

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 59/TT/2018

**Coram:
Shri. P.K.Pujari, Chairperson
Dr. M.K.Iyer, Member**

Date of Order:14.02.2019

In the matter of:

Approval Under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 of transmission tariff from COD to 31.03.2019 for **Asset-I:** LILO of both Circuit of 400 kV D/C Rourkela-Raigrah (02nd Line) along with 04 Nos of 400 kV Line bays at Jharsuguda (Sundargarh) Substation; **Asset-II:** Split Bus arrangement at 400 kV Bus at Jharsuguda (Sundargarh) Substation and **Asset-III:** 02 Nos of 400 kV Line bays for termination of OPGC (IB TPS) - Jharsuguda 400 kV D/C line (Under TBCB) at Jharsuguda (Sundargarh) under work associated with common transmission system for Phase-II Generation project in Odisha under Eastern 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. Bihar State Power (Holding) Company Ltd
(Formerly Bihar State Electricity Board -BSEB)
VidyutBhavan, Bailey Road, Patna – 800 001
2. West Bengal State Electricity Distribution Company Limited
BidyutBhawan, Bidhan Nagar
Block DJ, Sector-Ii, Salt Lake City
Calcutta - 700 091

3. Grid Corporation of Orissa Ltd.
Shahid Nagar, Bhubaneswar - 751 007
4. Jharkhand State Electricity Board
In Front of Main Secretariat
Doranda, Ranchi – 834002
5. Damodar Valley Corporation
DVC Tower, Maniktala
Civic Centre, Viproad, Calcutta - 700 054
6. Power Department
Govt. of Sikkim, Gangtok - 737 101
7. Sterlite Power Grid Ventures Limited
F-1, Mira Corporate Suits,
1 & 2, Mathura Road, Ishwar Nagar,
New Delhi - 110065, India
8. IB Thermal Power Plant Banharpali (OPGC)
Jharsugura, Banharpali
Odisha, 768234

.....Respondents

Parties present:

For Petitioner: Shri Amit Yadav, PGCIL
Shri S.K. Niranjan, PGCIL
Shri V.P. Rastogi, PGCIL
Shri S.K. Venkatesh, PGCIL
Shri S.S. Raju, PGCIL
Shri B Dash, PGCIL
Shri Rakesh Prasad, PGCIL

For Respondent: None

ORDER

The present petition has been filed by the Petitioner, Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of Transmission Tariff from anticipated DOCOs to 31.3.2019 for Asset-I: LILO of both Circuit of 400 kV D/C Rourkela-Raigrah (02nd Line) along with 04 Nos of 400 kV Line bays at Jharsuguda (Sundargarh) Substation; Asset-II: Split Bus arrangement at 400 kV Bus at Jharsuguda (Sundargarh) Substation and Asset-III: 02 Nos of 400 kV Line bays

for termination of OPGC (IB TPS) - Jharsuguda 400 kV D/C line (Under TBCB) at Jharsuguda (Sundargarh) under work associated with Common Transmission system for Phase-II Generation project in Odisha under Eastern Region under Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2014 (herein after referred to as the “2014 Tariff Regulations”).

2. The Petitioner has made the following prayer:

- i. Approve the Transmission Tariff for the tariff block 2014-19 blocks for the asset covered under this petition.
- ii. Admit the capital cost as claimed in the Petition and approve the Additional Capitalization projected to be incurred.
- iii. 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.
- iv. 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 2014 Tariff Regulations.
- v. 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 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.
- vi. Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the Respondents in terms of Regulation 52 of Central Electricity Regulatory

Commission (Terms and Conditions of Tariff) Regulations, 2014.

- vii. Allow the Petitioner to bill and adjust impact of 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.
- viii. 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.
- ix. Allow tariff as 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.
- x. Allow the Petitioner to bill Tariff from actual DOCO and also the Petitioner may be allowed to submit revised certificate and tariff forms (as per the Relevant Regulation) based on actual DOCO.

3. The Investment Approval (IA) for implementation of "Common Transmission System for Phase-II Generation project in Odisha under Eastern Region." was accorded by the Board of Directors of the Petitioner vide the Memorandum Ref: C/CP/Phase-II Odisha dated 05.04.2016, at an estimated cost of ₹844.64 crore including IDC of ₹50.27 crore, based on October 2015 price level.

4. The scope of the scheme was discussed and agreed in 24th TCC/ERPC meeting held on 26th and 27th April 2013. The scheme was further

discussed and approved in the 16th meeting of the Standing Committee on Power System planning in Eastern Region held on 2.5.2014 at NRPC, New Delhi (also discussed in 17th SCM) and 33rd meeting of the Empowered Committee on Transmission held on 30.9.2014 at CEA.

5. The scope of work covered under “Common Transmission System for Phase-II Generation project in Odisha under Eastern Region.” in Eastern Region is as follows:

Transmission Line

(a) LILO of both circuit of Rourkela – Raigarh 400 kV D/c (2nd line) at Jharsuguda (Sundargarh) Substation

Substation:

- 2x1500MVA, 765/400kV ICTs with associated bays in GIS at Jharsuguda (Sundargarh).
- 2x1500MVA, 765/400kV ICTs with associated bays at Angul
- 04 Nos of 400kV GIS Line bays for termination of LILO of both circuit of Rourkela – Raigarh 400 kV D/c (2nd line) at Jharsuguda (Sundargarh) Substation
- Split bus arrangement at 400 kV bus at Angul Substation
- Split bus arrangement at 765 kV bus at Angul Substation
- Split bus arrangement at 400 kV bus at Jharsuguda (Sundargarh) Substation with GIS
- Split bus arrangement at 765 kV bus at Jharsuguda (Sundargarh) Substation with GIS
- 02 Nos of 400 kV Line bays for termination of OPGC (IB TPS)-Jharsuguda 400 kV D/C line (Under TBCB) at Jharsuguda (Sundargarh)

{OPGC (Ib TPS) :: Odisha Power Generation Company (Ib Thermal Power Station)}

Substation Works:

a) Jharsuguda 765/400 kV Substation: Extension in GIS

765 kV

- 2x1500MVA, 765/400kV Transformers
- ICT Bays: 02 Nos (GIS)
- Split Bus arrangement (GIS)

400 kV

- ICT bays: 02 Nos (GIS)

- Line bays: 06 Nos (GIS)
- **Split Bus arrangement (GIS)**

Note: It has been agreed in the 17th SCM of ER that GIS bays maybe considered in place of AIS bays if there is space constraints in schemes involving substation extensions.

b) Angul 765/400 kV substation

765kV

- 2x1500 MVA 765/400kV Transformers
- ICT Bays: 2 Nos.
- Split bus arrangement

400kV

- ICT Bays: 2 Nos.
- Split bus arrangement

It is relevant to mention here that the Asset-III (02 Nos 400 kV line bays at Jharsuguda) of the instant project were planned corresponding to the following transmission line being constructed by the Odisha Generation Ph-II Transmission Limited (**OGPTL**), another company of the Sterlite Group under TBCB route:

400kV D/C OPGC (IB TPS) – Jharsuguda (PG) line

6. The Petitioner submitted that the Asset-III (02 Nos 400 kV line bays at Jharsuguda) of the instant project was planned corresponding to the 400kV D/C OPGC (IB TPS) – Jharsuguda (PG) line being constructed by Odisha Generation Ph-II Transmission limited (**OGPTL**) under TBCB route.

7. The Petitioner has claimed the following transmission charges for the instant assets:-

Particulars	(₹ in Lakh)					
	Asset-I		Asset-II		Asset-III	
	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19
Depreciation	177.03	848.75	15.69	75.19	41.65	166.00
Interest on Loan	176.84	809.97	16.32	75.03	42.39	161.92
Return on Equity	196.39	941.99	17.48	83.78	45.68	182.75
Interest on Working Capital	15.35	71.51	3.21	11.25	4.96	17.28
O&M Expenses	64.14	283.35	40.74	117.46	40.74	117.46
Total	629.75*	2,955.57	93.44	362.71	175.42	645.41

*Pro-rata tariff as per COD7.1.2018 amount in ₹629.75 lakh has been claimed by Petitioner in revised tariff forms in affidavit dated 18.4.2018

8. The details of the Interest on Working Capital claimed by the Petitioner for the instant assets are as under:-

(₹ in Lakh)

Particulars	Asset-I		Asset-II		Asset-III	
	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19
Maintenance Spares	41.14	42.50	17.05	17.62	17.05	17.62
O&M expenses	22.85	23.61	9.47	9.79	9.47	9.79
Receivables	448.79	492.60	43.46	60.45	81.59	107.57
Total	512.78	558.71	69.98	87.86	108.11	134.98
Rate of Interest	12.80%	12.80%	12.80%	12.80%	12.80%	12.80%
Interest on working capital	65.64	71.51	8.96	11.25	13.84	17.28
Pro rata interest on working capital	15.35	71.51	3.21	11.25	4.96	17.28

9. The Petitioner has served the petition to the Respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (the Act). No comments have been received from the public in response to the notices published by the Petitioner. Sterlite Power Grid Ventures Limited (Respondent No.7), has filed reply vide affidavit dated 20.11.2018.

10. The hearing in this matter was held on 27.3.2018, 24.4.2018, 28.8.2018 and 20.9.2018.

11. During the hearing on 24.4.2018, the representative of the Petitioner submitted that Asset-III which was initially anticipated to be put into commercial operation on 15.1.2018 was put into commercial operation on 7.1.2018. He submitted that the two bays at Jharsuguda Sub-station were to be put into commercial operation matching with the OPGC-Jharsuguda 400 kV D/C line being implemented by OGPTL under the TBCB route. PGCIL has submitted that the bays at Jharsuguda Sub-station could not be put into commercial operation because of the delay in COD of the OGPTL-Jharsuguda 400 kV D/C

transmission line under the scope of OGPTL and sought approval of COD of the bays at Jharsuguda Sub-station under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations. The representative of the Petitioner also requested to grant Annual Fixed Charges (AFC) in terms of proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC computation.

12. After carrying out preliminary prudence check of the AFC claimed by the Petitioner, the Commission had allowed tariff for assets I & II in terms of proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the computation of PoC charges vide its order dated 7.5.2018. AFC was not allowed for asset III as no power was flowing and it was not put to use. The details of the tariff claimed by the Petitioner and tariff awarded by the Commission are as under:-

i. Annual Transmission Charges claimed are as follows:-

Asset	(₹ in lakh)	
	2017-18 (Pro-Rata)	2018-19
Asset-I	629.75	2,955.57
Asset-II	93.44	362.71
Asset-III	175.42	645.41

ii. Annual Transmission Charges allowed are given below:-

Asset	(₹ in Lakh)	
	2017-18 (Pro-Rata)	2018-19
Asset I	535.29	2,512.23
Asset II	79.42	308.30

13. This order has been issued after considering the Petitioner's affidavits dated 19.1.2018, 20.2.2018, 23.3.2018, 18.4.2018, 18.5.2018, 13.9.2018, 15.10.2018, 22.11.2018, 4.1.2019 and reply filed by Respondent No. 7 dated 20.11.2018.

14. Having heard the Petitioner and having perused the material on record,

we proceed to dispose of the petition.

Date of Commercial Operation (“COD”)

15. The Petitioner vide affidavit dated 19.1.2018 and 18.4.2018 has claimed the actual COD of the Asset-I, Asset-II as 7.1.2018, 22.11.2017. The Petitioner has claimed the COD of the Asset-III as 22.11.2017 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

Analysis and decision:

16. We have considered the submissions of the Petitioner. The Petitioner has claimed the actual COD of the Asset-I and Asset-II as 7.1.2018 and 22.11.2017 respectively. The Petitioner has submitted the CEA energisation certificate, RLDC certificate regarding the trial operation, and the CMD certificate as required under the Grid Code. Accordingly, the COD of the Asset-I and Asset-II is approved as 7.1.2018 and 22.11.2017 respectively.

17. The Petitioner has submitted that Asset-III was ready to be put into commercial operation on 22.11.2017. However, they were not put into regular service as the associated transmission line was not commissioned. The Petitioner has claimed COD of Asset-III under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the Petitioner was not able to put the Asset-III into regular service due to reasons not attributable to it. Regulation 4(3) of the 2014 Tariff Regulations, provides 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 substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavor 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.”

In respect of Asset-III, the Petitioner has submitted that it has successfully completed trial operation on 21.11.2017 and obtained CEA approval of energisation certificate dated 23.11.2017 for 14 nos. of 400 kV GIS Bays along with bay equipment and line equipment of 400 kV Sundargarh-OPGC I&II at 765/400 kV Sub-station of PGCIL at Sundargarh. The Petitioner has submitted CEA energisation certificate, RLDC certificate regarding the trial operation, and the CMD certificate as required under the Grid Code. The Petitioner has claimed COD as 22.11.2017. However, the Petitioner obtained CEA energisation certificate on 23.11.2017. Hence, the COD claimed by the Petitioner for Asset-III as on 22.11.2017 has not been considered. By taking into consideration of CEA energisation certificate, the COD of the Asset-III is approved as 23.11.2017 under proviso (ii) of the 2014 Tariff Regulations. The 2 no's of 400 kV bays were ready on 23.11.2017. The associated transmission system under the scope of Respondent No.7 was declared deemed COD as 31.8.2017. The associated generation under the scope of the Respondent No.8, OPGC is not ready and not commissioned yet. Therefore, the transmission charges from 23.11.2017 till COD of the generating station of OPGC shall be borne by Respondent No.8, OPGC.

Time Over-Run

18. As per the investment approval dated 2.4.2016, the schedule COD of Asset-I and Asset-II was 1.4.2019. The COD of the Asset-I and Asset-II has been approved as 7.1.2018 and 22.11.2017 respectively. Hence, there is no time over-run in case of Assets I and II.

19. With respect to Asset-III, as per the investment approval dated

2.4.2016, the schedule COD of the Asset-III was 1.8.2017. The COD of the Asset-III has been approved as 23.11.2017, hence there is a time over-run of 114 days in case of Asset-III. The Petitioner has submitted that the time over-run of 114 days is due to issue of finalisation of scope of works of laying the OPGW from gantry tower to control room of Jharsuguda Substation (PG) between the Petitioner and Respondent no. 7. We have gone through submissions of the Respondent no. 7 and Petitioner and documentary evidence in support of time delay of Asset-III. The scheduled COD of the 2 nos. of 440 kV line bays at Jharsuguda Sub-station was 1.8.2017. The Petitioner has not submitted any documentary evidence that Petitioner was ready on SCOD i.e. 1.8.2017. The Petitioner has submitted CEA energisation certificate dated 23.11.2017. From CEA energisation certificate, it is observed that the Petitioner was not ready before 23.11.2017. As the asset was ready only on 23.11.2017, the Petitioner is responsible for the time over-run from 1.8.2017 to 22.11.2017 and it is not condoned.

Optical Ground Wire (OPGW):

20. Respondent No. 7 has submitted that a Common Transmission System for Phase-II Generation Projects in Odisha and immediate evacuation system for OPGC Project in Odisha is being developed and established by Odisha Generation Phase-II Transmission Limited (OGPTL). Respondent No. 7 submitted that Respondent No. 7 was acquired by Sterlite Grid 3 Limited (SG3L) for development of the Common Transmission Limited. The said Common Transmission System required establishing of the following transmission lines:

- i. Jharsuguda (Sundargarh)- Raipur Pool 765 kV D/C line (**JR Line**) and
- ii. OPGC-Jharsuguda (Sundargarh) 400 kV D/C line (**OJ Line**).

21. Respondent No. 7 has submitted that as per TSA, the laying of OPGW was not within the scope of work of OGPTL. As the laying of OPGW was not in its scope, the Petitioner was accordingly informed through e-mails dated 13.9.2017 and 17.10.2017. In the absence of any clarity, OGPTL undertook the work of laying of OPGW in the Petitioner's premises in the interest of the commissioning of the main OJ Transmission Line developed and implemented by OGPTL. There is no agreement or contract between the Petitioner and OGPTL in respect of the OPGW work. Any delay in respect of the OPGW is attributable to the Petitioner as it was outside the answering Respondent's scope of work. As a transmission licensee under Section 63 of the Act, OGPTL's sole responsibility is in respect of the scope of work specified in the TSA and it cannot be held liable for anything more. Therefore, OGPTL cannot be held liable for any delays in works forming part of the Petitioner's scope of work.

22. The Petitioner has submitted that as per Schedule 2 of the TSA signed between OGPTL and LTTCs and the scope of the project wherein the transmission service provider i.e. OGPTL was to fulfil the following requirements as regard the OPGC-Jharsuguda (Sundargarh) 400 kV D/c line:

“B.OPGC- Jharsuguda (Sundargarh) 400kV Ole (Triple Snowbird Conductor):

(i) On OPGC - Jharsuguda (Sundargarh) 400kV D/C (Triple Snowbird Conductor) transmission line, one OPGW containing 24 Fibres is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by CTU. The installation of OPGW shall be done from gantry of Jharsuguda (Sundargarh) Substation up to gantry of 400kV OPGC Substation and shall be terminated in a Joint Box by TSP at both the ends. These Joint Boxes shall be installed at a height of around 10m above ground and shall conform to IP66.

(ii) All these fibres of the OPGW shall be utilized for grid management purpose. The maintenance of the OPGW shall be the responsibility of TSP.”

As per the above, the termination of the OPGW from joint box on gantry tower till

control panels in the sub-station control room is within the scope of Respondent No.7.

23. We have considered the submissions of the Petitioner and Respondent No.7. In our view, laying of OPGW cable being a system requirement, lies with both the Petitioner and Respondent No.7. There should have been proper coordination between the Petitioner and Respondent No.7 to avoid such a situation before declaring COD of the instant assets. We do not want to go into merits of this issue further and are of the view that any consequences of non-installation or delay in installation of OPGW is not the subject matter of this petition except for the fact that the Petitioner has not been able to clearly bring out that its delay in commissioning of Asset-III is due to OPGW issue.

Capital Cost

24. The Petitioner has claimed capital cost as per Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations.

25. The Petitioner vide affidavit dated 18.4.2018 submitted the Auditor Certificates along with tariff forms for Asset-I. Auditor certificate for Asset-II and Asset-III were filed with petition itself. The details of apportioned approved cost, capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2017-18 and 2018-19 along with estimated completion cost for the assets covered in the petition are as under:

Asset	Apportioned Approved Cost	Cost as on COD	Estimated additional Capital Expenditure			Total Estimated Completion Cost
			2017-18	2018-19	2019-20	
Asset-I	22880.00	13437.99	1989.41	1300.00	300.00	17027.40
Asset-II	2012.47	370.09	929.39	250.00	50.00	1599.48
Asset-III	3915.42	1495.69	1390.48	450.00	100.00	3436.17
Total	28807.89	15303.77	4309.28	2000.00	650.00	22063.05

(₹ in lakh)

Cost Variation

26. As compared with apportioned approved cost of ₹28,807.89 lakh, the estimated completion cost of the instant assets is ₹22,063.05 lakh. The estimated completion costs of the individual assets are also within the apportioned approved cost of the respective assets.

27. Further, in hearing dated 20.9.2018 the Petitioner was directed to submit the following additional information/documents by 15.10.2018:

- a) Documents in support of Rate of Interest, Date of Drawl and repayment Schedule,
- b) Statement of Discharge of initial spares(if any),
- c) The details of incidental expenditure incurred (IEDC) during the period of delay in commissioning of all the assets along with liquidated damages recovered or recoverable.

Interest During Construction (IDC)

28. The Petitioner has claimed IDC of ₹337.61 lakh, ₹13.23 lakh and ₹56.65 lakh in respect of Asset-I, Asset-II and Asset-III respectively. The IDC on cash basis up to allowable dates has been worked out on the basis of the loan details given in Form-9C. It is submitted that Petitioner has not made any default in the payment of interest. Therefore, the IDC being considered for tariff computation is minimum of worked out IDC and IDC claimed by the Petitioner. Further, the Petitioner has submitted the statement showing discharged of IDC liability as on COD and thereafter is as follows:

(₹ in lakh)				
Asset	IDC as per certificate	IDC Discharged up to COD	IDC discharged in 2017-18	IDC discharged in 2018-19
Asset-I	337.61	151.01	56.12	130.48
Asset-II	13.23	3.49	9.07	0.67

Asset	IDC as per certificate	IDC Discharged up to COD	IDC discharged in 2017-18	IDC discharged in 2018-19
Asset-III	56.65	17.92	12.49	0.00

Incidental Expenditure during Construction (IEDC)

29. The Petitioner has claimed IEDC of ₹272.19 lakh, ₹10.38 lakh, and ₹54.02 lakh in respect of Asset-I, Asset-II and Asset-III respectively. The Petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. Further, the Petitioner vide affidavit dated 15.10.2018 has submitted that entire IEDC claimed in Auditor Certificate is on cash basis and is paid up to COD of the assets. Hence, the entire amount of IEDC has been allowed in case of Asset-I and II. Whereas in case of Asset-III value of ₹10.19 lakh in delay period has been disallowed and dealt accordingly. Further, the Petitioner has submitted that LD in respect to IEDC was not finalized by the date of filing of petition. Hence, impact of LD would be reviewed at the time of true-up.

30. In response to additional information sought vide ROP dated 20.9.2018, the Petitioner vide affidavit dated 15.10.2018 has submitted the expenditure on IEDC included in the Auditor certificate as per cash basis, as below:

Details of initial expenditure incurred during the period of delay in commissioning of all assets from SCOD to actual COD

(₹ in lakh)

Asset	SCOD	DOCO	Delay	IEDC up to DOCO as per Auditor's Certificate	IEDC from SCOD to DOCO
Asset I*	1.4.2019	7.1.2018	NIL	272.19	0.00
Asset II*	1.4.2019	22.11.2017	NIL	10.36	0.00
Asset III*	1.8.2017	22.11.2017	113 Days	54.02	10.19

*LD yet to be finalised

Initial spares

31. The Petitioner vide affidavit dated 18.4.2018 and 10.9.2018 and Auditor Certificates dated 2.3.2018 for Asset-I, Asset-II and Asset-III has claimed the Initial spares covered in the instant petition which is as follows:

Asset	Plant & Machinery Cost excl. IDC, IEDC & Land Exp.		Initial spares claimed		Ceiling limit (TL) as per Regulations (%)	Ceiling limit (SS) as per Regulations (%)
	T/L	S/S	T/L	S/S		
Asset-I	12,975.74	3,441.86	125.45 (0.97%)	166.63 (4.84%)	1.00%	5.00%
Asset-II	0.00	1,575.67	0.00	63.00 (4.00%)	1.00%	5.00%
Asset-III	0.00	3,325.50	0.00	116.00 (3.49%)	1.00%	5.00%

32. In response to additional information sought vide ROP dated 20.9.2018, the Petitioner vide affidavit dated 15.10.2018 has submitted the expenditure on initial spares included in the Auditor certificate as per cash basis, as below:

Statement of Discharge of Initial Spares

(₹ in lakh)				
Asset	Particulars	TL	SS	Total
Asset I	Payments actual up to DOCO (7.1.2018)	125.45	117.02	242.47
	Payment (actual) from 8.1.2018 to 31.3.2018	0.00	0.65	0.65
	Balance liability to be discharged from 1.4.2018 to 31.3.2019	0.00	48.96	48.96
	Total	125.45	166.63	292.08
Asset II	Payments actual up to DOCO (22.11.2017)	0.00	5.64	5.64
	Payment (actual) from 8.1.2018 to 31.3.2018	0.00	38.85	38.85
	Balance liability to be discharged from 1.4.2018 to 31.3.2019	0.00	18.51	18.51
	Total	0.00	63.00	63.00
Asset III	Payments actual up to DOCO (22.11.2017)	0.00	10.39	10.39
	Payment (actual) from 8.1.2018 to 31.3.2018	0.00	71.53	71.53
	Balance liability to be discharged from 1.4.2018 to 31.3.2019	0.00	34.08	34.08
	Total	0.00	116.00	116.00

33. The initial spares claimed by the Petitioner for Asset-I, Asset-II and Asset-III are within ceiling limits as specified in the 2014 Tariff Regulations and

the same have been allowed.

Capital Cost allowed as on COD

34. Based on the above, the capital cost allowed as on COD under Regulation 9(2) of the 2014 Tariff Regulation is summarized as under:-

(₹ in lakh)

Particular	Capital Cost claimed as on COD (a)	Un-discharged IDC as on COD (b)	Un-discharged IEDC (c)	Un-discharged Initial Spare as on COD (d)	Capital Cost allowed as on COD [e]=[a-(b+c+d)]
Asset-I	13437.99	186.60	0.00	49.61	13201.78
Asset-II	370.09	9.94	0.00	57.36	302.79
Asset-III	1495.69	38.73	10.19	105.61	1341.16

Additional Capital Expenditure (ACE)

35. The cut-off date for the instant assets (II & III) is 31.3.2021 and for Asset-I is 31.3.2022.

36. The Petitioner has claimed ACE as per as per Clause (1) of Regulation 14 of the 2014 Tariff Regulations based on the cost certified by the Auditors. In addition, the Petitioner has also claimed the ACE towards discharge of IDC liability for 2017-18 and 2018-19. The additional capital expenditure claimed by the Petitioner for the instant assets for the period 2017-18 and 2018-19 is within the cut- off date and is on account of balance and retention payments and accordingly it is allowed under Regulation 14(1) (i) of the 2014 Tariff Regulations. The ACE claimed by the Petitioner is summarized in the table below:-

(₹ in lakh)

Asset	2017-18	2018-19
Asset-I	1989.41	1300.00
Asset-II	929.39	250.00
Asset-III	1390.48	450.00

37. The un-discharged IDC as on COD has been allowed as Additional Capital Expenditure during the year of discharge. Accordingly, the Additional

Capital expenditure allowed has been summarized as under, which shall be reviewed at the time of true up:-

(₹ in lakh)

Assets	Particular	2017-18	2018-19	Total Add Cap allowed
Asset-I	Additional Capitalization Claimed	1989.41	1300.00	3289.41
	Add : IDC Discharged	56.12	130.48	186.60
	Add : Initial Spare Discharged	0.65	48.96	49.61
	Total Add Cap allowed	2046.18	1479.44	3525.62
Asset-II	Additional Capitalization Claimed	929.39	250.00	1179.39
	Add : IDC Discharged	9.07	0.67	9.74
	Add : Initial Spare Discharged	38.85	18.51	57.36
	Total Add Cap allowed	977.31	269.18	1246.49
Asset-III	Additional Capitalization Claimed	1390.48	450.00	1958.58
	Add : IDC Discharged	12.49	0.00	12.49
	Add : Initial Spare Discharged	71.53	34.08	105.61
	Total Add Cap allowed	1474.50	484.08	1958.58

38. The capital cost considered for the purpose of computation of tariff is as follows:-

(₹ in lakh)

Asset	Capital cost allowed as on COD	Add Cap for 2017-18	Add Cap for 2018-19	Total Estimated Completion Cost up to 31.3.2019
Asset I	13201.78	2046.18	1479.44	16727.40
Asset II	302.79	977.31	269.18	1549.28
Asset III	1341.16	1474.50	484.08	3299.74

Debt-Equity Ratio

39. The Petitioner has claimed Debt:Equity ratio of 70:30 as on the date of commercial operation. Debt:Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt : Equity ratio in respect of the instant assets as on the date of commercial operation and as on 31.3.2019 are as under:-

(₹ in lakh)

Asset-I				
Particular	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	9241.25	70.00%	11709.18	70.00%
Equity	3960.53	30.00%	5018.22	30.00%
Total	13201.78	100.00%	16727.40	100.00%

(₹ in lakh)

Asset-II				
Particular	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	211.95	70.00%	1084.49	70.00%
Equity	90.84	30.00%	464.78	30.00%
Total	302.79	100.00%	1549.28	100.00%

(₹ in lakh)

Asset-III				
Particular	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount	%	Amount	%
Debt		70.00	2309.82	70.00
Equity	402.35	30.00	989.92	30.00
Total	1341.16	100.00	3299.74	100.00

Return on Equity

40. This has been dealt with in line of Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations.

41. The Petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961% as provided under Regulation 25(2)(i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly

adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period on actual gross income of any financial year.

42. We have considered the submission made by the Petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of RoE with the effective tax rate for the purpose of RoE.

43. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the RoE allowed is as follows:-

(₹ in lakh)

Particular	Asset-I	
	2017-18 (pro-rata)	2018-19
Opening Equity	3960.53	4574.39
Addition due to Additional Capitalization	613.85	443.83
Closing Equity	4574.39	5018.22
Average Equity	4,267.46	4,796.30
Return on Equity (Base Rate)	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%
Return on Equity (Pre-tax)	192.59	940.56

(₹ in lakh)

Particular	Asset-II	
	2017-18 (pro-rata)	2018-19
Opening Equity	90.84	384.03
Addition due to Additional Capitalization	293.19	80.75

Particular	Asset-II	
	2017-18 (pro-rata)	2018-19
Closing Equity	384.03	464.78
Average Equity	237.43	424.41
Return on Equity (Base Rate)	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%
Return on Equity (Pre-tax)	16.58	83.23

(₹ in lakh)

Particular	Asset-III	
	2017-18 (pro-rata)	2018-19
Opening Equity	402.35	844.70
Addition due to Additional Capitalization	442.35	145.22
Closing Equity	844.70	989.82
Average Equity	623.52	917.31
Return on Equity (Base Rate)	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%
Return on Equity (Pre-tax)	43.21	179.88

Interest on loan (IOL)

44. Interest on loan has been dealt with in line of Regulation 26 of 2014 Tariff Regulations.

45. IOL has been worked out as under:-

(i) Gross amount of loan, repayment of instalments and rate of interest on actual average loan have been considered as per the petition;

(ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year; and

(iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

46. Based on above, details of Interest on Loan calculated are as follows:-

(₹ in lakh)

Particular	Asset-I	
	2017-18 (pro-rata)	2018-19
Gross Normative Loan	9241.25	10673.57
Cumulative Repayment up to previous Year	0.00	173.61
Net Loan-Opening	9241.25	10499.67
Addition due to Additional Capitalization	1432.33	1035.61
Repayment during the year	173.61	847.46
Net Loan-Closing	10499.97	10688.11
Average Loan	9870.61	10594.04
Weighted Average Rate of Interest on Loan	7.6354%	7.6361%
Interest on Loan	173.44	808.97

(₹ in lakh)

Particular	Asset-II	
	2017-18 (pro-rata)	2018-19
Gross Normative Loan	211.95	896.07
Cumulative Repayment up to previous Year	0.00	14.88
Net Loan-Opening	211.95	881.19
Addition due to Additional Capitalization	684.12	188.42
Repayment during the year	14.88	74.70
Net Loan-Closing	881.19	994.92
Average Loan	546.57	938.05
Weighted Average Rate of Interest on Loan	7.9524%	7.9524%
Interest on Loan	15.48	74.60

(₹ in lakh)

Particular	Asset-III	
	2017-18 (pro-rata)	2018-19
Gross Normative Loan	938.81	1,970.96
Cumulative Repayment up to previous Year	0.00	39.41
Net Loan-Opening	938.81	1931.55
Addition due to Additional Capitalization	1032.15	338.86
Repayment during the year	39.41	163.35
Net Loan-Closing	1931.55	2107.05
Average Loan	1435.18	2019.30
Weighted Average Rate of Interest on Loan	7.9043%	7.8965%
Interest on Loan	40.09	159.45

Depreciation

47. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff

Regulations.

48. The instant transmission assets were put under commercial operation during 2017-18 and 2018-19. Accordingly, they will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

49. Details of the depreciation allowed are as under:-

(₹ in lakh)

Particular	Asset-I	
	2017-18 (pro-rata)	2018-19
Opening Gross Block	13201.78	15247.96
Additional Capital expenditure	2046.18	1479.44
Closing Gross Block	15247.96	16727.40
Average Gross Block	14224.87	15987.68
Rate of Depreciation	5.3031%	5.3007%
Depreciable Value	12802.38	14388.91
Remaining Depreciable Value	12802.38	14215.31
Depreciation	173.61	847.46

(₹ in lakh)

Particular	Asset-II	
	2017-18 (pro-rata)	2018-19
Opening Gross Block	302.79	1,280.10
Additional Capital expenditure	977.31	269.18
Closing Gross Block	1280.10	1549.28
Average Gross Block	791.45	1414.69
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	712.30	1,273.22
Remaining Depreciable Value	712.30	1,258.34
Depreciation	14.88	74.70

(₹ in lakh)

Particular	Asset-III	
	2017-18 (pro-rata)	2018-19
Opening Gross Block	1341.16	2815.66
Additional Capital expenditure	1474.50	484.08
Closing Gross Block	2815.66	3299.74
Average Gross Block	2078.41	3057.70
Rate of Depreciation	5.3656%	5.3424%
Depreciable Value	1870.57	2751.93

Particular	Asset-III	
	2017-18 (pro-rata)	2018-19
Remaining Depreciable Value	1870.57	2712.52
Depreciation	39.41	163.35

Operation and Maintenance Expenses (O&M Expenses)

50. The Petitioner has claimed the O&M Expenses for 2014-19 period as per Regulation 29(4) (a) of the 2014 Tariff Regulations.

51. We have considered the submissions of the Petitioner. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. The O&M Expenses have been allowed as under:-

(₹ in lakh)

Assets	2017-18 (pro-rata)	2018-19
Asset-I	62.24	283.35
Asset-II	40.12	117.46
Asset-III	39.86	117.46

Interest on Working Capital (IWC)

52. As per 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

- a) **Maintenance spares:**
Maintenance spares @ 15 % of Operation and Maintenance expenses specified in Regulation 28.
- b) **O & M expenses:**
O&M expenses have been considered for one month of the O&M expenses.
- c) **Receivables:**
The receivables have been worked out on the basis of 2 months' of annual fixed cost as worked out above.
- d) **Rate of interest on working capital:**

As per Clause 28 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, SBI Base Rate

9.10% as on 01.04.2017 Plus 350 Bps i.e. 12.60 % have been considered as the rate of interest on working capital for all the assets.

53. Accordingly, the interest on working capital is summarized as under:-

(₹ in lakh)

Particular	Asset-I	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	40.57	42.50
O & M expenses	22.54	23.61
Receivables	446.76	491.77
Total	509.69	557.89
Interest	14.78	70.29

(₹ in lakh)

Particular	Asset-II	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	16.90	17.62
O & M expenses	9.39	9.79
Receivables	42.18	60.17
Total	68.46	87.58
Interest	3.07	11.03

(₹ in lakh)

Particular	Asset-III	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	16.92	17.62
O & M expenses	9.40	9.79
Receivables	78.88	106.16
Total	105.19	133.57
Interest	4.68	16.83

Annual Transmission Charges

54. Accordingly, the annual transmission charges allowed for the instant assets are summarized hereunder:-

(₹ in lakh)

Particular	Asset-I	
	2017-18 (pro-rata)	2018-19
Depreciation	173.61	847.46
Interest on Loan	173.44	808.97

Particular	Asset-I	
	2017-18 (pro-rata)	2018-19
Return on Equity	192.59	940.56
Interest on Working Capital	14.78	70.29
O & M Expenses	62.24	283.35
Total	616.66	2951.77

(₹ in lakh)

Particular	Asset-II	
	2017-18 (pro-rata)	2018-19
Depreciation	14.88	74.70
Interest on Loan	15.48	74.60
Return on Equity	16.58	83.23
Interest on Working Capital	3.07	11.03
O & M Expenses	40.12	117.46
Total	90.14	361.01

(₹ in lakh)

Particular	Asset-III	
	2017-18 (pro-rata)	2018-19
Depreciation	39.41	163.35
Interest on Loan	40.09	159.45
Return on Equity	43.21	179.88
Interest on Working Capital	4.68	16.83
O & M Expenses	39.86	117.46
Total	167.26	636.98

Revision in O&M expenditure for the impact of wage hike (if any), during period 2014-19

55. The petitioner has sought that they may be allowed to approach Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff

Regulations. As regards 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.

Filing Fee and the publication expenses

56. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

License Fee, RLDC Fees and Charges

57. The Petitioner has requested to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the Respondents. We are of the view that 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

58. The Petitioner has prayed for reimbursement of tax, if any, on account of implementation of GST. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

Sharing of Transmission Charges

59. The transmission charges from 23.11.2017 to till COD of the generating station shall be borne by Respondent No.8 OPGC. Thereafter the transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long

term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

60. This order disposes of Petition No. 59/TT/2018.

Sd/-
(Dr. M. K. Iyer)
Member

Sd/-
(P. K. Pujari)
Chairperson