projects in WR is also enclosed by the Petitioner.

87. We have considered the submissions of the Petitioner. The transmission asset was envisaged to be put into commercial operation for evacuation of 750 MW of power of the solar park. SCOD of the transmission asset is 8.6.2019 and the COD of the transmission asset is 5.9.2020 approved under Regulation 5(2) of the

2019 Tariff Regulations. The associated generating station i.e. Banaskantha (Radhanesada) Solar Power Park being executed by GPCL is not ready.

88. The Commission vide order dated 30.3.2017 in Petition No. 143/MP/2016, while granting regulatory approval w.r.t. to the transmission system, observed that transmission charges for the period of delay in commissioning of generators in the solar park has to be borne by the solar generators/SPPD. The relevant extracts of the regulatory approval order (order dated 30.3.2017 in Petition No. 143/MP/2016 with IA. No. 61/2016) is as follows:

> *"24. With regard to sharing of transmission charges of the transmission system, since the transmission system is being implemented as part of ISTS, the sharing of the transmission charges for the transmission system covered in the present petition shall be governed by the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 as amended from time to time. With regard to recovery of transmission charges on account of delay in commissioning of solar generation, in the Statement of Reasons for the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-state Transmission and related matters) (Fifth Amendment) Regulations, 2015, and the Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission Scheme to Central Transmission Utility) (First Amendment) Regulations, 2015, the following has been clarified:*
>
> > *"8.2.1 With regard to the suggestions of PGCIL, it is clarified that SPPD who shall apply for Connectivity/Long term Access shall be liable to deposit Application Bank Guarantee/Construction Bank Guarantee as required under Connectivity Regulation. Further, SPPD shall also be liable for payment of transmission charges for delay in commissioning of generator and relinquishment charges towards transmission access under Connectivity Regulations and Sharing Regulations. Regulation 7(1)(u) of the Sharing Regulations provides that "No transmission charges for the use of ISTS network shall be charged to solar based generation" is applicable only when the power is evacuated through the transmission system to the beneficiaries after the commercial operation of the generating station. Therefore, transmission charges for delay in commissioning of solar power generators shall be payable by such solar generators/SPPD on the same line as the liability for payment by the thermal and hydro Order in Petition No. 143/MP/2016 Page 15 generating station in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014. 8.2.2 With regard to delay of internal system, it is clarified that SPPD shall be executing internal system on behalf of solar power generators. The treatment of delay or other modalities should be covered in Agreement between solar power generators and SPPD. In regard to NTPC's comments on development of transmission matching with generation, it is clarified that CTU shall carry out coordination with the SPPD/solar power generators in accordance with Section 38 of the Act."*

Therefore, the transmission charges for delay in commissioning of the solar power generators shall be paid by such solar generators/SPPD in accordance with the relevant Regulations of the Commission."

89. Further, Regulation 8(5) and Regulation 8(6) of the 2010 Sharing Regulations provides as follows:

"8. ….

(5) Where the Approved Withdrawal or Approved Injection in case of a DIC is not materializing either partly or fully for any reason whatsoever, the concerned DIC shall be obliged to pay the transmission charges allocated under these regulations;

Provided that in case the commissioning of a generating station or unit thereof is delayed, the generator shall be liable to pay Withdrawal Charges corresponding to its Long term Access from the date the Long Term Access granted by CTU becomes effective. The Withdrawal Charges shall be at the average withdrawal rate of the target region;

Provided further that where the operationalization of LTA is contingent upon commissioning of several transmission lines or elements and only some of the transmission lines or elements have been declared commercial, the generator shall pay the transmission charges for LTA operationalised corresponding to the transmission system commissioned;

Provided also that where the construction of dedicated transmission line has been taken up by the CTU or the transmission licensee, the transmission charges for such dedicated transmission line shall be payable by the generator as provided in the Regulation 8 (8) of the Connectivity Regulations;

Provided also that a generating station drawing start-up power or injecting infirm power before commencement of LTA shall be liable to pay the withdrawal or injection charges corresponding to the actual injection of infirm power or withdrawal start-up power during a month (concerned month) and the amount received on account of such payments shall be reimbursed to the DICs in the month following the month of billing, in proportion to the billing of the DICs during the concerned month;

Provided also that CTU shall maintain a separate account for the above amount received in a quarter and deduct the same from the transmission charges of ISTS considered in PoC calculation for the next application period.

(6) For Long Term Transmission Customers availing power supply from inter-State generating stations, the charges attributable to such generation for long term supply shall be calculated directly at drawal nodes as per methodology given in the Annexure-I. Such mechanism shall be effective only after commercial operation of the generator. Till then it shall be the responsibility of the generator to pay transmission charges."

90. In the instant case, as the solar generation of 400 MW out of total capacity of 700 MW under the solar park achieved COD on different dates and another 300

MW is yet to be commissioned, the issue for our consideration is what proportion of transmission charges will be included in the common pool and what proportion of transmission charges is to be paid by the solar power park developer (GPCL). The transmission asset was put into commercial operation on 5.9.2020. However, no generation was commissioned on 5.9.2020. Generation of 350 MW was commissioned on 10.8.2021. Accordingly, the Solar Park developer i.e. GPCL will pay the transmission charges for 700 MW for the period from 5.9.2020 to 9.8.2021. On the similar line, the Solar Park developer GPCL is liable to pay the transmission charges as per the details given below in terms of the principle discussed in the preceding paragraphs and as provided under Regulation 8(5) and Regulation 8(6) of the 2010 Sharing Regulations:

COD of transmission asset	Solar generation capacity (MW) commissioned	COD of solar generation capacity	Liability of transmission charges
5.9.2020	Nil	--------	**From 5.9.2020 to 9.8.2021:** Transmission charges of subject asset for 700 MW shall be borne by GCPL
	350	10.8.2021	**From 10.8.2021 to 12.8.2021:** Transmission charges of subject asset proportionate to 350 MW shall be included in the common pool while for balance 350 MW shall be borne by GPCL.
	50	13.8.2021	**From 13.8.2021 to one day prior to COD of balance capacity:** Transmission charges of subject asset proportionate to 400 MW shall be included in the common pool while for balance 300 MW shall be borne by GPCL.
	300	Yet to be commissioned	

91. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. The Billing, collection and disbursement of the transmission charges shall be recovered in terms of provisions of the 2010 Sharing Regulations and 2020 Sharing Regulations

as provided in Regulation 57 of the 2019 Tariff Regulations.

92. To summarise:

a) The Annual Fixed Charges (AFC) allowed in respect of the transmission asset for 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)

2020-21 (Pro-rata for 208 days)	2021-22	2022-23	2023-24
1279.61	2334.09	2394.35	2373.47

93. Annexure-I given hereinafter shall form part of the order.

94. This order disposes of Petition No. 74/TT/2021 in terms of the above discussions and findings.

sd/-	sd/-	sd/-	sd/-
(P. K. Singh)	**(Arun Goyal)**	**(I. S. Jha)**	**(P. K. Pujari)**
Member	**Member**	**Member**	**Chairperson**

2019-24 Capital Expenditure as on COD	Admitted Capital Cost as on COD (₹ in lakh)	ACE 2019-20 (₹ in lakh)	ACE 2020-21 (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of depreciation (in %)	Annual Depreciation 2020-21 (₹ in lakh)	Annual Depreciation 2021-22 (₹ in lakh)	Annual Depreciation 2022-23 (₹ in lakh)	Annual Depreciation 2023-24 (₹ in lakh)
Land	195.52	43.91	0.00	**239.43**	0.00	0.00	0.00	0.00	0.00
Building	14.05	72.27	169.67	**255.99**	3.34	0.96	5.72	8.55	8.55
Transmission Line	0.00	0.00	0.00	**0.00**	5.28	0.00	0.00	0.00	0.00
Sub Station	9707.37	188.20	826.86	**10722.43**	5.28	517.52	544.31	566.14	566.14
PLCC	101.16	4.75	1.24	**107.15**	6.33	6.55	6.74	6.78	6.78
Leasehold Land	0.00	0.00	0.00	**0.00**	3.34	0.00	0.00	0.00	0.00
IT Equipment and software	60.37	2.19	0.74	**63.30**	15.00	9.22	9.44	9.49	9.49
TOTAL	**10078.46**	**311.32**	**998.51**	**11388.29**		534.97	566.21	590.97	590.97
				Average Gross Block (₹ in lakh)		**5.23**	**5.20**	**5.19**	**5.19**
				Weighted Average Rate of Depreciation (in %)		10234.12	10889.04	11388.29	11388.29