CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 6/TT/2020

Coram:

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

Date of Order: 24.02.2023

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and determination of transmission tariff for 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 in respect of **Asset-1:** 1 Number 220 kV Line Bay for 220 kV Rewa Pooling-Ramnagar circuit- 2 line and 1 Number 220 kV Line Bay for 220 kV Rewa pooling-Barsaita Desh circuit 2 line at Rewa Pooling Station, **Asset-2:** 1 Number 220 kV Line Bay for 220 kV Rewa Pooling – Ramnagar circuit - 1 line at Rewa Pooling Station, **Asset-3 :** 2 Number 220 kV line bays for 220 kV Rewa Pooling-Badwar circuit- 1 and circuit- 2 line at Rewa Pooling Station and **Asset-4:** 1 Number 500 MVA, 400/220 kV ICT 3 along with associated 400 kV and 220 kV transformer bays at Rewa Pooling Station under Transmission System for Ultra Mega Solar Park (750MW) in Rewa District, Madhya Pradesh 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**

Vs

1. Rewa Ultra Mega Solar Limited,
   Urja Bhawan, Link Road No 2,
   Shivaji Nagar, Bhopal - 462016.

2. Madhya Pradesh Power Management Company Limited,
   Shakti Bhavan, Rampur,
   Jabalpur– 482008.

3. Madhya Pradesh Power Transmission Company Limited (MPPTCL),
   Shakti Bhavan, Rampur,
   Jabalpur– 482008.

4. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road, Indore-452008.

5. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400001.

6. Maharashtra State Electricity Transmission Company Limited,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East) Mumbai-400051.

7. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan, Race Course Road,
Vadodara-390007.

8. Electricity Department,
Government of Goa,
Vidyuti Bhawan, Panaji,
Near Mandvi Hotel,Goa – 403001.

9. Electricity Department,
Administration of Daman and Diu,
Daman –396210.

10. DNH Power Distribution Corporation Limited,
Vidyut Bhawan, 66 kV Road, Near Secretariat,
Amli, Silvasa-396230.

11. Chhattisgarh State Power Transmission Company Limited,
Office of the Executive Director (C&P),
State Load Despacth Building

12. Chhattisgarh State Power Distribution Company Limited,
P.O.-Sunder Nagar, Dangania, Raipur,
Chattisgarh-492013. **...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 G. Umapathy, Advocate, RUMSL
Ms. P. Balakrishnan, Advocate, RUMSL
Shri Anindya Khare, MPPMCL

ORDER

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, for determination of tariff from commercial operation date (COD) to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") in respect of the following transmission assets under Transmission System for Ultra Mega Solar Park (750MW) in Rewa District, Madhya Pradesh in Western Region (hereinafter referred to as "the transmission system"):

Asset 1: 1 Number 220 kV line bay for 220 kV Rewa Pooling - Ramnagar Circuit - 2 line and 1 Number 220 kV line bay for 220 kV Rewa Pooling – Barsaita Desh circuit 2 line at Rewa Pooling Station;

Asset 2: 1 Number 220 kV line bay for 220 kV Rewa Pooling - Ramnagar Circuit - 1 line at Rewa Pooling Station;

Asset 3 : 2 Number 220 kV line bays for 220 kV Rewa Pooling – Badwar Circuit- 1 and Circuit - 2 Line at Rewa Pooling Station; and

Asset-4: 1 Number 500 MVA, 400/220 kV ICT 3 along with associated 400 kV and 220 kV transformer bays at Rewa Pooling Station.

2. The Petitioner has made the following prayers:

"1) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition as per para 12.2 above

2) Invoke the provision of regulation-4(3)(ii) of CERC (Terms and Conditions of Tariff) Regulations' 2014 and Regulation – 24 of CERC (Conduct of Business) Regulations' 1999 for approval of COD of transmission system of the petitioner as 22.11.2018 in case of Asset -3.

3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.

4) Allow the Petitioner to approach Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.

5) 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 under clause 25 of the Tariff regulations 2014.

6) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.

7) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

8) 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 2014-19 period, if any, from the respondents.

9) Allow the petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.

10) Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.

11) Allow the petitioner to bill Tariff from anticipated COD and also the petitioner may be allowed to submit revised Certificate and tariff Forms (as per the Relevant Regulation) based on actual COD

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

Background

3. The brief facts of the case are as follows:

a. Investment Approval (IA) of the project was accorded by the Board of Directors of the Petitioner in its 324th meeting held on 12.1. 2016, at an estimated cost of ₹30504.00 lakh including IDC of ₹1238.00 lakh, at August 2015 price level.

b. The scope of work covered under the transmission system is as follows:

Transmission Line

(i) LILO of Vindhyachal-Jabalpur 400 kV 2nd D/C line (Circuit 3&4) at Rewa Pooling Station

Sub-station

(i) 400/220 kV Rewa Pooling Station

400 kV

- Line bays :4 numbers
- 500 MVA, 400/220 kV transformer:3 numbers
- 125 MVAr Bus Reactor :1 number
- Transformer bays :3 numbers
- Bus reactor bays :1 number

220 kV

- Line bays :6 numbers
- Transformer bays :3 numbers
- BC+TBC :2 numbers

Reactive Compensation

(i) 1X125 MVAr Bus Reactor at 400/220 kV Rewa Pooling Station.

c. The transmission system was discussed and agreed during 38th and 39th Standing Committee meetings on Power System Planning of Western Region held on 25.8.2015 and 28.12.2015 respectively. The proposal was also discussed and agreed in 30th WRPC meeting held on 8.1.2016.

d. The entire scope of the work under the transmission system has been completed. The details of scope of work covered under various petitions is as follows:

Name of the Asset	Petition No.	COD	Date of order
Asset-1: LILO of Vindhyachal-Jabalpur 400 kV 2nd D/C line (Circuit -3&4) along with 2 number ICTs, bus reactor along with associated bays and 1 number 220 kV line bay at 400/220 kV Rewa Pooling Station.	7/TT/2018	6.7.2018 (actual)	5.11.2018 (final)
Asset-2: 1 number ICT and 5		1.10.2018 (Anticipated)	Vide order dated 5.11.2018, the

number 220 kV line bays at 400/220 kV Rewa Pooling Station			Commission directed the Petitioner to re-file the petition for the asset after actual COD.
Asset 1: 1 Number 220 kV line bay for 220 kV Rewa Pooling - Ramnagar Circuit - 2 line and 1 Number 220 kV line bay for 220 kV Rewa Pooling –Barsaita Desh circuit 2 line at Rewa Pooling Station	Petition No.6/TT/2020	25.7.2018	Instant petition
Asset 2: 1 Number 220 kV line bay for 220 kV Rewa Pooling - Ramnagar Circuit - 1 line at Rewa Pooling Station		16.10.2018	
Asset 3 : 2 Number 220 kV line bays for 220 kV Rewa Pooling – Badwar Circuit- 1 and Circuit - 2 Line at Rewa Pooling Station		22.11.2018 (proposed)	
Asset-4: 1 Number 500 MVA, 400/220 kV ICT 3 along with associated 400 kV and 220 kV transformer bays at Rewa Pooling Station		8.202019	

e. The Petitioner has submitted copy of LTA signed with Rewa Ultra Mega Solar Limited dated 9.12.2016.

f. The Commission vide Record of Proceedings (RoP) dated 13.2.2020 directed the Petitioner to submit and clarify description of the transmission assets covered in the present petition as the same was not in line with the Investment Approval. In response, the Petitioner vide affidavit dated 19.3.2020 submitted that all the assets of the transmission system are covered in the instant petition. The details of the petitions through which the assets of the transmission system are covered are as follows:

Description as per IA	Entire scope as per IA	Covered in Petition No. 7/TT/2018	Covered in Petition No. 6/TT/2020
TRANSMISSION LINE			
(i) LILO of Vindhyachal-Jabalpur 400 kV 2nd D/C line (Circuit 3 & 4) at Rewa Pooling Station			
SUB-STATION			

(i) 400/220 kV Rewa Pooling Station			
400 kV			
· Line bays	4	4	
· 500 MVA, 400/220 kV transformer	3	2	1
· 125 MVAr bus reactor	1	1	
· Transformer bays	3	2	1
· Bus reactor bays	1	1	
220 kV			
· Line bays	6	1	5
· Transformer bays	3	2	1
· BC+TBC	2	2	
Reactive Compensation			
(i) 1X125 MVAr Bus Reactor at 400/220 kV Rewa Pooling Station.	1	1	

g. One number of 440/220 kV MVA transformer and 5 number of 220 kV line bays have been filed in the present petition based on actual COD as per order Commission's dated 5.11.2018 in Petition No. 7/TT/2018.

4. The transmission assets were scheduled to be put into commercial operation within 14 months from the date of IA i.e. 12.1.2016. The transmission assets were scheduled to be put into commercial operation on 12.3.2017. Asset-1, Asset-2 and Asset-4 were put into commercial operation on 25.7.2018, 16.10.2018 and 8.2.2019 respectively. The Petitioner has claimed the COD of Asset-4 as 22.11.2018.

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

6. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/objections have been received from the general

public in response to the aforesaid notice published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 2, has filed its reply *vide* affidavit dated 16.1.2020. MPPMCL has raised issues regarding time over-run, Additional Capital Expenditure (ACE), IDC, IEDC, O&M Expenses and Central Finance Assistance (CFA). The Petitioner *vide* affidavit dated 2.7.2020 has filed rejoinder to the reply of MPPMCL. Rewa Ultra Mega Solar Limited (RUMSL), Respondent No. 1, has filed its reply *vide* affidavit dated 13.7.2020. RUMSL has raised issues regarding time over-run, completion cost, ACE, IDC, IEDC, O&M Expenses, CFA and sharing of transmission charges. The Petitioner *vide* affidavit dated 20.7.2020 has filed rejoinder to the reply of RUMSL. The Petitioner has also filed affidavit dated 27.1.2022 in response to Written Submissions of MPPMCL dated 19.1.2022. However, the Petitioner has inadvertently mentioned the said affidavit dated 27.1.2022 as rejoinder to the reply of MSEDCL. No reply has been filed by MSEDCL. The issues raised by the Respondents and the clarifications given by the Petitioner have been dealt in the relevant paragraphs of this order.

7. Hearing in this matter was held on various dates and the Commission after hearing the parties reserved order in the matter on 6.1.2022.

8. This order is being issued on the basis of the materials available on the record such as affidavits dated 4.10.2019, 19.3.2020 and 6.7.2020; reply filed by MPPMCL vide affidavit dated 16.1.2020 and the Petitioner's rejoinder affidavit dated 2.7.2020 to the reply of MPPMCL; reply filed by RUMSL vide affidavit dated 13.7.2020 and the Petitioner's rejoinder affidavit dated 20.7.2020 to the reply of RUMSL and Petitioner's affidavit dated 27.1.2022 to the Written Submissions of MPPMCL dated 27.1.2022.

9. Having heard the representatives of the Petitioner, learned counsel for RUMSL and representative of MPPMCL and perused the material on record, we proceed to dispose of the petition.

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

10. The Petitioner has claimed the following tariff in respect of the transmission assets from COD to 31.3.2019:

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3	Asset-4
	2018-19 (Pro-rata 250 days)	2018-19 (Pro-rata 167 days)	2018-19 (Pro-rata 130 days)	2018-19 (Pro-rata 52 days)
Depreciation	16.49	10.26	9.00	18.07
Interest on Loan	14.76	9.17	9.38	19.32
Return on Equity	17.62	10.90	9.63	20.10
O&M Expenses	65.89	22.01	34.26	16.64
Interest on Working	4.29	1.72	2.29	2.02
Total	**119.05**	**54.06**	**64.56**	**76.15**

11. The Petitioner has claimed the following Interest on Working Capital (IWC) for the transmission assets from COD to 31.3.2019:

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3	Asset-4
	2018-19 (Pro-rata 250 days)	2018-19 (Pro-rata 167 days)	2018-19 (Pro-rata 130 days)	2018-19 (Pro-rata 52 days)
O&M Expenses	8.02	4.01	8.02	9.73
Maintenance Spares	14.43	7.22	14.43	17.52
Receivables	28.97	19.69	30.21	89.09
Total Working Capital	51.42	30.92	52.66	116.34
Rate of Interest (in %)	12.20	12.20	12.20	12.20
Interest on Working Capital	**4.29**	**1.72**	**2.29**	**2.02**

Date of Commercial Operation ("COD")

12. Regulation 4(3) of the 2014 Tariff Regulations provides as follows:

> ***"4. Date of Commercial Operation:*** *The date of commercial operation of a generating station or unit or block thereof a transmission system or element thereof shall be determined as under:*

(3) Date of Commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

Provided that:

(i)*Where the transmission line or Sub-station is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations.*

(ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof."

13. The Petitioner has claimed actual COD of Asset-1, Asset-2 and Asset-4 as 25.7.2018, 16.10.2018 and 8.2.2019 respectively. In support of COD of Asset-1, Asset-2 and Asset-4, the Petitioner has submitted the following:

a) In case of Asset-1, CEA Energisation Certificate dated 24.1.2018 under Regulation 43 of CEA (Measures Related to Safety and Electricity Supply) Regulations, 2010, ("2010 CEA Regulations''), RLDC Charging Certificate dated 10.8.2018 in accordance with Regulation 6.3A(5) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 ('the 2010 Grid Code Regulations"), self-declaration COD letter dated 17.10.2018 and CMD certificate as required under the 2010 Grid Code.

b) In case of Asset-2, CEA Energisation Certificate dated 24.1.2018 under Regulation 43 of the 2010 CEA Regulations, RLDC Charging Certificate dated 22.11.2018 in accordance with Regulation 6.3A(5) of the 2010

Electricity Grid Code Regulations, self-declaration COD letter dated 2.1.2019 and CMD certificate as required under Grid Code.

c) In case of Asset-4, CEA Energisation Certificate dated 24.1.2018 & 4.2.2019 under Regulation 43 of the 2010 CEA Regulations, RLDC Charging Certificate dated 19.2.2019 in accordance with Regulation 6.3A(5) of the 2010 Grid Code Regulations, self-declaration COD letter dated 20.2.2019 and CMD Certificate as required under Grid Code.

14. Taking into consideration CEA Energisation Certificates, RLDC Charging Certificates and CMD Certificates as required under the 2010 Grid Code Regulations, the COD of Asset-1, Asset-2 and Asset-4 is approved as 25.7.2018, 16.10.2018 and 8.2.2019 respectively.

15. The Petitioner has claimed COD of Asset-3 as 22.11.2018 under proviso (ii) to Regulation 4(3) of 2014 Tariff Regulations as the associated 220 kV transmission line executed by Rewa Ultra Mega Solar Limited (RUMSL) was not ready. In support of COD of the Asset-3, the Petitioner has submitted idle charging certificate without active power flow issued by RLDC.

16. Regulation 6.3A (4)(iv) of Indian Electricity Grid Code Regulations, 2016 is as follows:

"6.3A Commercial operation of Central generating stations and inter-State Generating Stations
4. Date of commercial operation in relation to an inter-State Transmission System or an element thereof shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from the sending end to the receiving end:

……
……

(iv) In case a transmission system or an element thereof is prevented from regular service on or before the Scheduled COD for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system of other transmission licensee, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof."

17. We have considered the submissions of the Petitioner. It is observed that Asset-3 was not put into use due to non-readiness of 220 kV downstream transmission lines under the scope of the RUMSL. Accordingly, the Petitioner in the present petition has prayed to approve the COD of Asset-3 as 22.11.2018 under proviso (ii) to Regulation 4(3) of the 2014Tariff Regulations.

18. Taking into consideration CEA Energisation Certificate dated 24.1.2018 under Regulation 43 of CEA 2010 Regulations, RLDC idle Charging Certificate dated 27.11.2018 and CMD Certificate as required under Grid Code, COD of Asset-3 is approved as 22.11.2018 under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations.

Capital Cost

19. Regulation 9(1) and Regulation 9(2) of the 2014 Tariff Regulations provide 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;

(bi) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period shall form part of the capital cost.

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11of these regulations;

(e) Capitalised initial spares subject to the ceiling rates in accordance with the Regulation 11 these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations;

(h) Adjustment of any revenue earned by the transmission licensee by using the assets before COD;"

20. The Petitioner has submitted apportioned approved cost in respect of transmission assets covered in the instant petition. The Petitioner has submitted Auditor's Certificates dated 5.7.2019 for Asset-1, Asset- 2 and Asset-4 and Management Certificate dated 16.7.2019 in respect of Asset-3, claiming capital cost incurred as on COD as well as ACE projected to be incurred in respect of the transmission assets.

21. The details of apportioned approved cost, capital cost as on COD and estimated ACE incurred or projected to be incurred during 2018-19 and 2019-20 along with estimated completion cost as claimed by the Petitioner for the transmission assets are as follows:

(₹ in lakh)

Particulars	**Approved Apportioned Cost (as per FR)**	**Cost up to COD**	**Projected ACE**		**Estimated completion Cost**
			2018-19	**2019-20**	
Asset-1	661.56	405.62	76.06	164.37	646.05
Asset-2	548.53	352.72	101.47	29.95	484.14
Asset-3	661.56	431.12	51.06	156.71	638.89
Asset-4	2525.80	2386.00	10.33	16.84	2413.17
Total	**4397.45**	**3575.46**	**238.92**	**367.87**	**4182.25**

Cost variation

22. The Petitioner has submitted that as against the apportioned approved cost of ₹4397.25 lakh, the estimated completion cost is ₹4182.25 lakh. Hence, there is no cost over-run though there is cost variation. The Petitioner has submitted the following asset wise reasons for cost variation:

Asset-1:

(₹ in lakh)

Sl. No.	Particulars	As per FR	As per Estimated Completion Cost	Variation
				Change with respect to FR cost
1	Civil works including foundation	179.54	211.80	-62.26
2	Switchgear (CT, PT, Circuit Breaker, Isolator, etc.)	349.67	365.04	-15.37
3	IEDC including contingency	106.87	6.74	100.13
4	IDC	25.48	19.61	5.86

Asset-2:

(₹ in lakh)

Sl. No.	Particulars	As per FR	As per Estimated Completion Cost	Variation
				Change With respect to FR
1	Civil works including foundation	153.40	164.77	-11.37
2	Switchgear (CT, PT, Circuit Breaker, Isolator, etc.)	313.19	279.23	33.96
3	IEDC including contingency	56.59	6.20	50.38
4	IDC	25.35	21.08	4.27

Asset-3:

(₹ in lakh)

Sl. No.	Particulars	As per FR	As per Estimated Completion Cost	Variation
				Change With respect to FR
1	Civil works including foundation	179.54	241.41	-61.87
2	Switchgear (CT, PT, Circuit Breaker, Isolator, etc.)	349.67	364.43	-14.76
3	IEDC including contingency	106.87	12.20	94.66
4	IDC	25.48	8.00	17.48

Asset-4:

(₹ in lakh)

Sl. No.	**Particulars**	**As per FR**	**As per Estimated Completion Cost**	**Variation**
				Change With respect to FR
1	Civil works including foundation	145.35	226.16	-80.81
2	Switchgear (CT,PT, Circuit Breaker, Isolator, etc.)	1892.67	3034.22	-141.54
3	IEDC including contingency	392.55	44.65	347.90
4	IDC	95.22	95.28	-0.06

a) **Decrease in IDC:** Decrease in IDC is attributable to variation in the rate of interest considered in FR as against actuals, decrease in overall capital cost with respect to FR and deployment of funds based on actuals. In FR, IDC was calculated considering rate of interest for domestic loans @10.5%. However, in actual, the weighted average rate of interest on loans is around 7.60%. Actual IDC accrued upto COD has been considered at the time of claim of tariff.

b) **Decrease in IEDC including contingency:** During FR estimation, 5% and 3% of equipment cost and civil Works has been considered for IEDC and contingency respectively whereas actual amount of IEDC has been considered at the time of claim of tariff.

c) **Increase in sub-station equipment:** The overall estimated completion cost of the transmission assets is within the approved apportioned cost. Further, regarding variation in cost of individual item, the Petitioner has submitted that packages under transmission system 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, lowest bidder can be arrived at/evaluated on overall basis only. Hence, item-wise unit prices in contracts and their variation over unit rate considered in FR estimates are beyond the control of the Petitioner. The Petitioner being a Government enterprise, has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Through this process, lowest possible market prices for required product/services are obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market forces, bidder's perception and site requirements whereas the estimates, are prepared by the Petitioner as per well-defined procedures. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded.

23. MPPMCL has submitted the following in respect of cost variation:

a) The Petitioner has shown that there is less expenditure of ₹100.13 lakh, ₹50.38 lakh, ₹94.66 lakh, ₹347.90 lakh respectively in case of Asset-1, Asset-2, Asset-3 and Asset-4 under the head of IEDC and contingency as compared to provision in FR. During FR estimation, 5% and 3% of equipment cost and civil works has been considered for IEDC and contingency respectively whereas actual amount of IEDC has been considered at the time of claim of tariff.

b) Similarly, a decrease in IDC in respect of Asset-1, Asset-2 and Asset-3 has been shown. It has been mentioned that in FR that IDC was calculated considering rate of interest for domestic loans @ 10.5%. However, the weighted average rate of interest of loans comes out to be around 7.6%. Hence, this less expenditure. The Petitioner arranges domestic loans at regular intervals and is well aware of rate of the loans.

c) The Petitioner is CTU and is engaged in such works in routine. The Petitioner arranged domestic loans at regular intervals and is well aware of rate of loans. Thus, the Petitioner has deliberately made excess provision in the estimate than required so that all the expenditure may be capitalized. The Petitioner is repeatedly doing this and getting the benefit on the plea that the actual cost is less than the FR cost. The same is to be checked prudently and excess IDC and IEDC on this ground may be disallowed.

24. In response, the Petitioner has submitted that against the apportioned approved cost of ₹4397.45 lakh, the estimated completion cost is ₹4182.25 lakh. Hence, there is no cost over-run when compared to FR cost. The reasons for item-wise cost variation between approved cost (FR) and estimated completion cost as on COD have already been explained in Form-5. Accordingly, the Petitioner has prayed to approve the capital cost of the elements covered in the instant petition and allow the tariff as claimed.

25. We have considered the submissions made by the Petitioner and MPPMCL. As compared with FR cost, the estimated completion cost of Asset-1, Asset-2, Asset-3 and Asset-4 is reduced by ₹15.51 lakh, ₹64.39 lakh, ₹22.67 lakh and ₹112.63 lakh respectively. It is observed that cost variation is mainly due to variation in civil works including foundation, switchgear (CT, PT, circuit breaker, isolator etc.), IDC and IEDC based on actual market fluctuation and due to actual award price received through competitive bidding which were beyond the control of the Petitioner. Further, against

the apportioned approved cost of ₹4397.45 lakh, the capital cost as on COD is ₹3575.46 lakh and estimated completion cost including additional capital expenditure is ₹4182.25 lakh. Hence, there is no cost over-run with respect to FR cost. Moreover, the cost of the individual asset is also within the FR apportioned approved cost. Therefore, the cost variation is allowed.

Time Over-run

26. As per the Investment Approval dated 12.1.2016, the scheduled COD of the transmission assets was within 14 months from the date of Investment Approval, matching with execution schedule of RUMSL. Accordingly, the scheduled COD of the transmission assets was 12.3.2017. The transmission assets i.e. Asset-1, Asset-2, Asset-3 and Asset-4 were put into commercial operation on 25.7.2018, 16.10.2018, 22.11.2018 and 8.2.2019 respectively. As such, there is a delay of 500 days, 583 days, 620 days and 698 days in case of Asset-1, Asset-2, Asset-3 and Asset-4 respectively. Accordingly, the details of time over-run are as follows:

Assets	Scheduled COD	Actual/Proposed COD	Time over-run
Asset-1	12.3.2017	25.7.2018 (Actual)	500 days
Asset-2		16.10.2018 (Actual)	583 days
Asset-3		22.11.2018 (Proposed)	620 days
Asset-4		8.2.2019 (Actual)	698 days

27. The reasons for time over-run as submitted by the Petitioner are as follows:

a. The Ministry of Power (MoP) assigned the Petitioner construction of transmission system for 9 solar parks to be set up in 7 States including Rewa Solar Park in Madhya Pradesh in compressed time schedule matching with the execution schedule of solar parks for evacuation of power. This was recorded in the 38th SCM held on 17.7.2015 as follows:

> *"27.4. POWERGRID informed that Ministry of Power, vide letter dated 8.1.15 assigned POWERGRID to take up the construction of transmission lines including pooling station from nine (9) solar parks being set up in seven(7) states including Rewa solar park in Madhya Pradesh on compressed time schedule. For evacuation of power from Rewa solar park, it is proposed to establish a 400/220 kV Pooling station at Rewa, with 3x500 MVA transformation capacity and its interconnection through LILO of 400 kV Vindhyachal-Jabalpur D/C line. Further, to address reactive power issues especially during low / no generation periods like in evening/night hours, 1x125 MVAr Bus reactor at 400kV Rewa Pool is proposed. Considering short gestation period of solar park, land has to be identified in contiguous to solar power park for development of Pooling Station & allotted to POWERGRID by Government of MP/Solar park developer to facilitate timely implementation of ISTS scheme matching with the commissioning schedule of solar parks."*

b. The regulatory approval for the transmission system was accorded by Commission vide order dated 24.11.2015 in Petition No. 228/MP/2015. The Commission in paragraph 17 of the said order dated 24.11.2015 observed that the transmission system is to be developed matching with the generation projects. The relevant portion of the order dated 24.11.2015 is as follows:

> *"In regard to development of transmission system matching with generation projects in the Solar Park at Rewa, CTU is directed to coordinate with the SPPD who is responsible for development of internal transmission system. CTU shall pace the development of transmission system matching with the progress of different phases of the Solar Park. We further direct the CTU to submit quarterly progress report as per Annexure to this order which shall also contain the status of execution of the transmission system for which regulatory approval has been accorded, the progress of solar based generation projects in the Solar Power Park and the internal transmission system within the solar park".*

c. Accordingly, the Petitioner rescheduled the implementation of its transmission system matching with the revised timeline of commissioning schedule of associated generation as October 2017 as confirmed by RUMSL vide its letter dated 9.12.2016. Further, the commissioning schedule of generation was subsequently revised by RUMSL from November 2017 to February 2018 and subsequently from February, 2018 to April, 2018.

d. Further, RUMSL submitted the generation schedule as May, 2018 to in Petition No. 7/TT/2018. Subsequently, RUMSL started generation of power (first tranche) w.e.f. 5.7.2018 and accordingly the LILO of Vindhyachal-Jabalpur 400 kV 2nd D/C line (Ckt 3&4) along with 2 number of ICTs, bus reactor along with associated bays and 1 number 220 kV line bay at 400/220 kV Rewa Pooling Station had been charged and put under commercial operation w.e.f. 6.7.2018, which was covered in Petition No. 7/TT/2018, matching with commissioning of generation of RUMSL.

e. The Petitioner planned to execute the balance assets progressively matching with generation schedule of RUMSL and charged the transmission assets covered in the instant petition progressively. Asset-1 and Asset-2 i.e. 220 kV line bays meant for 220 kV Rewa Pooling - Ramnagar Ckt - 2 line at Rewa Pooling Station were put under commercial operation w.e.f. 25.7.2018 and 16.10.2018 respectively along with the associated line.

f. Asset-3 has been charged and put under commercial operation w.e.f. 22.11.2018 without the associated line which is executed by RUMSL and was delayed due to RoW issues. The Petitioner accordingly invoked proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations.

g. With the increase of generation of solar park, Asset-4 was put under commercial operation w.e.f. 8.2.2019 to cater the power generated by solar park for maintaining the N-1 criteria relating to transformer.

h. All efforts/ coordinations were made for execution of its transmission assets matching with generation of REWA. RUMSL has submitted the generation schedule as per the direction of the Commission. The Petitioner has also submitted the generation status of RUMSL. Accordingly, the Petitioner matched the execution of transmission assets and has requested to condone the delay.

28. MPPMCL vide affidavit dated 17.1.2020 has submitted as follows:

a. The Petitioner was required to complete the work within 14 months from the date of approval (i.e. 12.1.2016) so as to match the implementation schedule of RUMSL. Any delay on the part of RUMSL does not authorize the Petitioner to delay its project and to load the additional expenses on the Respondents. If the Petitioner had completed the work in time, the transmission charges for the period of delay would have been attributable to RUMSL. The Petitioner has given excuses to hide its inefficiency, shortcomings, poor sightedness and faulty planning.

b. The Petitioner has rescheduled the implementation of transmission system as per the directions of the Commission. However, the Petitioner has not obtained the prior consent of beneficiaries for rescheduling the implementation and the progress report has also not been submitted by the Petitioner as directed by the Commission in order dated 24.11.2015 in Petition No.228/MP/2015. The Petitioner has referred to enclosure 8 along with the petition, the Minutes of Meeting (MoM) dated 27.2.2018 makes it clear that the beneficiaries the beneficiaries never consented for rescheduling the implementation date.

c. The Commission in its final order dated 5.11.2018 in Petition No. 7/TT/2018 observed as follows:

> *"26. the petitioner has neither explained the time over-run from the schedule COD of 15.3.2017 to 30.1.2018 nor submitted any documentary evidence to justify the time delay for this period. As such we are aware of the view that the time over-run from 15.3.2017 to 31.1.2018 is attributable to the petitioner."*

29. The Petitioner agreed for 14 months' time period on its own. The Petitioner was aware of the quantum and nature of the work and it was possible to complete the work within 14 months. The Board of Directors of the Petitioner would have gone through the PERT chart prepared by the Petitioner for completion of work to fulfil its commitment.

30. The Petitioner's plea that the COD was delayed to match with the COD schedule of RUMSL is afterthought. The Petitioner is trying to impose extra expenses incurred due to its lethargy and clumsiness on the beneficiaries on futile grounds and the same has already been rejected by the Commission while disposing of Petition No. 7/TT/2018. As such, the prayer for condonation of delay is liable to be rejected as the delay is fully attributable to the Petitioner.

31. RUMSL has submitted that the Commission vide order dated 31.5.2019 in Petition No. 1/RP/2019 and vide order dated 5.11.2018 in Petition No. 7/TT/2018 has rejected the Petitioner's case for time over-un on similar grounds. The relevant extracts of the order dated 31.5.2019 and 5.11.2018 respectively are follows:

> *"23. Thus, the Commission, while deciding on the issue of time overrun, has taken a conscious view of allowing the capitalisation of the IDC/ IEDC only for the period from investment approval to the SCOD. The entire time overrun (i.e. the period from SCOD to actual COD) has been disallowed in absence of reasons for delay till the period 31.1.2018 and thereafter till 6.7.2018, as the petitioner himself preferred to defer the COD to match with the generation at RUMSL.*
>
> *24. Thus, in our view, the prayer of the PGCIL is devoid of merit, as there is no apparent error in the impugned Order. "*
>
> ***Order dated 5.11.2018 in Petition No. 7/TT/2018***
>
> *"26. We have considered the submissions of the petitioner and MPPMCL. As per the investment approval dated 15.1.2016, the scheduled COD of the transmission scheme was 15.3.2017, against which the COD of the instant asset was declared on 6.7.2018 i.e. with a time over-run of 478 days. Further, the Energisation Certificates dated 24.1.2018 and 31.1.2018 as issued by CEA show that some of the elements of the instant asset were ready on 24.1.2018 and some on31.1.2018. The petitioner has claimed combined tariff for the elements of the instant asset, therefore the instant*

asset was claimed to be ready on 31.1.2018. The petitioner has neither explained the time over-run from the scheduled COD of 15.3.2017 to 30.1.2018 nor submitted any documentary evidence to justify the time delay for this period. As such, we are of the view that the time over-run from 15.3.2017 to 30.1.2018 is attributable to the petitioner."

32. RUMSL has further submitted that the Petitioner has failed to substantiate that the transmission assets were ready by 15.3.2017. The Petitioner has failed to show that time over-run is attributable to RUMSL and has not submitted any documentary evidence to justify the same. Thus, the prayer of Petitioner seeking condonation of delay is liable to be rejected.

33. In response to the submissions of MPPMCL and RUMSL, the Petitioner has submitted that time over-run is mainly due to matching the transmission assets with the generating stations of RUMSL and has reiterated its submissions as narrated in the instant petition.

34. The Commission vide Record of Proceeding (RoP) dated 13.2.2020, directed the Petitioner to submit the details of reasons for time over-run, correspondence exchanged and chronology of time over-run alongwith documents. In response, the Petitioner vide affidavit dated 19.3.2020 has reiterated the reasons for time-over-run as submitted in the petition.

a. We have considered the submissions of the Petitioner, MPPMCL and RUMSL and have perused the documents available on record. As per the Investment Approval dated 12.1.2016, the scheduled COD of the transmission system was 12.3.2017, against which Asset-1, Asset-2 and Asset-4 have been put into commercial operation on 25.7.2018, 16.10.2018 and 8.2.2019 respectively with time over-run of 500 days, 583 days and 698 days respectively. The COD of Asset-3 has been approved as 22.11.2018 under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations, thus there is time over-run of 620 days. Further, the Petitioner has submitted CEA Energisation Certificate dated 24.1.2018 in case of Asset-1, Asset-2 and Asset-3 and certificate dated 4.2.2019 in case of Asset-4 issued by CEA to show that some of the elements of the transmission assets were ready on 24.1.2018 and on 4.2.2019. The Petitioner has not produced any document to show that the transmission assets were ready on the SCOD i.e. 12.3.2017. The Petitioner has submitted that as per the regulatory approval vide order dated 24.11.2015 in Petition No. 228/MP/2015, the transmission system has to be implemented with matching with the progress of different phases of the soalr park and accordingly matched the transmission assets with the generating units of Rewa Ultra Mega Solar Limited (RUMSL). The Petitioner has submitted that RUMSL vide letter dated 9.12.2016, after the grant of Regulatory approval, has informed the Petitioner that the Scheduled COD of the asset is extended to 31.10.2017. Accordingly, the Petitioner has rescheduled the COD as 31.10.2017. The relevant extracts of the letter dated 9.12.2016 is as follows:

> *"Sub: Change of capacity in the Region for Long Term Access (LTA)*
> *Dear Sir,*
> *REWA Ultra Mega Solar Limited (RUMSL), a JV between Solar Energy Corporation of India, GoI and Madhya Pradesh Urja Vikas Nigam Limited, GoMP, has been granted connectivity and LTA vide letter under reference (1&2) respectively for its 750 MW (3X250 MW) Rewa Ultra Mega Solar Park project being developed under MNRE solar park scheme.*
>
> *2) It is requested that, 'Intimation for grant of Connectivity (CON-3) dt 29.7.2016 refers at pt.11 to 'Commissioning schedule of the Generating station' as June 2017-Oct 2017. As against that, 'Intimation for grant of Long-term Access (LTA-5) dt 29.7.2016 provides at pt.9 that LTA will be from 30.6.2017 till 29.6.2042. As PPA is for a 25 year period, the same needs to be rationalised. The project timelines too have been revised and now power plant would be connected with PGCIL by October 2017. As such, connectivity and open access shall now be required by 31st October, 2017."*

b. In view of the above, the Petitioner has rescheduled the COD of the transmission assets covered in the instant petition. The Petitioner also rescheduled the infusion of the funds, out of the total loan amount of ₹283.93 lakh, ₹246.90 lakh, ₹301.78 lakh, ₹1670.20 lakh, an amount of ₹19.60 lakh, ₹3.31 lakh, ₹1.43 lakh, ₹9.85 lakh only incurred towards IDC for Asset-1, Asset-2, Asset-3 and Asset-4 respectively. We are of the view that the time over-run from 12.3.2017 to 31.10.2017 is beyond the control of the Petitioner and the same has been condoned.

c. As regards time over-run beyond 31.10.2017, the Petitioner has neither submitted any letter for extension of COD nor submitted the valid reasons for time over-run. Therefore, the time over-run for the period between the revised SCOD i.e. 31.10.2017 to COD of the Asset-1, Asset-2, Asset-3 and Asset-4 is not condoned. In view of the above, the time over-run condoned/ not condoned in case of the transmission assets is as follows:

Asset	COD	Time over-run	Time over-run condoned	Time over-run not condoned
Asset-1	25.7.2018 (Actual)	500 days	233 days	267 days
Asset-2	16.10.2018 (Actual)	583 days	233 days	350 days
Asset-3	22.11.2018*	620 days	233 days	387 days
Asset-4	8.2.2019 (Actual)	698 days	233 days	465 days

**considered/approved under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations.*

<u>Central Financial Assistance("CFA")</u>

35. Proviso to clause 6 of Regulation 9 of the 2014 Tariff Regulations provides as follows:

"Provided that 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 shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation."

36. Proviso (iii) to Regulation 19(1) of the 2014 Tariff Regulations provides as follows:

> *"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."*

37. Proviso to clause 6 of Regulation 9(6) of the 2014 Tariff Regulations provides for exclusion of grant (from the capital cost) received from the Central or the State Government or any statutory body or authority for execution of the project which does not carry any liability of repayment.

38. MPPMCL has submitted that the issue of Central Financial Assistance (CFA) is between PGCIL and RUMSL. However, the Petitioner has not mentioned the efforts made for obtaining the CFA at a faster pace. MPPMCL has requested that the Petitioner may be directed to make rigorous efforts for obtaining CFA so that benefit may be passed on to the beneficiaries.

39. RUMSL has submitted that the Petitioner has claimed that out of the total CFA of ₹60 core, it has adjusted ₹30 crore in Petition No. 7/TT/2018, while the remaining CFA would be adjusted at the time of truing up of Petition No. 7/TT/2018. RUMSL in this regard has submitted that remaining CFA should be adjusted while determining transmission charges of Asset-2 rather than taking it up in the truing up petition for Asset-1, as bill for transmission charges of Asset-2 may be raised by the Petitioner prior to the truing up of tariff for Asset-1.

40. In response to the submissions of MPPMCL and RUMSL, the Petitioner has submitted that CFA amounting to ₹30 crore out of ₹60 crore has been received till date and has already been adjusted in the asset covered in Petition No. 7/TT/2018.

The remaining CFA shall be adjusted from the capital cost of same asset at the time of truing up of Petition No. 7/TT/2018. Further, no CFA has been deployed/ adjusted in the transmission assets covered in the instant petition.

41. We have considered the submissions of the Petitioner, MPPMCL and RUMSL. The Petitioner has submitted that out of the total CFA of ₹60 crore, the Petitioner has received ₹30 crore only and the same has been adjusted Petition No. 7/TT/2018. The Petitioner has not received the balance amount of ₹30 crore as yet. The Petitioner is directed to adjust the remaining grant received from MNRE under CFA at the time of truing up.

Interest During Construction ("IDC")

42. The Petitioner has claimed the following IDC for the transmission assets covered in the instant petition and has submitted the statement showing IDC claim, discharge of IDC liability as on the date of commercial operation and thereafter:

(₹ in lakh)

Particulars	IDC as per Auditor's Certificate	IDC discharged upto COD	IDC discharged during 2018-19	IDC discharged during 2019-20
Asset-1	19.61	0.00	19.61	0.00
Asset-2	21.08	17.77	0.00	3.31
Asset-3	7.99	6.56	1.43	0.00
Asset-4	95.28	83.63	1.80	9.85

43. MPPMCL has submitted that in view of non-condonation of delay, IDC and IEDC may also be capitalized only up to SCOD in line with Commission's order dated 5.11.2018 in Petition No. 7/TT/2018 wherein, at paragraph 29 and paragraph 30, IDC and IEDC have been allowed up to the date of SCOD.

44. MPPMCL has further submitted that the Petitioner has furnished asset-wise reasons for cost variation. The Petitioner has shown that there is less expenditure of ₹100.13 lakh, ₹50.38 lakh, ₹94.66 lakh, ₹347.90 lakh respectively in case of Asset-1,

Asset-2, Asset-3 and Asset-4 under the IEDC and contingency heads as compared to provision in FR. During FR estimation, 5% and 3% of equipment cost and civil works have been considered for IEDC and contingency respectively whereas actual amount of IEDC has been considered at the time of claim of tariff. Similarly, decrease in IDC in respect of Asset-1, Asset-.2 and Asset-3 has been shown. It has been mentioned that in FR, IDC was calculated considering rate of interest for domestic loans @ 10.5%. However, the weighted average rate of interest of loans comes out to be around 7.6%. Hence, this expenditure is less.

45. MPPMCL has submitted that the Petitioner is CTU and is engaged in this type of work since long. The Petitioner arranges domestic loans at regular intervals and is well aware of rate of the loans. The Petitioner has deliberately made excess provision in the estimate than required so that all the expenditure may be capitalized. The Petitioner is repeatedly doing this and getting the benefit on the plea that actual cost is less than the FR cost. The same is to be checked prudently and excess IDC and IEDC on this ground may be disallowed.

46. In response, the Petitioner has submitted that application for determination of tariff is filed under Regulation 7(2) of 2014 Tariff Regulations applicable for 2014-19 tariff period. The instant petition covers approval of tariff based on estimated expenditure to be incurred up to COD and additional capitalization projected to be incurred from anticipated COD to 31.3.2020 in respect of the transmission assets. The estimated capital cost incurred upto COD and projected to be incurred during 2017-18, 2018-19 and 2019-20 is given in cost certificates certified by the management.

47. RUMSL has submitted that IDC and IEDC could also be capitalized only up to SCOD in line with order dated 5.11.2018 in Petition No. 7/TT/2020 wherein, IDC and

IEDC respectively been allowed upto the date of SCOD. RUMSL has further submitted that the Commission may also consider that during the period from the execution of the transmission system till the commissioning of the Solar Projects by the SPDs in the solar parks, for reasons other than those attributable to the SPDs, the unutilized capacity of the ISTS System constructed and/or upgraded and connected to the solar park be allowed IDC and IEDC till such capacity in the solar power project is operational. IDC and IEDC be socialized with other users of the transmission system, till the maximum time period which could be 2 to 4 years. During such period, available capacity may be used for the short term or medium term transfer of the power. For the period going beyond the maximum time period, parties (intermediary agencies, SPDs, State agencies) who are at default shall be liable to pay such charges as per the provisions of the 2010 Sharing Regulations. RUMSL has also mentioned that actual expenditure of IDC and IEDC is less than the FR cost and has prayed the Commission to disallow the excess claim after prudence check.

48. The Commission vide RoP dated 16.6.2020 directed the Petitioner to clarify whether there is any increase in IDC claimed because of time over-run and to submit IDC specified in the Investment Approval of the transmission system, actual IDC claimed and spread over of IDC. The Commission further directed the Petitioner to file details of variation in expenditure, IDC, etc. on account of matching the execution of the transmission assets with the commissioning schedule of RUMSL.

49. In response, the Petitioner submitted that details of apportioned IDC as per Investment Approval, actual IDC claimed and spread over of the IDC during execution of the transmission assets covered in the instant petition are as follows:

Description	Time Period					
IDC / Capital Cost	**Upto Scheduled COD as per Investment Approval i.e. (15.3.2017)**	**From SCOD to 31.3.2018**	**From 1.4.2018 to COD**	**From COD to 31.3.2019**	**Projected (2019-20)**	**Total**
Asset-1: COD-25.7.2018						
Apportioned IDC as per Investment Approval (Form-5)						25.48
Actual IDC claimed and its spread over (As per actual loan deployed)	**0.00**	**13.16**	**6.44**			**19.61**
Capital Cost (excluding IDC & IEDC)	200.72	178.56	0.00	76.06	164.37	**619.70**
Asset-2: COD-16.10.2018						
Apportioned IDC as per Investment Approval (Form-5)						**25.35**
Actual IDC claimed and its spread over (As per actual loan deployed)	**0.00**	**11.45**	**9.64**			**21.08**
Capital Cost (excluding IDC & IEDC)	155.23	138.09	32.12	101.47	29.95	**456.86**
Asset-3: COD-22.11.2018						
Apportioned IDC as per Investment Approval (Form-5)						25.48
Actual IDC claimed and its spread over (As per actual loan deployed)	0	0	7.99			**7.99**
Capital Cost (excluding IDC & IEDC)	200.72	178.56	31.66	51.06	156.71	**618.70**
Asset-4: COD-8.2.2019						
Apportioned IDC as per Investment Approval (Form-5)						95.22
Actual IDC claimed and its spread over (As per actual loan deployed)	0.00	9.51	85.77			**95.28**

Capital Cost (excluding IDC & IEDC)	553.08	492.02	1200.97	10.33	16.84	**2273.24**

50. We have considered the submissions made by the Petitioner, MPPMCL and RUMSL. As discussed above, the time over-run from 12.3.2017 to 31.10.2017 i.e. 233 days has been condoned for Asset-1, Asset-2, Asset-3 and Asset-4. Therefore, IDC computation has also been adjusted accordingly. In response to the query raised of the Commission, the Petitioner vide affidavit dated 6.7.2020 has submitted that no IDC has been incurred upto SCOD. Further, the Petitioner has submitted IDC computation statement which contains name of the loan, drawl date, loan amount, interest rate and interest claimed. IDC is worked out based on the details given in the IDC statement. Further, loan amount as on COD has been mentioned in Form 6 and Form 9C. On scrutiny of these documents, certain discrepancies have been observed, such as mismatch in loan amount between IDC statement and Form 6 and Form 9C. Allowable IDC has been worked out based on the information available on record and relying on the loan amount as per Form 9C. As per the IDC computation statements submitted by the Petitioner, the drawl dates of loans used for the computation of the IDC claimed by the Petitioner for all the 4 assets is after the SCOD. IDC considered as on COD and summary of discharge of IDC liability up to COD and thereafter with respect to transmission assets for the purpose of tariff determination is as follows:

(₹ in lakh)

Assets	IDC as per Auditor's certificate	IDC disallowed due to time over-run not condoned	IDC allowed	IDC Discharged upto COD	IDC discharged during 2018-19	IDC discharged during 2019-20
1	**2**	**3**	**4=2-3**	**5**	**6**	**7**
Asset-1	19.61	15.19	4.42	0.00	4.42	0.00
Asset-2	21.08	17.08	4.00	0.00	0.00	4.00
Asset-3	7.99	7.99	0.00	0.00	0.00	0.00
Asset-4	95.28	91.92	3.36	3.36	0.00	0.00

Assets	IDC as per Auditor's certificate	IDC disallowed due to time over-run not condoned	IDC allowed	IDC Discharged upto COD	IDC discharged during 2018-19	IDC discharged during 2019-20
Total	**143.96**	**132.18**	**11.78**	**3.364**	**4.42**	**4.00**

Incidental Expenditure During Construction ("IEDC")

51. The Petitioner has claimed IEDC in respect of the transmission assets and has submitted Auditor's Certificate in this regard. Further, the Petitioner has submitted that entire IEDC claimed in Auditor's Certificates is on cash basis and is paid up to COD of the transmission assets. The details of IEDC as per the Auditor's Certificates and IEDC discharged upto COD are as follows:

(₹ in lakh)

Particulars	IEDC as per Auditor's Certificate	IEDC discharged upto COD
Asset-1	6.74	6.74
Asset-2	6.20	6.20
Asset-3	12.20	12.20
Asset-4	44.65	44.65

52. As discussed above, the time over-run from 12.3.2017 to 31.10.2017 i.e. 233 days has been condoned for Asset-1, Asset-2, Asset-3 and Asset-4. Therefore, computation of IEDC has also been adjusted accordingly.

53. IEDC considered in respect of the transmission assets as on the date of commercial operation for the purpose of tariff determination in the instant order is as follows:

(₹ in lakh)

Particulars	IEDC claimed as per Auditor's Certificates dated 25.6.2020	IEDC disallowed due to time over-run not condoned	IEDC allowed
Asset-1	6.74	1.95	4.79
Asset-2	6.20	2.15	4.05
Asset-3	12.20	4.52	7.68

Particulars	IEDC claimed as per Auditor's Certificates dated 25.6.2020	IEDC disallowed due to time over-run not condoned	IEDC allowed
Asset-4	44.65	18.49	26.16
Total	**69.79**	**27.11**	**42.68**

Initial Spares

54. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to cut-off date, subject to the following ceiling norms:

> *"(d) Transmission System*
> *(i) Transmission line: 1.00%*
> *(ii) Transmission sub-station (Green Field): 4.00%*
> *(iii) Transmission sub-station (Brown Field): 6.00%*
> *(iv) Series Compensation devices and HVDC Station: 4.00%*
> *(v) Gas Insulated Sub-station (GIS): 5.00%*
> *(vi) Communication System: 3.5%"*

55. The Petitioner has claimed Initial Spares for the transmission assets as follows:

(₹ in lakh)

Particulars	Plant and Machinery excluding IDC, IEDC, land cost and cost of civil works as on cut-off date (A)	Initial Spares		Ceiling as per Regulations (in %) (D)
		Claimed by the Petitioner (B)	(% of Plant & Machinery cost) (C)	
Sub-station (Conventional Greenfield)				
Asset-1	619.70	23.33	3.76	4.00
Asset-2	456.86	17.02	3.73	4.00
Asset-3	618.70	22.33	3.61	4.00
Asset-4	2273.23	42.58	1.87	4.00

56. The Petitioner has submitted that discharge for Initial Spares has been considered on cash basis in the Auditor's Certificate. The discharge statement of Initial Spares for Asset-1, Asset-2 and Asset-4 is submitted by the Petitioner vide affidavit dated 19.3.2020 and the same is as follows:

(₹ in lakh)

Particulars	Total Initial Spares claimed	Initial Spares discharged up to COD	Initial Spares discharged during	
			2018-19	2019-20

Particulars	Total Initial Spares claimed	Initial Spares discharged up to COD	Initial Spares discharged during	
			2018-19	2019-20
Asset-1	23.33	19.16	2.67	1.50
Asset-2	17.02	13.97	1.95	1.10
Asset-4	42.58	37.04	4.36	1.18

57. The Petitioner has further submitted that details of discharge of Initial Spares for Asset-3 could be provided after approval of COD.

58. MPPMCL has submitted that cost of Initial Spares claimed by the Petitioner is within the norms specified in the 2014 Tariff Regulations. However, when time over-run is not condoned, the proposed ACE for 2019-20 will be denied and IDC and IEDC of the above period will not be capitalized, the plant and machinery cost for the transmission assets is bound to be less than the claimed. Initial Spares should be allowed within limits as per the 2014 Tariff Regulations on final cost so arrived at by the Commission.

59. In response, the Petitioner has submitted that Initial Spares of the transmission assets claimed for sub-station is within ceiling of 4% as per the 2014 Tariff Regulations.

60. We have considered the submissions of Petitioner and MPPMCL. Initial Spares claimed by the Petitioner are within the ceiling of 4% as per Regulation 13(d) of the 2014 Tariff Regulations. Initial Spares are allowed for 2014-19 tariff period on the basis of the individual capital cost of the transmission assets. Therefore, Initial Spares allowed for the transmission assets as per percentage specified in the 2014 Tariff Regulations and the same is as follows:

(₹ in lakh)

Particulars	Plant & Machinery cost excluding IDC, IEDC, land cost & civil works cost as on cut-off date as per Form-13 (A)	Initial Spares claimed by the Petitioner (B)	Norm (in%) (C)	Initial Spares worked out D = [(A-B)*C/(100-C)]	Initial Spares Allowed (₹ in lakh) (E)
For Sub-station (Conventional)					
Asset-1	619.70	23.33	4.00	24.85	23.33
Asset-2	456.86	17.02	4.00	18.33	17.02
Asset-3	618.70	22.33	4.00	24.85	22.33
Asset-4	2273.23	42.58	4.00	92.94	42.58

61. The details of the approved capital cost of the transmission assets on COD are as follows:

(₹ in lakh)

Particulars	Capital Cost claimed as on COD as per Auditor's Certificate (A)	Less: IDC Disallowed (B)	Less: IDC discharged after COD (C)	Less: IEDC Disallowed (D)	Capital Cost allowed as on COD on cash basis (E) = (A-B-C-D)
Asset-1	405.62	15.19	4.42	1.95	384.06
Asset-2	352.72	17.08	4.00	2.15	329.49
Asset-3	431.12	7.99	0.00	4.52	418.61
Asset-4	2386.00	91.92	0.00	18.49	2275.59
Total	**3575.46**	**132.18**	**8.42**	**27.11**	**3407.75**

Additional Capital Expenditure ("ACE")

62. Regulation 14 of the 2014 Tariff Regulations provides as follows:

*"**14. Additional Capitalisation and De-capitalisation:***

(1) The capital expenditure in respect of the 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:

(i) Undischarged liabilities recognized to be payable at a future date;
(ii) Works deferred for execution;
(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
(v) Change in law or compliance of any existing law:

Provided that 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 shall be submitted along with the application for determination of tariff."

63. The Petitioner has claimed the ACE for 2014-19 tariff period in accordance with the provisions of Regulation 14 of the 2014 Tariff Regulationson account of undischarged liability towards final payment for works executed and for works deferred for execution within the cut-off date and un-discharged IDC. The details of the same are as follows:

(₹ in lakh)

ACE claimed		
Asset No	**2018-19**	**2019-20**
Asset-1	95.66	164.37
Asset-2	104.78	29.95
Asset-3	52.49	156.71
Asset-4	12.13	26.69

64. MPPMCL and RUMSL have submitted that the Petitioner has claimed ACE under Regulation 14(1) of the 2014 Tariff Regulations with reasoning of balance/ retention payment only without providing proper details and justification and the Petitioner may be put to strict proof of the same. The claims of the Petitioner may be considered and allowed only at the time of truing-up based on actual.

65. In response, the Petitioner has submitted that ACE incurred/ projected to be incurred in respect of the contextual assets is mainly on account of balance/ retention payments and hence the same may be allowed. The details of reasons for ACE for the transmission assets are given in Form-7. The Petitioner has further submitted that the instant petition for determination of tariff is filed in line with Regulation7 of the 2014 Tariff Regulations applicable for 2014-19 tariff period.

66. We have considered the submissions of the Petitioner, MPPMCL and RUMSL. The ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations as it is towards undischarged liabilities recognised to be payable at a future date. As regards the ACE claimed during 2019-20 period, since 2019-20 falls beyond the 2014-19 tariff period and is not covered under the 2014 Tariff Regulations, the same will be considered while determining tariff for 2019-24 tariff period. Accordingly, ACE allowed with respect to the transmission assets for 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars	Regulation	ACE approved for 2018-19			
		Asset-1	Asset-2	Asset-3	Asset-4
Balance and retention payments for liabilities other than IDC	14(1)(i)	76.06	59.25	0.00	10.33
Addition in Gross block due to balance work	14(1)(ii)	0.00	42.22	51.06	0.00
IDC Discharged after COD	14(1)(i)	4.42	0.00	0.00	0.00
Total ACE		**80.48**	**101.47**	**51.06**	**10.33**

67. Accordingly, ACE allowed in 2014-19 tariff period and the capital cost as on 31.3.2019 are as follows:

(₹ in lakh)

Particulars	Approved Apportioned Cost (as per FR)	Capital Cost as on COD	ACE allowed	Capital Cost admitted as on 31.3.2019
			2018-19	
Asset-1	661.56	384.06	80.48	464.54
Asset-2	548.53	329.49	101.47	430.96
Asset-3	661.56	418.61	51.06	469.67
Asset-4	2525.80	2275.59	10.33	2285.92
Total	**4397.45**	**3407.75**	**243.34**	**3651.09**

Debt-Equity ratio

68. Regulation 19 of the 2014 Tariff Regulations provides as follows:

***"19. Debt-Equity Ratio**: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. 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, 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 1.4.2014, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014, the Commission shall approve the debt: equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 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."

69. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE for 2014-19 tariff period. The debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19tariff period in accordance with Regulation 19 of the 2014 Tariff Regulations and the details of the same are as follows:

Particulars	Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(in%)	ACE during 2014-19 (₹ in lakh)	(in%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(in%)
Asset-1	Debt	268.85	70.00	56.34	70.00	325.18	70.00
	Equity	115.22	30.00	24.15	30.00	139.36	30.00
	Total	**384.06**	**100.00**	**80.48**	**100.00**	**464.55**	**100.00**
Asset-2	Debt	230.64	70.00	71.03	70.00	301.67	70.00
	Equity	98.85	30.00	30.44	30.00	129.29	30.00
	Total	**329.49**	**100.00**	**101.47**	**100.00**	**430.96**	**100.00**
Asset-3	Debt	293.03	70.00	35.74	70.00	328.77	70.00
	Equity	125.58	30.00	15.32	30.00	140.90	30.00
	Total	**418.61**	**100.00**	**51.06**	**100.00**	**469.67**	**100.00**
Asset-4	Debt	1592.91	70.00	7.23	70.00	1600.14	70.00
	Equity	682.68	30.00	3.10	30.00	685.78	30.00
	Total	**2275.59**	**100.00**	**10.33**	**100.00**	**2285.92**	**100.00**

Depreciation

70. Regulation 27 of the 2014 Tariff Regulations provides as follows:

"27. 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 or elements thereof.

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 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.

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

(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-II** 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 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 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 during the fa end of the project(five years before the 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 during the fag end of the project.

(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."

71. Weighted Average Rate of Depreciation (WAROD) at Annexure-I to Annexure-IV has been worked out after taking into account the depreciation rates of the assets as specified in the 2014 Tariff Regulations. Depreciation has been worked out considering the admitted capital expenditure as on COD and ACE during 2014-19 period. Depreciation allowed in respect of the transmission assets is as follows:

(₹ in lakh)

Sr. No.	Particular	Asset-1	Asset-2	Asset-3	Asset-4
		2018-19 (Pro-rata 250 days)	2018-19 (Pro-rata 167 days)	2018-19 (Pro-rata 130 days)	2018-19 (Pro-rata 52 days)
A	Opening Gross Block	384.06	329.49	418.61	2275.59

Sr. No.	Particular	Asset-1 2018-19 (Pro-rata 250 days)	Asset-2 2018-19 (Pro-rata 167 days)	Asset-3 2018-19 (Pro-rata 130 days)	Asset-4 2018-19 (Pro-rata 52 days)
B	Addition during the year 2014-19 due to projected ACE	80.48	101.47	51.06	10.33
C	Closing Gross Block (A+B)	464.55	430.96	469.67	2285.92
D	Average Gross Block (A+C)/2	424.31	380.22	444.14	2280.76
E	Weighted average rate of Depreciation (WAROD) (in%)	5.55%	5.58%	5.54%	5.33%
F	Balance useful life at the beginning of the year (Year)	24.00	24.00	24.00	25.00
G	Elapsed Life at the beginning of the year (Year)	0.00	0.00	0.00	0.00
H	Aggregated Depreciable Value	381.88	342.20	399.73	2052.68
I	**Combined Depreciation during the year**	**16.13**	**9.70**	**8.77**	**17.32**
J	Aggregate Cumulative Depreciation	16.13	9.70	8.77	17.32
K	Remaining Depreciable Value (H-J)	365.75	332.50	390.96	2035.36

Interest on Loan ("IoL")

72. Regulation 26 of the 2014 Tariff Regulations provides as follows:

> ***"26. Interest on loan capital:*** *(1) The loans arrived at in the manner indicated in Regulation 19 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*
>
> *(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*
>
> *(3) The repayment for each of the year of the tariff period 2014-19 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.

(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 generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of refinancing of loan."

73. The weighted average rate of IoL has been considered on the basis of rate prevailing as on COD. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period may be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of truing up. Therefore, IoL has been allowed in respect of the transmission assets in accordance with Regulation 26 of the 2014 Tariff Regulations and the same is as follows:

(₹ in lakh)

	Particulars	**Asset-1**	**Asset-2**	**Asset-3**	**Asset-4**
		2018-19 (Pro-rata 250 days)	**2018-19 (Pro-rata 167 days)**	**2018-19 (Pro-rata 130 days)**	**2018-19 (Pro-rata 52 days)**
A	Gross Normative Loan	268.85	230.64	293.03	1592.91
B	Cumulative Repayments upto Previous Year	0.00	0.00	0.00	0.00
C	Net Loan-Opening (A-B)	268.85	230.64	293.03	1592.91

	Particulars	Asset-1	Asset-2	Asset-3	Asset-4
		2018-19 (Pro-rata 250 days)	2018-19 (Pro-rata 167 days)	2018-19 (Pro-rata 130 days)	2018-19 (Pro-rata 52 days)
D	Additions	56.34	71.03	35.74	7.23
E	Repayment during the year	16.13	9.70	8.77	17.32
F	Net Loan-Closing (C+D-E)	309.05	291.97	320.00	1582.82
G	Average Loan (C+F)/2	288.95	261.31	306.52	1587.87
H	Weighted Average Rate of Interest on Loan (in%)	7.2937	7.2582	8.3743	8.1830
I	**Interest on Loan (G*H)**	**14.44**	**8.68**	**9.14**	**18.51**

Return on Equity ("RoE")

74. Regulation 24 and Regulation 25 of the 2014 Tariff Regulations provide as follows:

*"**24. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 19 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 further that:

i. In case of projects commissioned on or after 1st April 2014, an additional return of 0.50% shall be allowed, if such projects are completed within the timeline specified in Annexure-I;

ii. the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

iii. additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid;

iv. the rate of return of a new project shall be reduced by 1% 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)/ Free Governor ModeOperation (FGMO), data telemetry, communication system up to load dispatchcentre or protection system:

v. as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency *continues:*

vi. additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."

25. Tax on Return on Equity. *(1) The base rate of return on equity as allowed by the Commission under Regulation 24 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 on income from other business streams including deferred tax liability (i.e. income on business other than business of generation or transmission, as the case may be) shall not be considered 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) @ 20.96 % including surcharge and cess:

Rate of return on equity = 15.50/(1-0.2096) = 19.610%

(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 2014-15 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 2014-15 to 2018-19 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/DICs, as the case may be, on year to year basis."

75. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed the following effective tax rates for 2014-19 tariff period:

Year	**Claimed effective tax (in %)**	**Grossed up RoE [(Base Rate)/(1-t)] (in %)**
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

76. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019, had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The same MAT rates are considered for the purpose of grossing up of rate of RoE for truing up of tariff of 2014-19 period in terms of the provisions of 2014 Tariff Regulations and the same are as follows:

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

77. The Petitioner has claimed RoE for 2014-19 tariff period after grossing up the RoE @15.50% with effective tax rates (based on MAT rates) each year. Accordingly, RoE is trued up on the basis of MAT rates applicable in the respective years and is allowed for the transmission assets as follows:

	Particulars	Asset-1	Asset-2	Asset-3	Asset-4
		2018-19 (Pro-rata 250 days)	2018-19 (Pro-rata 167 days)	2018-19 (Pro-rata 130 days)	2018-19 (Pro-rata 52 days)
	Return on Equity				
A	Opening Equity	115.22	98.85	125.58	682.68
B	Additions	24.15	30.44	15.32	3.10
C	Closing Equity	139.36	129.29	140.90	685.78
D	Average Equity	127.29	114.07	133.24	684.23
E	Return on Equity (Base Rate) (in%)	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in%)	21.549	21.549	21.549	21.549
G	Rate of Return on Equity (in%)	19.758	19.758	19.758	19.758
A	**Return on Equity**	**17.23**	**10.31**	**9.38**	**19.26**

<u>Operation & Maintenance Expenses ("O&M Expenses")</u>

78. O&M Expenses claimed by the Petitioner with respect to the transmission assets for 2014-19 period are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-1(Pro-rata 250 days)					
2 number 220 kV line bays from Rewa- Ramnagar Circuit 2					
Number of bays					2
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses claimed					**65.89**
Asset-2 (Pro-rata 167 days)					
1number of 220 kV line bay from Rewa- Ramnagar CircuitI					
Number of bays					1
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses claimed					**22.01**
Asset-3 (Pro-rata 130 days)					
1 number 220 kV line bay from Rewa- Badwar Circuit I and 2					
Number of bays					1
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses claimed					**34.26**
Asset-4 (Pro-rata 52 days)					
Rewa Transformer Bay (ICT 3 220 kV)					
Number of bays					1
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
O&M Expenses claimed					6.85
Rewa Transformer Bay (ICT 3 400 kV)					
Number of bays					1

Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
O&M Expenses claimed					9.79
Total O&M Expenses claimed					**16.64**

79. MPPMCL has submitted that the Petitioner is a profit-making Public Sector Company. In terms of Office Memorandum dated 26.11.2008, issued by Ministry of Heavy Industries & Public Enterprises, the Petitioner has to bear the financial implications on its own and the Respondents are not liable to bear the burden. In view of profit earned by the Petitioner, the Petitioner should bear the burden of wage revision of its employees. There is no provision in the 2014 Tariff Regulations for revision of O&M Expenses and as such the Commission has no control over the wage hike. Therefore, the claim of the Petitioner to include wage revision under O&M Expenses is baseless and is liable to be rejected. MPPMCL has further submitted that the Commission has arrived at the O&M rates based on past five years actual O&M Expenses including wage hike. 10% margin over and above, the effective cumulative annual growth rate of O&M Expenses has also been allowed. If O&M Expenses incurred by the Petitioner are compared with O&M Expenses incurred by State Transmission Utilities, then it may be found that O&M Expenses incurred by the Petitioner are exorbitant. Further, high O&M rates will over burden beneficiaries and requested that the revision of O&M rates may be disallowed.

80. In response, the Petitioner has submitted that wage revision of the employees of the Petitioner's Company is due during 2014-19 period and actual impact of wage hike which will be effective from a future date has not been factored in fixation of the normative O&M rates prescribed for 2014-19 tariff period. The scheme of wage revision applicable to CPSUs being binding on the Petitioner, the Petitioner reserves the right to approach the Commission for suitable revision in the norms for O&M

expenditure for claiming the impact of wage hike during 2014-19 onwards. Accordingly, the Petitioner has prayed for approaching the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.

81. RUMSL has submitted that the O&M Expenses claimed by the Petitioner are exorbitant in comparison with the rates of State Transmission Utilities. The high rate of O&M Expenses will overburden the beneficiaries and, therefore, the prayer seeking revision of the O&M rates may be disallowed. The claim of the Petitioner for inclusion of wage revision under O&M Expenses is liable to be rejected as neither the Commission nor the Respondents have control over wage hike as allowed by the Petitioner to its employees. The 2014 Tariff Regulations does not contain any provision for revision of O&M Expenses.

82. In response to the contentions of RUMSL, the Petitioner has submitted that O&M Expenses for the project are based on the norms for O&M Expenditure for transmission system as specified under Regulation 29(3)(a) of the 2014 Tariff Regulations. The norms for O&M Expenditure have been arrived at by the Commission after considering normalized actual O&M Expenses of the Petitioner on its various projects in various regions during the year 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13. The wage revision of the employees of the Petitioner's Company is due w.e.f. 1.1.2017 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rates prescribed for 2014-19 tariff period. The scheme of wage revision applicable to CPSUs being binding on the Petitioner, the Petitioner submitted that it would approach the Commission for suitable revision in the norms for O&M Expenditure for claiming

the impact of wage hike from 1.1.2017 onwards and the impact of wage hike during 2014-19 onwards. Accordingly, the Petitioner has prayed for approaching the Commission for suitable revision in the norms for O&M Expenditure for claiming the impact of wage hike, if any, during 2014-19 tariff period.

83. The applicable norms for O&M Expenses as per the 2014 Tariff Regulations are as follows:

"29. Operation and Maintenance Expenses:

…….

(4) Transmission System

(c) The operation and maintenance expenses of communication system forming part of inter-state transmission system shall be derived on the basis of the actual O&M expenses for the period of 2008-09 to 2012-13 based on audited accounts excluding abnormal variations if any after prudence check by the Commission. The normalized O&M expenses after prudence check, for the years 2008-09 to 2012-13 shall be escalated at the rate of 3.02% for computing base year expenses for FY 2012-13 and 2013-14 and at the rate of 3.32% for escalation from 2014-15 onwards."

84. We have considered the submissions of the Petitioner, MPPMCL and RUMSL. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards the impact of wage revision, any application filed by the Petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The total allowable O&M Expenses for the transmission assets are as follows:

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Asset-1 (Pro-rata 250 days)					
2 number 220 kV line bay from Rewa- Ramnagar Circuit 2					
No. of bays					2
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses claimed					**65.89**
Asset-2 (Pro-rata 167 days)					

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
1 number 220 kV line bay from Rewa- Ramnagar Circuit I					
Number of bays					1
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses claimed					**22.01**
Asset-3 (Pro-rata 130 days)					
1 number 220 kV line bay from Rewa- Badwar Circuit I and 2					
Number of bays					1
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
Total O&M Expenses claimed					**34.26**
Asset-4 (Pro-rata 52 days)					
Rewa Transformer Bay ICT 3 220 kV					
Number of bays					1
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
O&M Expenses claimed					**6.85**
Rewa Transformer Bay ICT 3 400 kV					
Number of bays					1
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
O&M Expenses claimed					9.79
Total O&M Expenses claimed					**16.64**

Interest on Working Capital ("IWC")

85. Regulation 28(1)(c), Regulation 28(3), Regulation 28(4) and Regulation 3(5) of the 2014 Tariff Regulations specify as follows:

*"**28. Interest on Working Capital:** (1) The working capital shall cover:*
…..

(c) *Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:*
(i) Receivables equivalent to two months of fixed cost;
(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in Regulation 29; and
(iii) Operation and maintenance 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 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 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:

(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. -** In these regulations, unless the context otherwise requires:-*

(5) ***Bank Rate**’ means the base rate of interest as specified by the State Bank of India issued from time to time or any replacement thereof for the time being in effect plus 350 basis points;”*

86. The IWC is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The Rate of Interest (RoI) considered is 12.20% (SBI 1-year MCLR applicable as on 1.4.2018 at 8.70% plus 350 basis points) for 2018-19. The components of the working capital and interest allowed thereon in respect of the transmission assets are as follows:

(₹ in lakh)

	Particulars	**Asset-1**	**Asset-2**	**Asset-3**	**Asset-4**
		2018-19 (Pro-rata 250 days)	**2018-19 (Pro-rata 167 days)**	**2018-19 (Pro-rata 130 days)**	**2018-19 (Pro-rata 52 days)**
A	Working Capital for O&M Expenses (one month of O&M Expenses)	8.02	4.01	8.02	9.73
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M Expenses)	14.43	7.22	14.43	17.52
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	28.70	19.08	29.87	86.22
D	**Total Working Capital (A+B+C)**	**51.15**	**30.31**	**52.31**	**113.48**
E	Rate of Interest (in%)	12.20	12.20	12.20	12.20
F	**Interest of working capital (D*E)**	**4.27**	**1.69**	**2.27**	**1.97**

Annual Fixed Charges of 2014-19 Tariff Period

87. The transmission charges approved for the transmission assets for 2014-19 tariff period are as follows:

(₹ in lakh)

	Particulars	**Asset-1**	**Asset-2**	**Asset-3**	**Asset-4**
		2018-19 (Pro-rata 250 days)	**2018-19 (Pro-rata 167 days)**	**2018-19 (Pro-rata 130 days)**	**2018-19 (Pro-rata 52 days)**
A	Depreciation	16.13	9.70	8.77	17.32

	Particulars	Asset-1	Asset-2	Asset-3	Asset-4
		2018-19 (Pro-rata 250 days)	**2018-19 (Pro-rata 167 days)**	**2018-19 (Pro-rata 130 days)**	**2018-19 (Pro-rata 52 days)**
B	Interest on Loan	14.44	8.68	9.14	18.51
C	Return on Equity	17.23	10.31	9.38	19.26
D	O&M Expenses	65.89	22.01	34.26	16.64
E	Interest on Working Capital	4.27	1.69	2.27	1.97
F	**Total (A+B+C+D+E)**	**117.96**	**52.39**	**63.82**	**73.70**

Filing Fee and the Publication Expenses

88. The Petitioner has sought reimbursement of fees paid by it for filing the petition and publication expenses.

89. We have considered the submissions of the Petitioner. Regulation 52 of the 2014 Tariff Regulations provides for reimbursement of filing fees and publication paid by the Petitioner. Accordingly, the Petitioner shall be entitled to recover the application filing fees and publication expenses directly from the beneficiaries or the long term transmission customers/ DICs in accordance with Regulation 52(1) of the 2014 Tariff Regulations.

Licence Fees& RLDC Fees and Charges

90. The Petitioner has requested to allow the Petitioner to bill and recover license fees and RLDC fees and charges, separately from the Respondents. The Petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively of Regulation 52 of the 2014 Tariff Regulations.

Goods and Services Tax

91. 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.

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

Sharing of Transmission Charges

93. The Petitioner has prayed that transmission charges for 2014-19 period may be allowed to be recovered on monthly basis in accordance with Regulation 42 of the 2014 Tariff Regulations and may be shared by the Respondents in accordance with Regulation 43 of the 2014 Tariff Regulations as per Central Electricity Regulatory Commission (Sharing of Inter-state Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as the "2010 Sharing Regulations").

94. RUMSL has made the following submissions:

(a) As per Regulation 7(1)(u) of the 2010 Sharing Regulations, no transmission charges for the use of Inter-State Transmission Network shall be charged to solar based generation.

(b) As per Regulation 8(5) and Regulation 8(6) of the 2010 Sharing Regulations, any transmission charges up to the COD of generator are payable by the generator for the corresponding LTA that has been operationalized.

(c) As per the regulations, ISTS waiver is available to RUMSL. However, unlike conventional generation, solar projects are commissioned in part capacities. Hence, RUMSL got waiver for the part capacities commissioned. However, the transmission charges were raised for the remaining part capacities that were not commissioned. The dates of LTA operationalization and commissioning are as follows:

COD of Transmission Assets and Rewa Solar Park Capacities						
Sl. No	**Transmission capacity put into commercial operation**	**LTA operationalization date**	**Annual transmission charges determined (₹ in lakh)**	**Solar Park cumulative capacity commissioned (MW)**	**COD**	**Pending capacity where transmission charges are applied (MW)**
1	490 MW	7.7.2018	2789.83	5.1	6.7.2018	484.9
				15.1	3.8.2018	474.9
				115.1	21.8.2018	374.9
				150.8	7.9.2018	339.2
				200.8	26.10.2018	289.2
				230.8	2.11.2018	259.2
				280.8	2.12.2018	209.2
				330.8	4.1.2019	159.2
				380.8	9.1.2019	109.2
				430.8	14.2.2019	59.2
				490.8	21.3.2019	0
2	260 MW	13.4.2019		590.8	5.4.2019	159.2
				630.8	9.5.2019	119.2
				640.8	17.5.2019	109.2
				735	10.7.2019	15

(d) Annual Transmission Charges corresponding to 260 MW (i.e. Asset-2) have not been determined by the Commission and thus the bill raised by the Petitioner for 260 MW shall not be payable by RUMSL.

(e) LTA operationalization date for the transmission assets under the instant petition was communicated by the Petitioner to RUMSL on 13.4.2019 vide letter dated 11.4.2019. Thus, irrespective of COD as mentioned by the Petitioner in the instant petition, the transmission charges on RUMSL shall be applicable only from the date of LTA operationalization in accordance with Regulations 8(5) of the 2010 Sharing Regulations.

(f) Transmission system is executed in one go whereas solar generation is commissioned in parts or stages. Hence, the transmission charges levied on RUMSL were unavoidable on the account of the same. Further, RUMSL is a Solar Power Park Developer (SPPD) and its only source of funds is park charges (mentioned in the project agreements of Rewa Project as 'comprehensive charges'), which are paid by the three unit developers. As this is an additional cost to RUMSL and was not envisaged during the planning of the project, these transmission charges are an additional cost to RUMSL. Further, RUMSL is developing new Solar Parks in the State which are being developed to achieve Prime Minister's vision of achieving 100 GW RE by 2022. Such additional charges may create difficulties for RUMSL to comply with its activities and obligations because of negative cash flow.

(g) If ISTS charges and losses are exempted only from COD of solar power projects as provided in the existing Regulations, there will be a serious issue of meeting the liabilities to pay such charges and adjustment of losses prior to such commercial operation date. Especially, since the commercial operation date of the solar power projects established in the solar parks are achieved in phases. In these circumstances, the SPPD as an intermediary nodal agency would not be in a position to absorb the entire cost of payment of such transmission charges and adjustment of transmission losses pending the establishment of the solar power projects to the full capacity of the solar park. Levying of such charges and losses would seriously affect the ability of the SPPDs in the execution of the projects which would adversely impact the development of the solar capacity in the country.

(h) if the socializing of the transmission charges and losses made applicable by the 2010 Sharing Regulations from the commercial operation date of the solar power project is not considered for the period prior to the commercial operation date, in the circumstances other than the default or delay on the part of the SPPDs, there will be serious financial consequences to the Respondent who are undertaking the developmental work for promotion of the solar parks. This will make the entire concept of development of the solar park unviable for the intermediary agencies. The very purpose of promoting the solar power development through solar park will get seriously affected.

(i) As per Regulation 20 of the 2010 Sharing Regulations, the Commission has been empowered to relax any of the provisions of the regulations either on its own motion or on an application made before it by an interested party for reasons to be recorded in writing.

(j) Waiver of full transmission charges is provided to SPPD for a period of 25 years, the same should be applicable from the first initial part commissioning up to 25 years, instead of 25 years from actual SCOD or Unit COD of the solar project.

95. In response, the Petitioner has submitted that transmission charges of the transmission assets should be recovered on monthly basis and billing, collection and disbursement of transmission charges should be governed by the provisions of the 2010 Sharing Regulations, as provided under Regulation 43 of the 2014 Tariff

Regulations. MPPMCL has raised the issue of operationalization of LTA, raising of bilateral bills on them due to delay in their generation and seeking exemption from payment of transmission charges applicable to solar based power projects as per the 2010 Sharing Regulations etc. The Petitioner has submitted that these issues are specific to Madhya Pradesh Audyogik Kendra i.e. Respondent No.4 and have no relevance to the determination of transmission tariff of the transmission assets.

96. We have considered the submission of the Petitioner and RUMSL. The regulatory approval for the transmission project was granted vide order dated 24.11.2015 in Petition No. 228/MP/2015. The relevant portion of the order dated 24.11.2015 are as follows:

> *"18. 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 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 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 solar power generators shall be paid by such solar generators/SPPD in accordance with the relevant regulation of the Commission."

97. The Commission in order dated 24.11.2015 in Petition No. 228/MP/2015, while granting regulatory approval for 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 park developer as in the case of thermal and hydro generating stations. It is further observed that the Commission vide order dated 23.5.2022 in Petition No. 525/MP/2020 has made the following observations with regard to waiver of transmission charges:

"52. Thus, the above extracted provision clearly shows that no transmission charges are to be levied for the purpose of "sale". Further, the subject of all the above quoted MOP Orders is "Waiver of inter-state transmission charges and losses on transmission of the electricity generated from solar and wind sources of energy under para 6.4(6) of the revised Tariff Policy, 2016". Therefore, it is abundantly clear that waiver of transmission charges is on "electricity generated".

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54. The 2020 Sharing regulations clearly provide that waiver of transmission charges is for generation of electricity. The same cannot be read as providing relief from payment of transmission charges due to delay of the generation project.

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57. We observe that the Order dated 15.1.2021 has been issued under the Tariff Policy where waiver is for the sale of power and for the electricity generated from identified sources satisfying specified conditions. The quoted provision in the Order dated 15.1.2021 extracted in paragraph 56 provides that for an entity which is provided extension of COD by the competent authority, LTA under waiver shall start from such COD date (i. e. when the generator starts generating power) and waiver shall be applicable for the period as specified (such as 25 years). Thus, the entire provision is for waiver of transmission charges after COD of the generating station. Nowhere it is provided that a generator which has not declared COD would not be levied transmission charges as per extant regulations."

98. In view of the above decision of the Commission, we are of the view that waiver of transmission charges is applicable after COD of the generating station.

99. We have considered the submission of RUMSL. Regulation 8(5) and 8(6) *of* 2010 Sharing Regulations *provides as follows:*

> ***"8. Determination of specific transmission charges applicable for a Designated ISTS Customer***
>
> *(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 during the period when a generating station draws startup power or injects infirm power before commencement of LTA, withdrawal or injection charges corresponding to the actual injection or withdrawal shall be payable by the generating station and such amount shall be adjusted in the next quarter, from the ISTS transmission charges to be recovered through PoC mechanism from all DICs:*
>
> *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."*

100. The instant transmission project is for evacuation of power from solar energy generators associated with 750 MW Ultra Mega Solar Power Park at Rewa District of Madhya Pradesh. The regulatory approval was granted for execution of the following transmission system:

(a) Establishment of 400/220 kV, 3x500 MVA Pooling Station at Rewa;

(b) LILO of Vindhyachal - Jabalpur 400 kV 2nd D/C Line (Circuit-3&4) at Rewa Pooling Station;

(c) 1x125 MVAR bus reactor at Rewa Pooling Station; and

(d) 6 number 220 kV line bays at Rewa Pooling Station (for its inter-connection with solar park).

Of the above transmission system, the instant petition covers 1 number of 500 MVA ICT at Rewa Sub-station and 5 number of 220 kV line bays at Rewa Pooling Station for its inter-connection with Solar Park.

101. The transmission assets were envisaged for evacuation of power from Rewa Ultra Mega Solar Power Park. It is observed that the Petitioner has implemented transmission system which is capable of transferring about 750 MW power from Rewa Solar Park. The instant transmission system has been evolved in a comprehensive manner which consists of associated transmission system (ATS) for immediate inter-connection and transfer of power from Rewa Ultra Mega Solar Power Park. The details of the same are as follows:

REWA Ultra Mega Solar Ltd (750 MW)	Rewa PS	**ATS** **<u>Transmission System for transfer of power to MPPMCL (WR):</u>** A) **<u>Transmission System for Ultra Mega Solar Park (750 MW) in Rewa district, Madhya Pradesh</u>** a)LILO of Vindhyachal-Jabalpur 400 kV 2nd D/C line (Ckt 3&4) alongwith 2 number of ICTs along with associated bays and 1 number 220 kV line bay at 400/220 kV Rewa Pooling Station-6.7.2018. b) 1x125 MVAr, 420 kV bus reactor at Rewa -6.7.2018 c) 1 number 500 MVA, 400/220 kV ICT 3 along with associated 400 kV and 220 kV transformer bays at Rewa Pooling Station-8.2.2019 (proposed) c) 1 number 220 kV line bay for 220 kV Rewa Pooling - Ramnagar Ckt - 2 line and 1 number 220 kV line bay for 220kV Rewa Pooling-Barsaita Desh ckt 2 line at Rewa Pooling Station-25.7.2018. d) 1 number 220 kV line bay for 220 kV Rewa Pooling - Ramnagar Ckt - 1 line at Rewa Pooling Station-16.10.2018. e) 2 number 220 kV line bays for 220 kV Rewa Pooling – Badwar Ckt- 1 and Ckt - 2 line at Rewa Pooling Station-22.11.2018 (proposed)

		Common: **<u>Transmission System for transfer of power to DMRC (NR):</u>** B) **<u>Inter-Regional System Strengthening Scheme in WR and NR (Part-B):</u>** a) Jabalpur PS - Orai 765 kV D/C line b) Orai - Aligarh 765k V D/C line c) Orai - Orai 400 kV D/C (Quad) line d) LILO of one ckt of Satna - Gwalior 765 kV 2xS/C line at Orai e) Establishment of 2x1000MVA, 765/400 kV sub-station at Orai S/S & 765 kV switching station at Aligarh (GIS) sub-station f) LILO of Agra - Meerut 765 kV S/C at Aligarh g) LILO of Kanpur - Jhatikara 765 kV S/C at Aligarh

102. Out of the total LTA of 750 MW granted, solar generation of 750 MW achieved COD on different dates. RUMSL has contended that it is eligible for waiver of transmission charges being a solar park. In this regard, the Commission in order dated 23.5.2022 in Petition No. 525/MP/2020 has already observed that waiver of transmission charges shall start only from the COD of the solar park (i. e. when the generator starts generating power) and waiver shall be applicable for the period as specified (such as 25 years). The waiver of transmission charges is applicable only after COD of the generating station and the regulations do not provide for waiver of transmission charges for a generator which has not declared COD. In the instant case, RUMSL has not commissioned its generation when the transmission assets were put into commercial operation. Therefore, RUMSL is not eligible for waiver of transmission charges for the period of delay in commissioning of its generation.

103. Further, as per the regulatory approval granted for the transmission project vide order dated 24.11.2015 in Petition No. 228/MP/2015 and Regulation 8(5) and 8(6) of the 2010 Sharing Regulations, the 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 generating station in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014. Accordingly, RUMSL has to bear the transmission charges for the period of delay in commissioning of the generation by RUMSL. Therefore, RUMSL is liable to pay the transmission charges as follows:

COD of the transmission assets	**Solar generation capacity (MW) commissioned**	**Date of commissioning of solar generation capacity**	**Liability of transmission charges**
Asset-1: 25.7.2018	**RUMSL (750 MW)**		
	5.1 MW	6.7.2018	Transmission charges proportionate to 5.1 MW shall be included in the common pool and balance 744.9 MW shall be borne by RUMSL.
	10 MW	3.8.2018	**From 3.8.2018 to 20.8.2018:** Transmission charges proportionate to 15.1 MW shall be included in the common pool and balance 734.9 MW shall be borne by RUMSL.
	100 MW	21.8.2018	**From 21.8.2018 to 6.9.2018:** Transmission charges proportionate to 115.1 MW shall be included in the common pool and balance 634.9 MW shall be borne by RUMSL
	35.7 MW	7.9.2018	**From 7.9.2018 to 25.10.2018:** Transmission charges proportionate to 150.8 MW shall be included in the common pool and balance 599.2 MW shall be borne by RUMSL
	50 MW	26.10.2018	**From 26.10.2018 to 1.11.2018**: Transmission charges proportionate to 200.8 MW shall be included in the common pool and balance 549.2 MW shall be borne by RUMSL
	30 MW	2.11.2018	**From 2.11.2018 to 1.12.2018**: Transmission charges proportionate to 230.8 MW shall be included in the common pool

			and balance 519.2 MW shall be borne by RUMSL
	50 MW	2.12.2018	**From 2.12.2018 to 3.1.2019**: Transmission charges proportionate to 280.8 MW shall be included in the common pool and balance 469.2 MW shall be borne by RUMSL
	50 MW	4.1.2019	**From 4.1.2019 to 8.1.2019**: Transmission charges proportionate to 330.80 MW shall be included in the common pool and balance 419.2 MW shall be borne by RUMSL
	50 MW	9.1.2019	**From 9.1.2019 to 13.2.2019**: Transmission charges proportionate to 380.8 MW shall be included in the common pool and balance 369.2 MW shall be borne by RUMSL
	50 MW	14.2.2019	**From 14.2.2019 to 20.3.2019**: Transmission charges proportionate to 430.8 MW shall be included in the common pool and balance 319.2 MW shall be borne by RUMSL
	60 MW	21.3.2019	**From 21.3.2019 to 4.4.2019**: Transmission charges proportionate to 490.8 MW shall be included in the common pool and balance 259.2 MW shall be borne by RUMSL
	100 MW	5.4.2019	**From 5.4.2019 to 8.5.2019**: Transmission charges proportionate to 590.8 MW shall be included in the common pool and balance 159.2 MW shall be borne by RUMSL
	40 MW	9.5.2019	**From 9.5.2019 to 16.5.2019**: Transmission charges proportionate to 630.8 MW shall be included in the common pool and balance 119.2 MW shall be borne by RUMSL
	10 MW	17.5.2019	**From 17.5.2019 to 9.7.2019**: Transmission charges proportionate to 640.8 MW shall be included in the common pool and balance 109.2 MW shall be borne by RUMSL
	94.2 MW	10.7.2019	**From 10.7.2019 to 2.1.2020**:

			Transmission charges proportionate to 735 MW shall be included in the common pool and balance 15 MW shall be borne by RUMSL
	15 MW	3.1.2020	From 3.1.2020, Transmission charges of Asset-1 proportionate to 750 MW shall be included in the common pool.
Asset-2: 16.10.2018	**RUMSL (750 MW)**		
	150.8	On various dates up to 16.10.2018 (i.e. before COD of Asset-2)	**From 16.10.2018 to 25.10.2018:** Transmission charges of Asset-2 proportionate to 150.8 MW shall be included in the common pool while for 599.2 MW shall be borne by RUMSL.
	50 MW	26.10.2018	**From 26.10.2018 to 1.11.2018**: Transmission charges proportionate to 200.8 MW shall be included in the common pool and balance 549.2 MW shall be borne by RUMSL
	30 MW	2.11.2018	**From 2.11.2018 to 1.12.2018**: Transmission charges proportionate to 230.8 MW shall be included in the common pool and balance 519.2 MW shall be borne by RUMSL
	50 MW	2.12.2018	**From 2.12.2018 to 3.1.2019**: Transmission charges proportionate to 280.8 MW shall be included in the common pool and balance 469.2 MW shall be borne by RUMSL
	50 MW	4.1.2019	**From 4.1.2019 to 8.1.2019**: Transmission charges proportionate to 330.8 MW shall be included in the common pool and balance 419.2 MW shall be borne by RUMSL
	50 MW	9.1.2019	**From 9.1.2019 to 13.2.2019**: Transmission charges proportionate to 380.8 MW shall be included in the common pool and balance 369.2 MW shall be borne by RUMSL
	50 MW	14.2.2019	**From 14.2.2019 to 20.3.2019**: Transmission charges

			proportionate to 430.8 MW shall be included in the common pool and balance 319.2 MW shall be borne by RUMSL
	60 MW	21.3.2019	**From 21.3.2019 to 4.4.2019**: Transmission charges proportionate to 490.8 MW shall be included in the common pool and balance 259.2 MW shall be borne by RUMSL
	100 MW	5.4.2019	**From 5.4.2019 to 8.5.2019**: Transmission charges proportionate to 590.8 MW shall be included in the common pool and balance 159.2 MW shall be borne by RUMSL
	40 MW	9.5.2019	**From 9.5.2019 to 16.5.2019**: Transmission charges proportionate to 630.8 MW shall be included in the common pool and balance 119.2 MW shall be borne by RUMSL
	10 MW	17.5.2019	**From 17.5.2019 to 9.7.2019**: Transmission charges proportionate to 640.8 MW shall be included in the common pool and balance 109.2 MW shall be borne by RUMSL
	94.2 MW	10.7.2019	**From 10.7.2019 to 2.1.2020**: Transmission charges proportionate to 735 MW shall be included in the common pool and balance 15 MW shall be borne by RUMSL
	15 MW	3.1.2020	From 3.1.2020, Transmission charges of Asset-2 proportionate to 750 MW shall be included in the common pool.
Asset-4: 8.2.2019	**RUMSL (750 MW)**		
	380.8	On various dates up to 9.1.2019 (i.e. before COD of Asset-2)	**From 8.2.2019 to 13.2.2019:** Transmission charges of Asset-4 proportionate to 380.8 MW shall be included in the common pool while for 369.2 MW shall be borne by RUMSL.
	50 MW	14.2.2019	**From 14.2.2019 to 20.3.2019**: Transmission charges proportionate to 430.8 MW shall

			be included in the common pool and balance 319.2 MW shall be borne by RUMSL
	60 MW	21.3.2019	**From 21.3.2019 to 4.4.2019**: Transmission charges proportionate to 490.8 MW shall be included in the common pool and balance 259.2 MW shall be borne by RUMSL
	100 MW	5.4.2019	**From 5.4.2019 to 8.5.2019**: Transmission charges proportionate to 590.8 MW shall be included in the common pool and balance 159.2 MW shall be borne by RUMSL
	40 MW	9.5.2019	**From 9.5.2019 to 16.5.2019**: Transmission charges proportionate to 630.8 MW shall be included in the common pool and balance 119.2 MW shall be borne by RUMSL
	10 MW	17.5.2019	**From 17.5.2019 to 9.7.2019**: Transmission charges proportionate to 640.8 MW shall be included in the common pool and balance 109.2 MW shall be borne by RUMSL
	94.2 MW	10.7.2019	**From 10.7.2019 to 2.1.2020**: Transmission charges proportionate to 735 MW shall be included in the common pool and balance 15 MW shall be borne by RUMSL
	15 MW	3.1.2020	From 3.1.2020, Transmission charges of Asset-4 proportionate to 750 MW shall be included in the common pool.

104. The transmission charges approved in this order for Asset-1, Asset-2 and Asset-4 from their respective CODs to 3.1.2020 shall be recovered as per the details given in the above paragraph and thereafter would be governed by the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations. The COD of the Asset-3 has been approved as 22.11.2018 under proviso (ii) of Regulation 4(3) of 2014 Tariff Regulations as the associated 220 kV transmission line executed by

RUMSL is not ready. The Petitioner has submitted that 220 kV Rewa Pooling-Badwar Ckt-1 and Ckt-2 (being executed by RUMSL) have been successfully synchronized on 1.4.2019 and 6.7.2019 respectively. Therefore, the transmission charges approved for Asset-3 in this order shall be borne by RUMSL from 22.11.2018 to 31.3.2019. As the 220 kV Rewa Pooling-Badwar Ckt-1 was charged on 1.4.2019, 50% of the transmission charges of Asset-3 shall be included in the PoC from 1.4.2019 and remaining 50% shall be continued to be borne by RUMSL till 5.7.2019 (as 220 kV Rewa Pooling-Badwar Ckt-2 charged on 6.7.2019). With effect from 6.7.2019, 100% of transmission charges pertaining to Asset–3 shall be included in POC.

105. To summarise:

a) The Annual Fixed Charges allowed for the transmission assets for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	**Asset-1**	**Asset-2**	**Asset-3**	**Asset-4**
	2018-19 (Pro-rata 250 days)	**2018-19 (Pro-rata 167 days)**	**2018-19 (Pro-rata 130 days)**	**2018-19 (Pro-rata 52 days)**
Annual Fixed Charges	**117.96**	**52.39**	**63.82**	**73.70**

106. Annexure to this order form part of this order.

107. This order disposes of Petition No. 6/TT/2020 in terms of the above discussion and findings.

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

Annexure-I

Asset-1

2014-19	Admitted Opening Capital Cost (₹ in lakh)	Allowed Additional Capitalization (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Annual Depreciation as per Regulation (₹ in lakh)	
Capital Cost (₹ in lakh)		**2018-19**		**Rate of Depreciation**	**2018-19**
Sub-station	372.84	79.34	452.19	5.28	21.78
IT Equipment (Incl. Software)	11.22	1.14	12.36	15.00	1.77
Total	**384.06**	**80.48**	**464.55**	**Total**	**23.55**
				Average Gross Block (₹ in lakh)	**424.31**
				Weighted Average Rate of Depreciation	**5.55%**

Annexure II

Asset-2

2014-19	**Admitted Opening Capital Cost (₹ in lakh)**	**Allowed Additional Capitalization (₹ in lakh)**	**Admitted Capital Cost as on 31.3.2019 (₹ in lakh)**	**Annual Depreciation as per Regulation (₹ in lakh)**	
Capital Cost (₹ in lakh)		**2018-19**		**Rate of Depreciation**	**2018-19**
Sub-station	318.42	100.46	418.88	5.28	19.46
IT Equipment (Incl. Software)	11.07	1.01	12.08	15.00	1.74
Total	**329.49**	**101.47**	**430.96**	**Total**	**21.20**
				Average Gross Block (₹ in lakh)	**380.22**
				Weighted Average Rate of Depreciation	**5.58%**

Annexure III

Asset-3

2014-19	Admitted Opening Capital Cost (₹ in lakh)	Allowed Additional Capitalization (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Annual Depreciation as per Regulation (₹ in lakh)	
Capital Cost (₹ in lakh)		**2018-19**		**Rate of Depreciation**	**2018-19**
Sub-station	407.11	50.05	457.16	5.28	22.82
IT Equipment (Incl. Software)	11.51	1.01	12.52	15.00	1.80
Total	**418.61**	**51.06**	**469.67**	**Total**	**24.62**
				Average Gross Block (₹ in lakh)	**444.14**
				Weighted Average Rate of Depreciation	**5.54%**

Annexure IV

Asset-4

2014-19	**Admitted Opening Capital Cost (₹ in lakh)**	**Allowed Additional Capitalization (₹ in lakh)**	**Admitted Capital Cost as on 31.3.2019 (₹ in lakh)**	**Annual Depreciation as per Regulation (₹ in lakh)**	
Capital Cost (₹ in lakh)		**2018-19**		**Rate of Depreciation**	**2018-19**
Sub-station	2264.29	9.32	2273.61	5.28	119.80
IT Equipment (Incl. Software)	11.30	1.01	12.31	15.00	1.77
Total	**2275.59**	**10.33**	**2285.92**	**Total**	**121.57**
				Average Gross Block (₹ in lakh)	**2280.76**
				Weighted Average Rate of Depreciation	**5.33%**