CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No.125/TT/2018

Coram:
Shri. P. K. Pujari, Chairperson
Dr. M. K. Iyer, Member
Shri. I.S Jha, Member

Date of Order: 8.4.2019

In the matter of:

Approval under Regulation-86 of CERC (Conduct of Business) Regulations' 1999 and CERC (Terms and Conditions of Tariff) Regulations' 2014 for determination of Transmission Tariff from DOCO to 31.03.2019 for Asset–I: 400 kV D/C Allahabad – Kanpur Line along with associated bays at both ends including 2x50 MVAR Line Reactor at Kanpur end (DOCO: 28.09.2017) under Northern Regional System Strengthening Scheme – XXX.

And in the matter of:

Power Grid Corporation of India Limited
"Saudamini", Plot No.2,
Sector-29, Gurgaon -122 001

……Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
   Vidyut Bhawan, Vidyut Marg,
   Jaipur – 302005

2. Ajmer Vidyut Vitran Nigam Limited
   132 KV, GSS RVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar, Jaipur-302017

3. Jaipur Vidyut Vitran Nigam Limited
   132 KV, GSS RVPNL Sub- Station Building,
   Caligiri Road, Malviya Nagar, Jaipur-302017

4. Jodhpur Vidyut Vitran Nigam Limited

132 KV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017

5. Himachal Pradesh State Electricity Board
Vidyut Bhawan, Kumar House Complex Building II
Shimla-171004

6. Punjab State Electricity Board
THERMAL SHED TIA
Near 22 Phatak,, Patiala-147001

7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6, Panchkula
(Haryana) 134 109

8. Power Development Department
Government of Jammu & Kashmir
Mini Secretariat, Jammu

9. Uttar Pradesh Power Corporation Limited
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001

10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road, New Delhi-110002

11. BSES Yamuna Power Ltd.
BSES Bhawan, Nehru Place, New Delhi.

12. BSES Rajdhani Power Ltd.
BSES Bhawan, Nehru Place, New Delhi

13. North Delhi Power Ltd,
Power Trading & Load Dispatch Group, Cennet Building,
Adjacent To 66/11 kV Pitampura-3
Grid Building, Near Pp Jewellers
Pitampura, New Delhi – 110034

14. Chandigarh Administration
Sector -9, Chandigarh.

15. Uttarakhand Power Corporation Ltd.

Urja Bhawan, Kanwali Road, Dehradun.

16. North Central Railway,
Allahabad.

17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002

…..Respondents

The following were present:

For Petitioner:	Shri S. K. Venkatesan, PGCIL Shri S. S. Raju, PGCIL Shri S.K. Niranjan, PGCIL
For Respondents:	Shri R. B. Sharma, Advocate, BRPL Shri Mohit Mudgal, Advocate, BRPL

ORDER

The present petition has been filed by the petitioner, Power Grid Corporation of India Ltd. (PGCIL) seeking approval of transmission tariff for the Asset: 400 kV D/C Allahabad – Kanpur Line along with associated bays at both ends including 2x50 MVAR Line Reactor at Kanpur end (herein after referred to as the Asset) under "Northern Regional System Strengthening Scheme - XXX (NRSS-XXX)" in Northern Region (hereinafter referred to as "transmission system") for 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The petitioner has made the following prayers:-

i) Approve the Transmission Tariff for the tariff block 2014- 19 for the assets covered under this petition.

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

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

iv) Condone the delay in completion of subject assets on merit of the same being out of the control of Petitioner in line with Clause 12(2)(i) "uncontrollable factors" of Tariff Regulations, 2014.

v) 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.

vi) 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.

vii) Allow the petitioner to bill and recover License 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.

viii) 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.

ix) Allow to approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 01.01.2017 onwards.

x) 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.

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

Background

3. The Investment Approval (IA) for implementation of "Northern Region System Strengthening Scheme XXX (NRSS-XXX)" was accorded by the Board of Directors of POWERGRID vide Memorandum dated 14.02.2014 at an estimated cost of ₹ 53982 Lakh including an IDC of ₹ 3297 Lakh based on December, 2013 price level. Later, approval to the Revised Cost Estimate (RCE) of the project was accorded by Board of Directors of POWERGRID vide Memorandum dated 27.3.2018 at an estimated cost of ₹ 57567 lakh including IDC of ₹ 5214 lakh based on December, 2017 price level.

4. The system strengthening scheme in NR was discussed and agreed in 31st and 32nd Standing Committee Meetings held on 2.1.2013 and 31.8.2013 respectively and in 28th meeting of NRPC & 25th meeting of TCC held on 25.04.2013.

5. The details of the transmission elements covered under the transmission system as per Revised Cost Estimate (RCE) dated 27.03.2018 are broadly as follows:-

Transmission Lines:

(i) Singrauli – Allahabad 400 kV S/C line*

(ii) Allahabad – Kanpur 400 kV D/C line.

*Including utilization of (60 km) spare circuit available on existing 400 kV D/C tower in Singrauli – Allahabad Corridor.

Sub-Stations:

(i) Extension at 400 kV Singrauli S/S at NTPC Generating Station.

(ii) Extension at 400/220 kV Allahabad S/S .

(iii) Extension at 765/400 kV Kanpur GIS**.

**From Kanpur 765/400 kV GIS two 400 kV lines are proposed-(i) Allahabad - Kanpur 400 kV D/C line and (ii) Lucknow - Kanpur 400 kV D/C line under NRSS-XXXII. GIS bays are sealed units and hence complete dia is to be commissioned with first feeder. Hence, for termination of both the above lines at Kanpur GIS, both dia at Kanpur 765/400 kV GIS are covered under NRSS-XXXII.

Reactive Compenstaion:

S.No.	Transmission Line	Line reactor -To Bus
1	Singrauli – Allahabad 400 kV S/C	50 MVAR new at Allahabad end.
2	Allahabad-Kanpur 400 kV D/C	50 MVAR *** (at Kanpur end) (one reactor shifted from Kankroli end of RAPP- Kankroli line and one reactor shifted from Mandola after LILO of Bareilly-Mandola line)

*** 2 nos. of 50 MVAR reactors were envisaged to be shifted from Kankroli after LILO of 400 kV D/C RAPP- Kankroli line at Chittorgarh, however, as decided in 34th SCM of NR, only one circuit of 400 kV D/C RAPP-Kankroli has been LILOed. Therefore, only one 50 MVAR reactor became spare and could be shifted from Kankroli.
Remaining one 50 MVAR reactor has been shifted from Mandola which became spare after LILO of Bareily - Mandola 400 kV D/C.line at Meerut executed under separate project "765 kV system for Central part of Northern Grid-Part-III".

6. Details of asset and COD of the asset being filed in the instant Petition:

Description of the Asset	**Scheduled COD**	**COD (actual)**	**Delay**
400 kV D/C Allahabad – Kanpur Line along with associated bays at both ends including 2x50 MVAR Line Reactor at Kanpur end under "Northern Regional System Strengthening Scheme – XXX (NRSS-XXX)" in Northern Region	04.06.2016	28.09.2017	15 months 23 days

7. The details of the transmission charges claimed by the petitioner are as under:-

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (pro-rata)	**2018-19**
Depreciation	886.05	1837.25
Interest on Loan	948.72	1855.30
Return on Equity	986.89	2046.33
Interest on Working Capital	73.04	148.54
O&Mexpenses	220.47	448.13
Total	**3115.17**	**6335.55**

8. The details of the interest on working capital claimed by the Petitioner are as under:-

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (annualized)	**2018-19**
Maintenance Spares	65.06	67.22
O&M expenses	36.14	37.34
Receivables	1021.37	1055.93
Total	**1122.57**	**1160.49**
Interest	143.69	148.54
Rate of Interest	12.80%	12.80%
Pro –rata Interest in WC	73.04	148.54

9. Annual Fixed Charges under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges were granted vide order dated 5.11.2018.

10. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Act. BSES Rajdhani Power Limited (BRPL), Respondent No. 12, has filed reply vide affidavit dated 03.07.2018. BRPL has raised issues of Cost Over-

run, shifting of reactor, accrual IDC, OPGW, TSA, delay reason, CPM, PERT, DPR, wage revision, reimbursement of expenditure towards filing fee, license fee etc. The petitioner has filed rejoinder dated 11.10.2018 to the reply of BRPL. UP Power corporation limited (UPPCL), Respondent No. 09 has filed reply vide affidavit dated 08.05.2018. UPPCL has raised issue of time over-run, Cost Over-run, add-cap, rate of interest on loan, RCE etc. The petitioner has filed rejoinder dated 11.10.2018 to the reply of UPPCL. The objections raised by the respondents and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

11. Commission had sought replies to certain queries vide order dated 5.11.2018, which were replied to by the petitioner vide affidavit dated 15.11.2018. This order has been issued after considering the submissions of the petitioner in the petition and affidavits dated 20.2.2018, 12.4.2018, 11.10.2018, 11.10.2018 and 15.11.2018 and respondent's affidavits dated 8.5.2018 and 3.7.2018.

Analysis and Decision

Commercial operation Date (COD)

12. The petitioner has claimed date of commercial operation of the Asset as 28.09.2017. In support of COD, petitioner has submitted CEA certificate dated 20.3.2017 & 29.8.2017 under Regulation 43 of CEA (Measures relating to safety and Electric Supply) Regulations, 2010, RLDC certificate dated 23.10.2017 in accordance with Regulation 6.3.A (5) of CERC (Indian Electricity Grid Code), self-declaration of COD letter dated 21.11.2017 and

CMD Certificate. Accordingly, taking into consideration the certificates, the COD of the asset is approved as 28.9.2017 and has been considered for the purpose of tariff computation from COD till 31.3.2019.

Capital Cost

13. Clause (1) and Clause (2) of Regulation 9 of the 2014 Tariff Regulations provide as follows:-

"(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects."

(2) The Capital Cost of a new project shall include the following:

a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
c) 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 11 of these regulations;
e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39
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; and
h) adjustment of any revenue earned by the transmission licensee by using the assets before COD."

14. The details of approved apportioned cost (FR), revised apportioned approved cost (RCE), capital cost as on COD and additional capital expenditures incurred or projected to be incurred during 2017-18 and 2018-19 along with

estimated completion cost for the asset as claimed by the petitioner and considered for the purpose of computation of tariff are indicated in the table below. The expenditure up to COD is based on Auditor's Certificate dated 14.12.2017.

(₹in lakh)

Apportioned Approved Cost(FR)	Apportioned Approved Cost (As per RCE)	Cost as on COD	Estimated Additional Capital Expenditure			Total Estimated Completion Cost
			2017-18	2018-19	2019-20	
36871.99	37399.00	32866.82	1039.92	2079.84	1039.92	37026.50

15. We have considered the submissions of the petitioner. It is observed that the petitioner has submitted the revised apportioned approved cost (RCE) and that estimated completion cost is within the RCE.

Cost Over-Run / Variation

16. The approved apportioned cost as per FR of the project is ₹ 36871.99 Lakh and as per RCE is ₹ 37399.00 Lakh against which the estimated completion cost is ₹ 37026.48 lakh. Although there has been reduction in costs vis-à-vis the original estimates under some heads, the reasons of upward cost variation in RCE vis-à-vis the investment approval, as submitted by the petitioner, are as below:

S. No.	Particulars	Variation w.r.t FR cost (₹ in lakhs)	Justification
Transmission line			
1	Tower steel	2300.39	➢ Total number of tower increased from 627 to 652

			during final route alignment and to negotiate various crossings, populated area. There is increase of 52 numbers of tension towers and decrease of 27 numbers of suspension towers. Thus there is a net increase of 25 numbers of towers ➢ Moreover, there is also rate variation as received though open competitive bidding.
2	Insulator	175.59	➢ Total number of insulator increased from 6594 to 7916 based on revised tower quantity & tower type based on final route alignment. Thus there is a net increase of 1322 number of insulator. ➢ Moreover, there is also rate variation as received though open competitive bidding.
3	Hardware fitting	399.86	➢ In FR, Hardware fitting, Erection stringing & civil works including foundation, Conductor and earth wire accessories is considered on lumpsum basis. However, actual requirement is based on revised tower quantity & tower type based on final route alignment.
4	Erection stringing & civil works including foundation	179.16	
5	Conductor and earth wire accessories	209.20	
Substation			
6	Equipment civil works	163.12	➢ High price as received through open competitive bidding.
7	Miscellaneous civil works	118.71	➢ Based on actual site requirement (gravel filling work etc.)

17. It is observed that, overall increase in transmission line material cost is due to high bid price received through competitive bidding, increase in number of tower and insulator as per final route alignment taking into consideration various crossings, population, space and corridor constraints which were beyond the control of the petitioner. Further, total completion cost of ₹ 37026.48 lakh is within the revised cost estimate (RCE) of ₹ 37399 lakh and hence, cost variation is being allowed in tariff.

Time over-run

18. As per the investment approval, the schedule completion is within 28 months from the date of investment approval. The date of Investment Approval is 14.2.2014. Hence, the commissioning schedule comes to 13.6.2016, against which the asset has been commissioned and declared under commercial operation w.e.f. 28.9.2017 with a delay of 15 months and 14 days.

19. The petitioner has submitted the following reasons for delay in commissioning of the asset:

    a) The delay in commissioning of the asset is mainly on account of ROW issue at various locations (No. 82/1,82/2,82/3,82/6 ,86/0, 65/7, 72/6, 28/2, 29B/0, 29B/1, 29B/227/0, 20/0, 19/0, 18/0 and 17/0) since October 2015 in major districts like Allahabad, Fatehpur and Kanpur etc. Stiff resistance was noticed from the land owners and consequently work got hampered. The land owners started construction of permanent structure in the transmission line corridor and started pressurizing the petitioner to change the route of the line and demanded higher compensation. The detailed chronology of ROW issues which caused the delay are mentioned below:-

Sr. No.	Particular	Date	Remarks
1	Letter to land owner with copy to DM and SDM Fatehpur.	29.10.2015	For permanent construction between the tower location no. 82/1 to 82/2 within the corridor.
2	Letter to SDM, Fatehpur	19.01.2016	To sort out ROW problem at location No. 82/3 and 82/6.
3	Letter to land owner with copy to DM and SDM Fatehpur	23.01.2016	To sort out ROW problem at location No. 82/6.

4	Letter to land owner with copy to DM and SDM Fatehpur	23.01.2016	To sort out ROW problem at location No. 82/3.
5	Letter to SDM, with copy to DM and SP Fatehpur	23.03.2016	To sort out ROW problem at location No. 82/3.
6	Letter to SDM, with copy to DM and SP Fatehpur	14.05.2016	To sort out ROW problem with administrative help at location No. 82/3.
7	Letter to SDM, with a copy to Dm	03.06.2016	To sort out ROW problem with administrative help at location No. 65/7.
8	Letter to SDM, with copy to DM and SP Fatehpur	20.07.2016	To sort out ROW problem with administrative help at location No. 82/3.
9	Letter to SDM, with copy to DM Allahabad	08.11.2016	To sort out ROW problem at location No. 27/0.
10	Letter to SDM, with copy to DM Fatehpur	14.11.2016	To sort out ROW problem at location No. 82/3.
11	Letter to SDM, with copy to DM Fatehpur	14.11.2016	To sort out ROW problem at location No. 86/0.
12	Letter to SDM, with copy to DM Fatehpur	14.11.2016	To sort out ROW problem at location No. 65/7.
13	Letter to SDM, with copy to DM Fatehpur	14.11.2016	To sort out ROW problem at location No. 72/6.
14	Letter to SDM, with copy to DM Allahabad	22.11.2016	To sort out ROW problem at location No. 27/0, 16/0 and 20/0.
15	Letter to SDM, with copy to DM Allahabad	22.11.2016	For hampering the work at Location No. 29B/0, 29B/1 and 30/1, by the owners.
16	Letter to SDM, with copy to DM Allahabad	10.12.2016	To sort out ROW problem at location No. 28/2.
17	Letter of SDM to land owner with copy to SHO Ghazipur.	16.12.2016.	To sort out ROW problems at Location no. 86/0.
18	Letter to SDM, with copy to DM Allahabad	21.12.2016	To sort out ROW problem at location No. 29B/0 and 29B/1
19	Letter to SDM, with copy to DM Allahabad	21.12.2016	To sort out ROW problem at location No. 28/2.
20	Letter of SDM to land owner Sh. JamaluddinMaksood Ahmad	16.01.2017	To sort out ROW problems at Location no. 28/2.
21	Letter to SDM, with copy to DM Allahabad	09.02.2017	To sort out ROW problem at location No. 18/0 for four nos. landowners.
22	Letter to SDM, with copy to DM Allahabad	09.02.2017	To sort out ROW problem at location No. 17/0 and 25B/0.
23	Letter to SDM, with copy to DM Fatehpur	28.02.2017	To sort out ROW problem at location No. 86/0.
24	Letter to SDM, with copy to DM Fatehpur	28.02.2017	To sort out ROW problem at location No. 72/6.
25	Letter of SDM to land owner with copy to DM, Fatehpur.	08.03.2017	To present before the SDM, Fatehpur within two days, to sort out the ROW problems for Location No. 72/6. Receipted copy of the owner is also

			enclosed.
26	Letter to SDM, with copy to DM and SP Allahabad	10.03.2017	To sort out ROW problem with administrative help at location No. 29B/2.
27	Letter to DM, Allahabad for administrative help.	11.04.2017	To sort out ROW problem at location No. AP 18/0, 19/0 and 20/0 by the administration.
28	Letter to SDM, Allahabad	12.04.2017	To sort out ROW Problem at Location No. AP/19 and AP 20/0.
29	Letter to SDM, Allahabad	15.04.2017	To sort out ROW Problem at Location No. AP 18/0.
30	Letter from SDM, Bara Allahabad to SHO, Ghoorpur.	15.04.2017	To ensure execution of work as requested by POWERRGRID.
31	Letter to SDM, Bara Allahabad for administrative help.	26.04.2017	To sort out ROW problem at location No. AP 18/0, by the administration.
32	Letter of land owner, Sh. Ram Sewak Singh to DM, Fatehpur.	26.04.2017	The owner has written letter to DM in reference to DM letter dt.08.03.2017, demanding Rs.72,90,00,000.00 from POWERGRID.
33	Letter of ADM, Fatehpur to SDM, Fatehpur and Asst. GM POWERGRID, Allahabad.	02.05.2017	To explain the allegations made by the owner Sh. Ram Sewak Sing pertaining to Loc. No. 72/6.
34	Clarification to ADM, Fatehpur by Asst. GM POWERGRID.	05.05.2017	Reply submitted with provision of Electricity Act for Loc. No. 72/6.
35	Letter to SDM, Bara Allahabad	15.05.2017	To sort out ROW problem with administrative help at location No. 25B/0.
36	Letter to SDM, Sadar, Allahabad	22.05.2017	To sort out ROW problems at Loc. AP29B/2.

b) The petitioner further submitted that ROW issue prevailed continuously in different locations from October 2015 to May 2017 i.e for 20 months. After sorting out ROW problems in the month of June 2017, foundation works, erection works, stringing works, final checking and testing took another 4 months, as these were to be carried out in rainy season.

20. UPPCL, Respondent No. 9, vide affidavit dated 8.5.2018, has submitted that detailed chronology submitted by the petitioner in support of ROW issue from 29.10.2015 to 21.5.2017 is justified, however, petitioner has not provided proper justification from 22.5.2017 to 28.9.2017 (COD) and

accordingly, the IDC and IEDC for said period may be deducted from capital cost.

21. BRPL, Respondent No.12, vide affidavit dated 3.7.2018, has submitted that the grounds for delay as mentioned by the petitioner shows the slackness of the petitioner in project management and excuse for delay is not a justified argument by any standard. Further, petitioner has also not submitted DPR, CPM Analysis, PERT Chart and Bar Chart and reasons for delay clearly falls within the controllable factors mentioned in Regulation 12 of the 2014 Tariff Regulations. BRPL has also raised queries regarding communication system.

22. In response to replies of UPPCL & BRPL, the petitioner, vide affidavit dated 11.10.2018, has submitted that detailed justifications along with CPM and PERT Chart based on actual activities has already been submitted in main petition and delay for subject asset is in line with Clause 12(2)(i) of 2014 Tariff Regulations (uncontrollable factors) and hence, delay may be condoned. In the context of communication system, the Petitioner has submitted that OPGW (Optical Ground Wire) have not been installed in the present case.

23. In response to the query of the Commission regarding details of reason for time overrun, petitioner vide affidavit dated 15.11.2018 has submitted as under:

S. no.	**Activity**	**Schedule**		**Actual**		**Remarks, if any**
		From	**To**	**From**	**To**	
1	Supplies	22.8.14	25.2.16	1.8.14	7.3.17	Started within schedule date.

2	Foundation	25.7.14	29.2.16	16.7.14	27.5.17	Further the delay is mainly on account of ROW issues at various locations from October 2015 to June 2017 i.e for 20 months.
3	Tower Erection	25.9.14	1.4.16	3.11.14	15.6.17	The delay is mainly on account of ROW issues at various locations from October 2015 to June 2017 i.e for 20 months.
4	Stringing	23.1.15	6.5.16	10.9.15	10.9.17	
5	Testing & Commissioning	9.5.16	3.6.16	25.9.17	26.9.17	

24. We have considered the submissions of the petitioner and the respondents. Petitioner has prayed to condone the delay in accordance with Regulation 12(2) of CERC Tariff Regulations, 2014. Regulation 12(1) & (2) of CERC Tariff Regulations provides as under:

"12. Xxxxxx

(1) The "controllable factors" shall include but shall not be limited to the following:

(a) Variations in capital expenditure on account of time and/or cost over-runs on account of land acquisition issues;

(b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or force majeure events; and

(c) Delay in execution of the project on account of contractor, supplier or agency of the generating company or transmission licensee.

(2) The "uncontrollable factors" shall include but shall not be limited to the following:

(i) Force Majeure events; and

(ii) Change in law.

Provided that no additional impact of time overrun or cost over-run shall be allowed on account of non-commissioning of the generating station or associated transmission system by SCOD, as the same should be recovered through Implementation Agreement between the generating company and the transmission licensee:

Provided further that if the generating station is not commissioned on the SCOD of the associated transmission system, the generating company shall bear the IDC or transmission charges if the transmission system is declared under commercial operation by the Commission in accordance with second proviso of

Clause 3 of Regulation 4 of these regulations till the generating station is commissioned:

Provided also that if the transmission system is not commissioned on SCOD of the generating station, the transmission licensee shall arrange the evacuation from the generating station at its own arrangement and cost till the associated transmission system is commissioned."

25. Further, as per regulation, 3(9) & 3(25) of the 2014 Tariff Regulations, "Change in Law" and "Force majeure" respectively interprets as under:

"3. (9) "Change in Law" means occurrence of any of the following events:

(a) Enactment, bringing into effect or promulgation of any new Indian law; or
(b) Adoption, amendment, modification, repeal or re-enactment of any existing Indian law; or
(c) change in interpretation or application of any Indian law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation or application; or
(d) Change by any competent statutory authority in any condition or covenant of any consent or clearances or approval or licence available or obtained for the project; or
e) Coming into force or change in any bilateral or multilateral agreement/treaty between the Government of India and any other Sovereign Government having implication for the generating station or the transmission system regulated under these Regulations.

Xxxx

3. (25) 'Force Majeure' for the purpose of these regulations means the event or circumstance or combination of events or circumstances including those stated below which partly or fully prevents the generating company or transmission licensee to complete the project within the time specified in the Investment Approval, and only if such events or circumstances are not within the control the generating company or transmission licensee and could not have been avoided, had the generating company or transmission licensee taken reasonable care or complied with prudent utility practices:

a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or

b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
c) Industry wide strikes and labour disturbances having a nationwide impact in India;"

26. The delay in commissioning of the asset is mainly on account of delay due to ROW issues at various locations since October 2015 in major districts like Allahabad, Fatehpur and Kanpur etc. Moreover, the land owners started construction of permanent structure in the transmission line corridor and began pressurizing the petitioner to change the route of the line and demanded higher compensation. Further, with regard to delay due to ROW in construction of the Asset, it is observed that, various correspondences were exchanged between the petitioner and local authority for settlement of ROW issues which hampered the work progress from 29.10.2015 to 22.5.2017 (18 months 25 days), with SCOD (13.6.2016) falling in between, which were beyond the control of the petitioner. Further, from activity wise details submitted by petitioner, vide affidavit dated 15.11.2018, it is observed that, it was only after the ROW Issues were resolved, the petitioner could carry out consequential activities like Foundation work, Tower Erection, Stringing, Testing & Commissioning between May, 2017 and September,2017(i.e.27.5.17 to 26.9.2017- approximately 4 months) and thereafter, the asset was commissioned on 28.9.2017. Therefore, we are of the view that, the time overrun of 15 months 14 days on account of ROW issues and subsequent activities like Foundation works, Tower Erection, Stringing, Testing & Commissioning, were beyond the control of the petitioner and accordingly, same is allowed.

Incidental Expenditure During Construction (IEDC) & Interest During Construction (IDC)

27. The petitioner has claimed IEDC of ₹ 1006.85 lakh for the asset. The petitioner has claimed IEDC as on COD, which is within the percentage on hard cost as indicated in the abstract cost estimate. We observe that, less than 10.75% of hard cost is indicated as IEDC in the abstract cost estimate, therefore, the entire IEDC claimed by the petitioner is allowed. Further, the petitioner has submitted that the entire amount of IEDC for the asset has been discharged up to COD.

28. The petitioner has claimed IDC of ₹ 2949.93 lakh for the asset. The petitioner has submitted the statement showing discharge of IDC liability as on COD. However, in IDC calculation, the petitioner has not submitted the floating rate of interest of SBI loans deployed. The IDC on cash basis up to the COD has been worked out on the basis of the loan details given in the statement showing discharge of IDC and Form-9C for the asset. The petitioner is directed to submit information of details of interest rates at the time of truing-up. Further, the petitioner has submitted that there is no default in the payment of interest.

29. Following assumptions have been made to work out the IDC on cash basis as on COD in the instant case:

   A. Rate of Interest for all the SBI loans having floating rate of interests has been considered as 8.90% i.e. for loans of SBI (2015-16) (Q2), SBI

(2015-16) (Q4) and SBI (2016-17) (Q4) and 7.95% for SBI (2017-18) (Q1).

B. Dates of drawl of all the SBI loans have been considered as mid of the respective quarters to simplify the IDC working.

30. The IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination subject to revision at the time of truing up is as below:

(₹ in lakhs)

IDC claimed as per certificate	IDC considered as on COD	IDC Discharged upto COD	IDC Discharged in 2017-18	IDC Discharged in 2018-19
2949.93	2850.30	2503.40	120.77	226.11

31. The balance portion of IDC discharged after COD has been considered in additional capital expenditure. The allowed/capitalized IDC shall be reviewed at the time of truing up, on submission of details regarding floating Interest rates of SBI loans.

Initial spares

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

"(d) Transmission System Transmission line: 1.00%
Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%"

33. The petitioner has claimed ₹ 299.21 lakh and ₹ 50.60 lakh as initial spares for the asset corresponding to transmission line and sub-station

respectively. Initial spare claimed by the petitioner is within the permissible limits and the same is allowed. Further, the petitioner, vide affidavit dated 15.11.2018, has submitted the statement of year-wise initial spare discharge detail indicating that the discharged initial spares beyond the COD have been included in auditor certificate as add cap during 2017-18, 2018-19 and 2019-20. Hence, adjustment in respect of initial spare as on COD and thereafter is not required.

34. The petitioner has submitted Form-5 and Form-5B indicating the expenditure of ₹ 43.72 lakhs against the dismantling and relocation of 50 MVAR shunt reactor from Kankroli to Kanpur. The Commission, vide order dated 5.11.2018, had directed the petitioner to submit Form-10B, in case the 2x50 MVAR reactors are de-capitalized at Kankroli, before capitalizing at Kanpur sub-station.

35. BRPL, Respondent No.12, vide affidavit dated 3.7.2018, has submitted that the 50 MVAR Line reactor at Kanpur end will be shifted from the Kankroli end of RAPP-Kankroli line after LILO at Chittorgarh. This would require de-capitalization of this asset from the RAPP-Kankroli line and capitalization of the asset at book value under this asset. Further, the petitioner is required to file affidavit as to when the 50 MVAR Line reactors from the Kankroli end of RAPP-Kankroli line was removed and its consequent de-capitalization.

36. In response, the petitioner vide its rejoinder dated 11.10.2018, and also vide affidavit dated 15.11.2018 has submitted as below:

a) 2 nos. 50 MVAR line reactors at Kanpur end commissioned along with the present asset are shifted from Kankroli S/S and Mandola S/S. The Kankroli reactor is originally covered in true-up petition no. 557/TT/2014 under Transmission System associated with RAPP 5 & 6 in Northern Region, and Mandola reactor is originally covered in true-up petition no. 38/TT/2015 under TALA HEP East - North Inter-connector and Northern Region Transmission System, an inter - regional asset between Northern Region and Eastern Region.

b) The reactors at Kankroli S/S and Mandola S/s was de-capitalized on 27.9.2018 and shifted and commissioned as line reactors at Kanpur S/S on 28.9.2018. Further, the cost of reactor is not claimed in the capital cost of the present asset and only dismantling & reallocation cost of ₹ 43.72 lakhs have been claimed. The net tariff of the reactors after de-capitalization from the original project and re-capitalization in present project remains same, and accordingly, it is prayed to allow the tariff of present asset as claimed in the petition and allow to do the de-capitalization of 50 MVAR line reactor from the original project and re-capitalization in the present project at the time of truing-up of 2014-19. Petitioner has submitted Form -10B with the affidavit.

37. We have considered the submissions of the petitioner and BRPL. The petitioner has claimed that 2 nos. 50 MVAR line reactors shifted from Kankroli S/S and Mandola S/S were put to use at Kanpur S/S without capitalization in the present petition and without de-capitalization of the gross value of the two reactors from the RAPP 5 & 6 Transmission System and TALA Transmission System. The petitioner has prayed to allow de-

capitalization of the gross value of these two reactors at the time of truing up of tariff for Kankroli S/S and Mandola S/S covered under petition no. 557/TT/2014 and petition no. 38/TT/2015 respectively, and has also prayed to consider the capitalization of the same in the instant asset at the time of true up. We observe that the two reactors have been shifted and put to use in the instant asset and the cost of reactors has not been claimed in the capital cost of present asset. Hence, at this juncture, we are not inclined to allow independently, the dismantling & reallocation cost of ₹ 43.72 lakh associated with the transferred reactors, the capitalization of which has not been settled in the present petition. Accordingly, dismantling & reallocation cost of ₹ 43.72 lakhs is disallowed in the present petition and we direct the petitioner to present the dismantling & reallocation cost along with the capitalized value of the reactors to the Commission at the time of truing up of the tariff of the present petition.

38. The following capital cost as on COD after taking into consideration the allowable IDC, IEDC and initial spare is considered for the computation of tariff for the instant assets :-

(₹ in lakh)

Capital Cost Claimed as on COD	Less: IDC disallowed (Excess claim)	Less: IDC disallowed (Un-discharged)	Less: Excess Initial spare	Less: Dismantling & Reallocation Cost (As per Form-5B	Capital Cost considered as on COD
32866.82	99.63	346.88	0.00	43.72	32376.59

Additional Capital Expenditure (ACE)

39. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

"(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) Un-discharged 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; 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."

40. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines "cut-off" date as under:-

"cut-off date" means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation".

41. The cut-off date for the instant assets is 31.3.2020.

The petitioner has claimed ACE, as per Auditor certificate dated 14.12.2017, as ₹1039.92 lakh for year 2017-18 and ₹2079.84 lakh for year 2018-19. Further the petitioner has claimed the entire ACE under Regulation 14(1). The petitioner has also claimed the discharge of IDC liability during 2017-18 & 2018-19 in respect of the asset.

Accordingly, the ACE claimed by the petitioner and allowed up to 31.03.2019 is summarized in the table below:-

(₹ in lakh)

	2017-18	**2018-19**
Claimed	1039.92	2079.84
Allowed**	1160.69	2305.95

**Discharged IDC added in the respective year add cap.

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

(₹ in lakh)

Expenditure up to COD	**2017-18**	**2018-19**	**Total Estimated Completion Cost up to 31.3.2019**
32376.59	1160.69	2305.95	35843.23

<u>Debt-Equity Ratio</u>

43. This has been dealt with in line with Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations.

44. 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 Asset as on the date of commercial operation and as on 31.3.2019 are as under:-

(₹ in lakh)

Asset				
Particular	**Capital cost as on COD**		**Capital cost as on 31.3.2019**	
	Amount	**%**	**Amount**	**%**

Debt	22,663.61	70.00	25090.26	70.00
Equity	9,712.98	30.00	10752.97	30.00
Total	**32376.59**	**100.00**	**35843.23**	**100.00**

Return on Equity

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

46. 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.

47. We have considered the submissions made by the petitioner and respondent. 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)

	Asset-I	
Particulars	**2017-18 (pro-rata)**	**2018-19**
Opening Equity	9712.98	10061.18
Addition due to Additional Capitalization	348.21	691.78
Closing Equity	10061.18	10752.97
Average Equity	9887.08	10407.08
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)	982.71	2040.83

Interest on loan (IOL)

48. This has been dealt with in line with Regulation 26 of 2014 Tariff Regulations.

49. 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.

50. Based on above, details of IOL calculated are as follows:-

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (pro-rata)	2018-19
Gross Normative Loan	22663.61	23476.10
Cumulative Repayment upto previous Year	0.00	882.29
Net Loan-Opening	22663.61	22593.80
Addition due to Additional Capitalization	812.48	1614.16
Repayment during the year	882.29	1832.32
Net Loan-Closing	22593.80	22375.64
Average Loan	22628.71	22484.72
Weighted Average Rate of Interest on Loan	8.2372%	8.2297%
Interest on Loan	944.75	1850.43

Depreciation

51. This has been dealt with in line with Regulation 27 of 2014 Tariff Regulations.

52. Depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

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

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (pro-rata)	2018-19
Opening Gross Block	32376.59	33537.28
Additional Capital expenditure	1160.69	2305.95
Closing Gross Block	33537.28	35843.23
Average Gross Block	32956.94	34690.25
Rate of Depreciation	5.2819%	5.2819%
Depreciable Value	29661.24	31221.23
Remaining Depreciable Value	29661.24	30338.93
Depreciation	882.29	1832.32

Operation and Maintenance Expenses (O&M Expenses)

54. This has been dealt with in line with Clause 29(4)(a) of 2014 Tariff Regulations.

55. The O&M Expenses claimed by the petitioner are as under:-

(₹ in lakh)

2017-18	2018-19
220.47	448.13

56. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

57. BRPL vide affidavit dated 3.7.2018 has submitted that the increase in the employee cost, if any, due to wage revision must be taken care by improvement in their productivity levels by the petitioner company so that the beneficiaries are not unduly burdened over and above the provisions made in the 2014 Tariff Regulations. In response, the petitioner filed its rejoinder dated 11.10.2018 and submitted that the wage revision of the

employees of the petitioner 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 the tariff block 2014-19. The scheme of wage revision applicable to CPSUs is binding on the petitioner and hence it would approach the Commission for suitable revision in the norms for O&M Expenses for claiming the impact of wage hike from 1.1.2017 onwards.

58. We have considered the submissions of petitioner and BRPL. The O&M Expenses have been worked out as per the norms 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 subject asset is as follows:

(₹ in lakh)

Element	**2017-18 (pro-rata)**	**2018-19**
2 nos.400kV bays at Kanpur	185/365x66.51x2 =67.42	68.71x2 =137.42
2 nos.400kV (GIS)bays	185/365xx56.84x2 =57.61	58.73x2 =117.46
239.76km line length of 400kV D/C Allabhad-Kanpur-Double circuit	185/365x0.780x239.76 =94.79	0.806x239.76 =193.24
Total Allowable O&M Expenses	**67.42+57.61+94.79 =219.82**	**137.42+117.46+193.24 =448.12**

*Pro-rata has been calculated from 28.9.2017 to 31.3.2018=185 days.

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

59. As per proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base Rate Plus 350 bps as on 1.04.2017 (i.e.12.60%) has been considered for the instant asset, as the rate of interest on working capital.

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

(₹ in lakh)

Particulars	**Asset-I**	
	2017-18 (Pro-rata)	**2018-19**
Maintenance Spares	65.05	67.22
O&M expenses	36.14	37.34
Receivables	1019.75	1052.92
Total	1,120.95	1,157.48
Interest	**71.59**	**145.84**

Annual Transmission charges

61. In view of the above, the annual transmission charges being allowed for the instant asset is summarized hereunder:-

(₹ in lakh)

Particulars	**Asset-I**	
	2017-18 (pro-rata)	**2018-19**
Depreciation	882.29	1832.32
Interest on Loan	944.75	1850.43
Return on Equity	982.71	2040.83
Interest on Working Capital	71.59	145.84
O&MExpenses	219.82	448.12
Total	**3101.16**	**6317.54**

Filing fee and the publication expenses

62. 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 and RLDC Fees and Charges

63. 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 licence 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

64. 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

65. 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.

66. This order disposes of Petition No. 125/TT/2018.

Sd-	Sd-	Sd-
(I.S. Jha)	**(Dr. M. K. Iyer)**	**(P. K. Pujari)**
Member	**Member**	**Chairperson**