

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 48/TT/2017**

**Coram:**

**Shri Gireesh B. Pradhan, Chairperson  
Shri A.K. Singhal, Member  
Shri A.S. Bakshi, Member  
Dr. M.K. Iyer, Member  
Date of Order : 15.11.2017**

**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 31.3.2019 for **Asset-I: 2 No. 400 kV Line bays at Fatehpur 400/220 kV Substation (Anticipated DOCO: 2.10.2016) under "Provision of 400 kV bays at Fatehpur for ATS under Unchahar TPS".**

**And in the matter of:**

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

**....Petitioner**

**Vs**

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited  
Vidyut Bhawan,  
Janpath, Jaipur - 302 005  
Rajasthan, INDIA.

2. Ajmer Vidyut Vitran Nigam Limited,  
Vidyut Bhawan, Panchsheel Nagar,  
Makarwali Road, Ajmer- 305004 Jaipur

3. Jaipur Vidyut Vitran Nigam Limited,  
Vidyut Bhawan, Janpath, Jaipur - 302 005  
Rajasthan, INDIA.

4. Jodhpur Vidyut Vitran Nigam Limited,  
New Power House, Industrial Area  
Jodhpur-342003

5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Shimla  
Himachal Pradesh (India)-171004

6. Punjab State Electricity Board,  
1st Floor, Patiala - 147001,  
Opposite Kali Mata Mandir Shakti Sadan



7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector -6  
Panchkula-134109

8. Power Development Department,  
Exhibition Ground, PDD Building,  
Jahangir Chowk - 190001, Srinagar;

9. Uttar Pradesh Power Corporation Ltd.,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow - 226001, UP, India.

10. Delhi Transco Limited,  
Shakti Sadan, Kotla Marg,  
New Delhi-110002

11. BSES Yamuna Power Limited,  
New Delhi C-7, Yamuna Vihar,  
New Delhi – 110053

12. BSES Rajdhani Power limited,  
33 KV Grid, BSES Bhawan, Adchini,  
New Delhi -110017

13. North Delhi Power Limited,  
Shakti Deep Building,  
District Office Building, Rohini Sector 3  
New Delhi– 110085

14. Chandigarh Administration,  
Union Territory 5th Floor,  
Secretariat Deluxe Building,  
Sector - 9 - D Chandigarh– 160017

15. Uttarakhand Power Corporation Ltd.,  
Victoria Cross Vijeyta Gabar Singh Bhawan,  
Kanwali Road, Balliwala Chowk,  
Dehradun-248001, Uttarakhand

16. North Central Railway,  
Subedarganj, Doomanganj,  
Allahabad, Uttar Pradesh – 211011

17. New Delhi Municipal Council,  
Palika Kendra, Parliament Street,  
New Delhi-110001

18. Powergrid Unchahar Transmission Limited (PUTL)  
765/400/220 kV Powergrid Sub-station  
Fatehpur-Lalganj-Lucknow Road Village-Chaufera Fatehpur- 212601

19. NTPC  
TC/33/V-1, Near Lohia Hospital  
PICUP Bhawan RD, Vibhuti Khand

Respondents



## ORDER

The present petition has been filed by Power Grid Corporation of India Limited (“PGCIL”) seeking approval of transmission tariff for Asset-I: 2 No. 400 kV Line bays at Fatehpur 400/220 kV Sub-station under “Provision of 400 kV bays at Fatehpur for ATS under Unchahar TPS” for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).

2. Investment Approval of the project was accorded by the Board of Directors of POWERGRID vide Memorandum No. C/CP/Fatehpur bays in NR for “Provision of 400 kV bays at Fatehpur for ATS under Unchahar TPS”, on 21.4.2015 at an estimated cost of ₹10.66 Crore including Interest during Construction of ₹ 0.52 Crore based on December, 2014 price level.

3. As per the Investment Approval, the assets covered in the petition were scheduled to be commissioned within 19 months from the date of Investment Approval. The date of Investment Approval being 21.4.2015, the assets were to be commissioned by 20.11.2016.

4. The complete transmission scheme has been discussed and agreed in the connectivity and LTA meeting held along with 31st Standing Committee meeting of Northern Region held on January 2, 2013. The transmission scheme has also been discussed in the 29th Empowered Committee meeting held on 15/6/2012 wherein it was noted that the system was to be made ready by March, 2015; CTU to confirm availability of 2 Nos 400 kV bays at Unchahar Switchyard of NTPC; CTU to provide bays at Powergrid's Fatehpur Sub-station and associated bays to be provided by



Powergrid/Generator to match with commissioning of the transmission scheme and CTU to coordinate. In the 27th TCC meeting held on 27.2.2014 and 30th NRPC meeting held on 28.2.2014, it was noted that Unchahar Power project would be connected to ISTS through Unchahar-Fatehpur 400 kV D/C line from November, 2016. Further, a 400/220 kV 500 MVA transformer would be provided at Unchahar for anchoring to the generating units by NTPC line as agreed in 25th NRPC meeting held on 24.2.2012.

**Scope of work as per Investment Approval is as follows:**

5. The scope of work covered under “Provision of 400 kV bays at Fatehpur for ATS under Unchahar TPS” is as follows:

Sub-station:

Extension of 765/400/220 kV sub-station at Fatehpur 400 kV Line bays : 2 Nos

6. The assets covered in the instant petition is given as below:

Name of the Asset
Asset-I: 2 No. 400 kV Line bays at Fatehpur 400/220 kV Substation

**Date of Commercial Operation**

7. The petitioner has claimed the date of the commercial operation of the instant Transmission Assets as follows:

Asset	SCOD as per I.A	Proposed COD
Asset-I	20.11.2016	2.10.2016*

\*Application for issuance of successful Trial run operation has already been submitted to NRLDC, however the same is awaited, therefore DOCO is yet to be issued.

8. The petitioner has submitted that three parties are involved in Unchahar-Fatehpur Transmission project:

- a) POWERGRID: Construction of 400 kV bays at Power Grid Fatehpur Substation
- b) POWERGRID Unchahar Transmission Limited (PUTL): Construction of 400 kV D/C Unchahar-Fatehpur Transmission Line
- c) NTPC: Construction of 400 kV bays at NTPC Unchahar Thermal power station (TPS)



9. The Petitioner has submitted that 400 kV bays at Fatehpur (POWERGRID) and 400 kV D/C Unchahar-Fatehpur Transmission Line under TBCB route by PUTL are ready and line is anti-theft charged upto NTPC Unchahar TPS bays. RLDC certificate for power flow in the system including 2 bays at Fatehpur Sub-station could not be obtained due to non-completion of 400 kV bays at Unchahar (NTPC). Therefore, the petitioner could not declare its system under commercial operation w.e.f. 2.10.2016.

10. The petitioner has submitted that the line is could not be put into commercial operation due to non-readiness of bays at Unchahar end. The Petitioner has submitted that instant transmission line could not be put to use for reasons not attributable to it and hence requested to approve CoD as 2.10.2016 as provided in the second proviso to Regulations 4 (3) of the 2014 Tariff Regulations.

11. NTPC, vide affidavit dated 15.5.2017, has submitted reply to the petition as under:-

- a) The petitioner has claimed that the Fatehpur Sub-station bays along with Circuit-I and Circuit-II of the Unchahar-Fatehpur line were charged from Fatehpur end for theft prevention on 30.9.2016 and 26.10.2016 respectively, and has prayed for approval of CoD as from 2.10.2016 in terms of Regulation 4 (3) of the 2014 Tariff Regulations. However, complete line-I and line-II along with both end bays were charged on 15.12.2016 and 6.12.2016 respectively and power flow started on 21.12.2016.
- b) As indicated in POSOCO letter dated 12.10.2016, trial operation of the line has still not been completed. Further, as indicated in PGCIL letter dated 9.12.2016, the Fatehpur-Unchahar line along with bays at both ends was commissioned on 6.12.2016. The date of commercial operation of the instant asset may be decided



keeping in view the dates when the asset was put into regular use along with communication system and certificate issued by RLDC in this regard.

- c) As regards date from which NTPC liability can arise, for development of evacuation system of the generating station, NTPC had applied for LTA to CTU vide application dated 8.8.2011. Thereafter, vide letter dated 8.8.2013, PGCIL was informed that as per Investment Approval of the generating station by the Board of Directors of NTPC Ltd. the Unit was scheduled to be commissioned in 40 months from the date of Investment Approval (30.7.2013), which works out to 30.11.2016.
- d) Subsequently, CTU, in reference to NTPC letter dated 8.8.2013 and other NTPC letters, granted LTA of Unchahar IV w.e.f. November. 2016 vide letter dated 3.1.2014.
- e) The Generating Unit has already been commissioned on 31.3.2017 and commercial operation of generating station is expected to be declared by September. 2017.
- f) NTPC did not require the line before 30.11.2016 which was made clear to PGCIL before grant of LTA. Liability of NTPC, for payment of IDC or Annual Transmission Charges of instant transmission asset should be from 1.12.2016 onwards or COD of line, whichever is later.

12. NTPC was directed to submit the status of line bays at Unchahar associated with 400 kV D/C Unchahar-Fatehpur transmission line on affidavit with an advance copy to the petitioner. In response, NTPC, vide affidavit dated 15.5.2017, has submitted the status of Unchahar end bays of 400 kV, D/C, Unchahar-Fatehpur line as under:-

Activity	Activity completion data remarks	
	Bay-I	Bay-II
CEA Charging clearance date	28.11.2016	28.11.2016
Date of commissioning of PLCC	5.12.2016	5.12.2016



Date of charging of bays alongwith line	15.12.2016	6.12.2016
Date of power flow(being used for drawal of startup power)	21.12.2016	21.12.2016

Since 21.12.2016, the Unchahar-Fatehpur line along with Unchahar and Fatehpur end bays is being used for drawl of startup power for Unchahar-IV project of NTPC Ltd.

13. In compliance with the Order dated 28.4.2017 the petitioner vide affidavit dated 15.6.2017 has made following submission:

- a) As regards to RLDC certificate, due to non-readiness of Unchahar bays which is in the scope of Unchahar TPS (NTPC), Asset-I i.e. "2 Nos. 400 kV Line bays at Fatehpur 400/220 kV Sub-station" was first time anti-theft charged from Fatehpur S/s (PG) end on 26.9.2016 and 30.9.2016. However, CEA certificate of energisation was obtained on 24.9.2016 which indicates that the asset covered in the instant petition was ready on 24.9.2016. Further, Unchahar TPS completed its bay work on 9.12.2016 and 15.12.2016. Therefore, Unchahar bays along with the 400 kV Fatehpur-Unchahar T/L was first time charged from both ends on 9.12.2016 and 15.12.2016. Letter for first time charging from both the ends was issued by NRLDC. Trial run certificate for the instant asset is awaited from NRLDC.
- b) As regards to additional capital expenditure (Add. Cap.) incurred after COD, admissibility of add cap. is to be dealt in accordance with the Regulation 14 (1) (i) of the Tariff Regulation.
- c) The CEA certificate of 24.9.2016, shows that the Asset-I "2 Nos. 400 kV Line bays at Fatehpur 400/220 kV Sub-station" was ready to charge since 24.9.2016. Due to non-completion of work in the scope of Unchahar TPS, line could not be charged on 24.9.2016 and accordingly connected line was anti-theft charged since 26.9.2016



and 30.9.2016 from Fatehpur end. Therefore, date of commercial operation of a transmission system or element thereof shall be determined in accordance with the second proviso of Regulation 4(3) of the 2014 Tariff Regulations.

14. CTU was directed vide order dated 28.4.2017 to submit the scheduled timeline given for construction of 400 kV D/C Unchahar-Fatehpur transmission line under TBCB and basis for arriving at the timeline and relevant minutes of Empowered Committee.

15. As regards scheduled timeline for construction of 400 kV D/C Unchahar-Fatehpur transmission line, CTU vide affidavit dated 15.6.2017 has made following submission:

- a) The associated transmission system for Unchahar TPS was discussed and agreed during the 29th meeting of Empowered Committee on Transmission held on 15.6.2012 wherein it was discussed that associated bays to be provided by POWERGRID/Generator should be matched with commissioning of the transmission Scheme.
- b) CTU-Powergrid forwarded RFP Inputs to RECTPCL (Bid Coordinator) on 19.6.2013. In the RFP Letter, as per NTPC, COD for generation plant was expected by June, 2016. However, it was mentioned that based on the communication from NTPC, the commissioning schedule for Unchahar-Fatehpur 400 kV D/C line shall be informed later.
- c) NTPC vide letter dated 8.8.2013 intimated that the generation plant is scheduled to be commissioned in 40 months i.e. by November, 2016.
- d) CTU-POWERGRID informed RECTPCL on 11.9.2013, the commissioning schedule for generation project as November, 2016 and it was informed that the associated transmission system should be matched with the generation.
- e) RECTPCL replied to above mentioned email on 11.9.2013, requesting that due to preparatory activities for commencement of RFP process, a period of 33





months could be given as completion target in the RFP for transmission project. However, CTU-POWERGRID, again informed RECTPCL that the commissioning schedule for generation project is November, 2016 and the associated transmission system should be matched with the generation.

- f) To finalize the time line a meeting was held on 7.10.2013 at CEA between CEA, CTU-POWERGRID and RECTPCL. Wherein CTU-POWERGRID again reiterated that the commissioning schedule for generation project was November, 2016 as informed by NTPC.
- g) RECTPCL issued RFP with completion target as 30 months from effective date. Since the effective date is 24.3.2014, therefore, completion schedule was 24.9.2016.
- h) PUTL has intimated vide letter dated 26.07.2016, that Unchahar-Fatehpur D/C T/L would be charged on 24.9.2016. Accordingly, POWERGRID has completed bay work at Fatehpur Sub-station matching with the said transmission line.

16. NTPC has directed to submit (a) connectivity application and connectivity granted by CTU and (b) LTA application as applied to CTU.

17. NTPC vide affidavit dated 7.7.2017 has submitted the above mentioned documents. From the FORMAT-CON-3 i.e intimation for grant of connectivity granted by CTU, it is observed that connectivity was granted from November, 2016 and from the FORMAT-LTA-5 i.e intimation for grant of LTA by CTU, it is observed that LTA was granted from November, 2016.

18. RECTPCL was directed to give the reasons for giving early schedule for commissioning of the 400 kV D/C Unchahar-Fathehpur transmission line when it was required by November, 2016.



19. RECTPCL, vide affidavit dated 10.7.2017, has submitted as under:-

a) As per the requirement of the Standard Bidding Documents, the completion schedule for the transmission system is to be provided in months from the Effective Date. As per Transmission Service Agreement (TSA), the definition of Effective Date is as given below:

"This Agreement (TSA) shall be effective from later of the dates of the following events: -

- i. The Agreement (TSA] is executed and delivered by the Parties;
- ii. The Selected Bidder has acquired for the Acquisition Price, one hundred percent (100%) of the equity shareholding of REC Transmission Projects Company Ltd. in Unchahar Transmission Limited along with all its related assets and liabilities as per the provisions of the Share Purchase Agreement, and
- iii. The Selected Bidder, on behalf of the TSP, has provided the Contract Performance Guarantee, as per terms of Article 3.1 of this Agreement (TSA)."

b) A meeting to finalize the completion schedule in months was held in CEA on 7.10.2014 wherein CTU informed that Unchahar Generation project is scheduled for commissioning by 1.11.2016 and the transmission system is required to be built matching with the commissioning of generation project.

c) RECTPCL conveyed that based on the past experience approximately 5-6 months would be required for handing over of the SPV i.e. Unchahar Transmission Limited (UTL) to the selected bidder which means SPV can be handed over by March-April, 2014.

d) After considering the commissioning schedule of NTPC's generation project and tentative time required to complete the bidding process, it was decided to keep the

completion schedule of the Transmission Line as 30 months' from the effective date to match the completion of Transmission & Generation Schedule.

- e) After successful completion of the bidding process the SPV, Unchahar Transmission Limited was transferred to successful bidder on 24.3.2014 about 5 and 1/2 months from the date of the meeting. As per the timeline of Standard Bidding Documents, RECTPCL has to handover the SPV in stipulated time. RECTPCL has completed the bid processing activities within a given time i.e. 5-6 months, as agreed in the above meeting.
- f) As 30 months' period was mentioned in the RFP, only option to match the scheduled date of NTPC plant commissioning with the commissioning of Transmission System was to postpone the Effective Date by one month i.e. to delay handing over of SPV to successful bidder. However, this is not a good practice considering the importance of line and any delay would have led to bottlenecking of generation. As a general practice, TSP constructs the line in cooperation and coordination with stakeholders which is NTPC in this case.
- g) As regards Connection and Commissioning of the project, the TSA provides as follows:-

#### “6. Connection and Commissioning of the Project

##### 6.1 Connection with the Inter-Connection Facilities:

6.1.1 The TSP shall give the RLDC(s), CTU/ STU, as the case may be, the Long Term Transmission Customers and any other agencies as required at least sixty (60) days advance written notice of the date on which it intends to connect an Element of the Project, which date shall be not earlier than its Scheduled COD or Schedule COD extended as per Article 4.4.1 of this Agreement, unless the Lead Long Term Transmission Customer otherwise agrees.

6.1.2 The RLDC / SLDC (as the case may be) or the CTU / STU (as the case may be) or the Lead Long Term Transmission Customer may, for reasonable cause, including failure to arrange for Interconnection Facilities as per Article 4.2, defer the connection for up to fifteen (15) days from the date notified by the TSP pursuant to Article 6.1.1 if it notifies to the TSP in writing, before the date of connection, of the reason for the deferral and when the connection is to be rescheduled. However, no such deferment on one or more occasions would be for more than an aggregate period of 30 days. Further, the Scheduled COD would be extended as required, for all such deferments on day for day basis.”



- h) As per the above provisions of TSA, Scheduled COD can be extended upto 30 days in the case of failure of arrangement of Inter-Connection facility which has to be provided by NTPC in the immediate case.
20. As per the directions of the Commission, the Petitioner, vide affidavit dated 21.7.2017 has submitted as under:
- a) As per RLDC Certificate dated 23.6.2017 successful charging on no-load was completed on 1.10.2016 and requested to approve the CoD of the instant asset as 2.10.2016. Further, it is submitted that “400 kV D/C Fatehpur-Unchahar Transmission Line” is under TBTC route and is being executed by PUTL. CEA certificate of “400 kV D/C Fatehpur-Unchahar Transmission Line” obtained on 24.9.2016 and the Line 1 and Line 2 is anti-theft charged up to NTPC Unchahar TPS bays on 26.9.2016 and 30.9.2016. Further, with regard to Unchahar bays Substation is in the scope of NTPC.
- b) Trial run certificate of “2 No. 400 kV Line bays at Fatehpur 400/220 kV Substation has been submitted.

**Analysis and Decision:**

21. We have considered the submissions of petitioner and respondents and documents available on records. The petitioner has submitted that 400 kV bays at Fatehpur (POWERGRID) end and 400 kV D/C Unchahar-Fatehpur Transmission Line under TBCB route by PUTL was ready and line was anti-theft charged up to NTPC Unchahar TPS bays. As the line was anti-theft charged from Fatehpur end due to non-readiness of bays at Unchahar (NTPC) end, it could not get RLDC Certificate for power flow in the system. Hence, the petitioner has prayed to approve the COD of the instant bays w.e.f. 2.10.2016 under the second proviso to Regulation 4(3) of the 2014 Tariff Regulations. The said provision provides as under:-

**“4. Date of Commercial Operation**



The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxxxxxxxxx

(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 endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations:
- (ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.”

22. NTPC has submitted that though the petitioner has prayed for CoD from 2.10.2016 in terms of the second proviso to Regulation 4 (3) of the 2014 Tariff Regulations. Line-I and Line-II along with both end bays were charged on 15.12.2016 and 6.12.2016 respectively and power flow started on 21.12.2016. NTPC has stated that the date of commercial operation of the instant asset keeping in view the dates when the assets was put into regular use along with communication system and the certificate issued by RLDC in this regard.

23. The petitioner has submitted the antitheft charging certificate dated 2.2.2017 stating that the 2 Nos 400 kV line bays, were anti-theft charged on 26.9.2016 and 30.9.2016, NRLDC charging certificate dated 10.4.2017 for first time charging, RLDC trial run certificate dated 23.6.2017 on no load, CEA certificate dated 24.9.2016 and CMD certificate. As per RLDC charging certificate dated 23.6.2017, 2 No.s 400 kV line bays were charged on no load and successfully completed trial run for bay 1 and bay 2 on 1.10.2016 and 29.9.2016 respectively. However, due to non-commissioning of bays



associated with Unchahar end (under NTPC scope), the instant assets were charged on no load conditioned. It is observed that Unchahar TPS was completed and first time charged its bays on 9.12.2016 and 15.12.2016 and are being used for drawl of startup power for Unchahar-IV project of NTPC w.e.f. 21.12.2016.

24. Thus, the instant assets were anti theft charged on 28.9.2016 and 30.09.2016, the bays were not put to regular use till 21.12.2016. Hence, we are not inclined to approve petitioner's claim for approval of COD under the second proviso of Regulation 4(3) of the 2014 Tariff Regulations. Accordingly, COD of the assets is considered as 21.12.2016 from which date the assets have been put to regular use.

**Time Over-run:**

25. As per the Investment Approval, the assets covered in the petition were scheduled to be put into commercial operation within 19 months from the date of Investment Approval. The date of Investment Approval was 21.4.2015, hence the CoD of the assets was 20.11.2016. The details are given below:

<b>SCOD</b>	<b>COD</b>	<b>Actual COD</b>	<b>Delay</b>
20.11.2016	2.10.2016 (Anticipated)	21.12.2016	31 days

26. Thus, there is a delay in actual COD of the instant assets. It is observed that bays were charged on no load conditioned on 1.10.2016 and 29.9.2016 and COD proposed by the petitioner was 2.10.2016. However, as discussed above COD has been approved as 21.12.2016, when the bays were put to regular use, hence the delay in commissioning of assets is not attributable to petitioner since it was ready on 2.10.2016. Therefore, the time taken from 20.11.2016 to 20.12.2016 cannot be attributable to the petitioner. Liability of IDC and IEDC for period 1.12.2016 to 20.12.2016 shall be borne by



NTPC since SCOD for NTPC generating unit was 30.11.2016. Liability of IDC and IEDC for period 20.11.2016 to 30.11.2016 shall be as decided in Petition No. 99/MP/2017 as per liability of associated transmission line.

### **Capital Cost claimed**

27. The petitioner has submitted Auditor's Certificate dated 2.6.2017 for expenditure incurred / projected to be incurred during 2014-19 period. The details of expenditure incurred as on COD and estimated additional capitalization incurred / projected to be incurred for the period from claimed COD to 31.3.2019 covered in the petition are summarized below:

				(₹ in lakh)
<b>Expenditure up to Claimed COD (2.10.2016)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>Total Estimated Completion Cost up to 31.03.2019</b>
537.86	151.65	154.04	154.04	997.59

28. On the basis of available information, we have considered pro-rata add cap claimed during the Financial Year 2016-17 as a part of capital cost as on Tariff COD (21.12.2016) and considered the balance of additional capitalization incurred / projected to be incurred during that year as add cap for the period from Tariff COD to 31.3.2019. Therefore, the following capital cost has been considered, for the purpose of tariff, before the scrutiny of IDC and IEDC, Initial Spares etc. and other issues:

				(₹ in lakh)
<b>Expenditure up to Tariff COD / COD</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>Total Estimated Completion Cost up to 31.03.2019</b>
604.89	84.62	154.04	154.04	997.59

### **Treatment of IDC and IEDC**

29. The petitioner has claimed ₹12.44 lakh as Interest during Construction (IDC). We have checked allowable IDC amounting to ₹12.44 lakh based on information submitted by the petitioner. The Petitioner has submitted that out of ₹12.44 lakh, ₹3.86 lakh has



been discharged up to COD and the remaining ₹8.58 lakh has been discharged during the year 2017-18. Accordingly, the undischarged IDC amounting to ₹8.58 lakh has been deducted from the capital cost as on COD and the same has been allowed during the year 2017-18.

### **Initial Spares**

30. The admissible initial spares are as under:

(₹ in lakh)

<b>Plant and Machinery</b>	<b>Spares cost (Claimed)</b>	<b>Ceiling Limit</b>	<b>Admissible Initial Spares</b>	<b>Excess Initial Spares</b>
985.46	63.87	6.00%	58.82	5.05

The initial spares claimed by the petitioner is more than the limits specified in Regulation 13 of the 2014 Tariff Regulations. Therefore, the initial spares for instant asset is restricted to 6% being a Brown sub-station.

### **Additional capital expenditure**

31. 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) Undischarged liabilities recognised 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.”

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





“cut-off date” means 31<sup>st</sup> 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 31<sup>st</sup> March of the year closing after three years of the year of commercial operation”.

33. The “cut-off date” in the case of instant transmission asset is 31.3.2019.

34. The petitioner has claimed the following additional capital expenditure vide affidavit dated 15.6.2017:-

(₹ in lakh)

Add Cap from COD to 31.3.2017	Add Cap in 2017-18	Add Cap in 2018-19	Total estimated Add Cap
151.65	154.04	154.04	459.73

35. The petitioner has submitted that the additional capital expenditure incurred/projected to be incurred is on account of Balance and Retention Payments. We have considered the submission of the petitioner. The additional capital expenditure incurred/projected to be incurred is on account of Balance/Retention Payments and are within “cut-off date” and is covered under Regulation 14(1)(i) of the 2014 Tariff Regulations and accordingly it is allowed.

### **Capital Cost**

36. Accordingly, a capital cost considered for the purpose of tariff calculation, subject to truing up is as below:

(₹ in lakh)

Capital Cost considered for the purpose of tariff before adjustment of IEDC/IDC & Initial Spares, if any, as on COD (A)	IDC Un-discharged disallowed as on COD (B)	IEDC Disallowed as on COD (C)	Excess Initial Spares Disallowed as on COD (D)	Capital Cost considered for the purpose of tariff after scrutiny of IEDC/IDC & Initial Spares as on COD (E)=(A)-(B+C+D)
604.89	8.58	0.00	5.05	591.26



37. The total estimated completion cost of the instant assets as on 31.3.2019 is given below:-

(₹ in lakh)

Capital Cost allowed as on COD	Additional Capitalisation from COD to 31-03-17	Additional Capitalisation for 2017-18	Additional Capitalisation for 2018-19	Total estimated completion cost up to 31.3.2019
591.26	84.62	162.62	154.04	992.54

### **Debt-Equity Ratio**

38. Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specify as follows:-

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

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

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

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

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)

Particulars	Capital cost as on tariff COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	413.88	70.00	694.78	70.00
Equity	177.38	30.00	297.76	30.00
<b>Total</b>	<b>591.26</b>	<b>100.00</b>	<b>992.54</b>	<b>100.00</b>

### **Return on Equity (RoE)**

40. Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

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

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

Provided that:

(i) in case of projects commissioned on or after 1<sup>st</sup> April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:**

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

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

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

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

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

**“25. Tax on Return on Equity:**

(40) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

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.



Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

42. We have considered the submissions made by the petitioner and the respondents. 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 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:-

Particulars	₹ in lakh		
	2016-17 (pro-rata)	2017-18	2018-19
Opening Equity	177.38	202.77	251.55
Addition due to Additional Capitalization	25.39	48.79	46.21
Closing Equity	202.77	251.55	297.76
Average Equity	190.07	227.16	274.66
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
<b>Return on Equity (Pre-tax)</b>	<b>10.31</b>	<b>44.55</b>	<b>53.86</b>

### **Interest on Loan (IOL)**

43. Regulation 26 of the 2014 Tariff Regulations provides as under:-



“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

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

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

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

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

44. In these calculations, IOL has been worked out as hereinafter:-

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

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



45. The petitioner has submitted that it be allowed to bill and adjust impact on IOL due to change in interest due to floating rate of interest applicable, if any, from the respondents. The IOL has been calculated on the basis of rate prevailing as on the tariff date of commercial operation. Any change in rate of interest subsequent to the tariff date of commercial operation will be considered at the time of truing- up.

46. Detailed calculation of the weighted average rate of interest has been given in **Annexure** to this order.

47. Based on above, details of calculation of Interest on Loan is as follows:-

Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Gross Normative Loan	413.88	473.12	586.95
Cumulative Repayment up to Previous Year	0.00	9.42	50.10
Net Loan-Opening	413.88	463.70	536.85
Addition due to Additional Capitalization	59.24	113.83	107.83
Repayment during the year	9.42	40.68	49.18
Net Loan-Closing	463.70	536.85	595.50
Average Loan	438.79	500.28	566.18
Weighted Average Rate of Interest on Loan	8.216%	8.189%	8.186%
<b>Interest</b>	<b>9.98</b>	<b>40.97</b>	<b>46.35</b>

### **Depreciation**

48. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as below:-

**“27. Depreciation:**

(48) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation



of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

49. The petitioner has claimed actual depreciation as a component of annual fixed charges. Depreciation has been allowed in accordance with Regulation 27 of the 2014 Tariff Regulations. The instant asset was put under commercial operation on 2.10.2016. Accordingly, it 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.





50. Accordingly, depreciation has been worked out on the basis of capital expenditure as on COD and additional capitalization incurred/projected to be incurred thereafter, wherein depreciation for the first year has been calculated on pro rata basis for the year/part of year. Details of the depreciation allowed are as under:-

Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Opening Gross Block	591.26	675.88	838.50
Additional Capital expenditure	84.62	162.62	154.04
Closing Gross Block	675.88	838.50	992.54
Average Gross Block	633.57	757.19	915.52
Rate of Depreciation	5.3714%	5.3718%	5.3722%
Depreciable Value	570.22	681.48	823.97
Remaining Depreciable Value	570.22	672.05	773.87
<b>Depreciation</b>	<b>9.42</b>	<b>40.68</b>	<b>49.18</b>

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

51. The O&M Expenses claimed by the petitioner is as under:

O&M expenses claimed by the petitioner				
(₹ in lakh)				
2014-15	2015-16	2016-17	2017-18	2018-19
0	0	64.02	133.02	137.42

52. In CERC Tariff Regulations, 2014 applicable for 2014-19, norms for O&M expenditure for Transmission System have been specified under section 29 (4) for the asset covered in the petition are as follows:

Element	(₹. lakh/bay)				
	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV bay	60.30	62.30	64.37	66.51	68.71

53. O&M Expenses allowable as per Regulation, 29(4) of Tariff Regulations 2014 are given below:

(Rs. lakh/bay)



Element	2014-15	2015-16	2016-17 (pro rata)	2017-18	2018-19
<b>Asset-I</b>					
2 No.s 400 Kv bays	0	0	35.62	133.02	137.42
<b>Total</b>	<b>0</b>	<b>0</b>	<b>35.62</b>	<b>133.02</b>	<b>137.42</b>

### **Interest on Working Capital (IWC)**

54. Clause 1© of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff

Regulations specify as follows:-

#### **“28. Interest on Working Capital**

The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

- (i) Receivables equivalent to two months of fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
- (iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1<sup>st</sup> April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

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

55. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The components of the working capital and the petitioner’s entitlement to interest thereon are discussed hereunder:-

#### **(i) Receivables**

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months’ annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months’ transmission charges.



### **(ii) Maintenance spares**

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

### **(iii) O & M Expenses**

Operation and maintenance expenses have been considered for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

### **(iv) Rate of interest on working capital**

As per Proviso 3 of regulation 28 of the 2014 Tariff Regulations, SBI Base rate 9.30% as on 1.4.2016 plus 350 Bps i.e. 12.80% has been considered for the asset, as the rate of interest on working capital.

56. Accordingly, the interest on working capital as determined is as under:-

(₹ in lakh)

<b>Particulars</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Maintenance Spares	19.31	19.95	20.61
O & M expenses	10.73	11.09	11.45
Receivables	40.86	44.82	49.54
Total	70.90	75.86	81.61
Interest (pro-rata)	<b>2.51</b>	<b>9.71</b>	<b>10.45</b>

### **Transmission charges**

57. The transmission charges being allowed for the instant assets are summarized hereunder:-



Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	9.42	40.68	49.18
Interest on Loan	9.98	40.97	46.35
Return on equity	10.31	44.55	53.86
Interest on Working Capital	2.51	9.71	10.45
O & M Expenses	35.62	133.02	137.42
<b>Total</b>	<b>67.84</b>	<b>268.92</b>	<b>297.26</b>

### **Filing Fee and Publication Expenses**

58. 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. BRPL has submitted that filing fee and other expenses may not be allowed. 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.

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

59. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. 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.

### **Sharing of Transmission Charges**

60. NTPC vide affidavit dated 15.5.2017 has submitted that for development of evacuation system of the generating station, it had applied for LTA to CTU vide application dated 8.8.2011. Thereafter, vide letter dated 8.8.2013, it was



informed to PGCIL that the Investment Approval of the generating station has been accorded by the Board of Directors of NTPC Ltd. and the Unit is scheduled to be commissioned in 40 months from the date of Investment Approval (30.7.2013), which work out to 30.11.2016. Subsequently, CTU in reference to the above mentioned NTPC letter dt. 8.8.2013 and other NTPC letters, vide letter dated 3.1.2014 granted LTA of Unchahar IV w.e.f. Nov. 2016. It is stated that the Generating Unit has already been commissioned on 31.3.2017 and commercial operation of generating station is expected to be declared by Sept. 2017. As NTPC did not require the line before 30.11.2016 which was made clear to PGCIL before grant of LTA, liability of NTPC, for payment of IDC or Annual Transmission charges of instant transmission asset, if any, be from 1.12.2016 onwards only or COD of line whichever is later.

61. The Commission directed CTU to submit the scheduled timeline given for construction of 400 kV D/C Unchahar-Fatehpur transmission line under TBCB and basis for arriving at the timeline and relevant minutes of Empowered Committee.

62. POWERGRID vide affidavit dated 15.6.2017 has submitted as under:

Schedule timeline for construction of 400 kV D/C Unchahar-Fatehpur transmission line is Sequence for finalizing Time line for implementation of Unchahar-Fatehpur 400 kV line:

- a) The associated transmission system for Unchahar TPS was discussed and agreed during the 29th meeting of Empowered Committee on



Transmission held on 15.6.2012 wherein it was discussed that associated bays to be provided by POWERGRID/Generator to be matched with commissioning of the transmission Scheme. CTU-Power Grid forwarded RFP Inputs to RECTPCL (Bid Coordinator) on 19.6.2013. In the RFP Letter, as per NTPC, COD for generation plant was expected by June'16, however, it was mentioned that based on the communication from NTPC, the commissioning schedule for Unchahar-Fatehpur 400 kV D/C line shall be informed later.

- b) NTPC vide letter dated 08.08.2013 intimated that the generation plant is scheduled to be commissioned in 40 months i.e. by Nov'16. CTU-POWERGRID informed RECTPCL on 11.09.2013, indicating the commissioning schedule for generation project as Nov'16 and it was informed that the associated Transmission system should be matched with the generation.
- c) RECTPCL replied to above mentioned email on 11.09.2013, requesting that due to preparatory activities for commencement of RFP process, a period of 33 months could be given as completion target in the RFP for transmission project. However, CTU-POWERGRID, again informed RECTPCL that the commissioning schedule for generation project is Nov'2016 and the associated transmission system should be matched with the generation.
- d) To finalize the time line a meeting was held on 07.10.2013 at CEA between CEA, CTU-POWERGRID & RECTPCL. It was again reiterated in the meeting by CTU-POWERGRID that as informed by NTPC, the commissioning schedule for generation project is Nov'2016 and the associated Transmission system is to be build matching with the generation project. RECTPCL issued RFP with completion target as 30 months from



effective date. Since the effective date is 24<sup>th</sup> march 2014 therefore completion schedule is 24.09.2016.

- e) Vide letter dated 26.7.2016, PUTL has intimated that Unchahar-Fatehpur D/C T/L would be charged on 24.9.2016. Accordingly POWERGRID has completed bay work at Fatehabad S/s matching with the said transmission line.

63. The Commission vide RoP dated 20.6.2017 has directed NTPC to submit (a) connectivity application and connectivity granted by CTU and (b) LTA application as applied to CTU.

The Respondent, NTPC vide affidavit dated has submitted the above mentioned documents. From the FORMAT-CON-3 i.e intimation for grant of connectivity granted by CTU, it is observed that connectivity was granted from November, 2016 and from the FORMAT-LTA-5 i.e intimation for grant of LTA by CTU, it is observed that LTA was granted from November, 2016.

64. The Commission vide RoP dated 20.6.2017 has directed to seek comments of RECTPCL, for giving early schedule for commissioning of the 400 kV D/C Unchahar-Fathehpur transmission line when it was required by November, 2016 and also directed that representative of RECTPCL should be present on the next date of hearing to explain the reasons for specifying an giving an early schedule for the said line.

65. RECTPCL vide affidavit dated 10.7.2017 has submitted as under:

- In order to meet timeline of 30 months, RECTPCL has to handover the SPV in April end i.e. after one month of completing bidding process in all respect, which doesn't seem to be correct practice considering the fact



that after completion of the bidding process just to schedule time to bidder as per the bid documents, it may not be advisable to hold the SPV transfer.

- PGCIL got approx. 40 days more to construct the transmission line and as a standard practice TSP coordinates with stakeholder/generator to meet this timeline.
- As per tariff policy also, Transmission Infrastructure should be ready before generation plant to avoid bottlenecking of project due to transmission infrastructure. Hence, TSP completed the transmission infrastructure around 40 days earlier, which is beneficial for system/timely evacuation of project.
- As per Article 6 of TSA, it is amply clear that the Scheduled COD can be extended upto 30 days' in the case of failure of the arrangement of Inter-Connection facility which has to be provided by NTPC Limited on the immediate case on the request of PGCIL.

66. We have considered the submissions of the petitioner and respondents. RECTPCL has submitted that approximately 5-6 months would be required for handing over of the SPV i.e. Unchahar Transmission Limited (UTL) to the selected bidder which means SPV can be handed over by March-April'14. Further, it has submitted that after considering the commissioning schedule of NTPC's generation project and tentative time required to complete the bidding process, it was decided to keep the Completion schedule of the Transmission Line as 30 months' from the effective date to match the completion of Transmission & Generation Schedule. As 30 months' period was mentioned in the RFP, only option to match the scheduled date of NTPC plant commissioning with the commissioning of Transmission System was to postpone the Effective





Date by one month i.e. to delay handing over of SPV to successful bidder. However, this would not have been good practice considering the importance of line and any delay would have lead to bottlenecking of generation. As a general practice, TSP constructs the line in cooperation & coordination with stakeholders which is NTPC in this case.

67. It is noticed that in the instant case REC was the BPC and it should have scheduled the timeline of execution of transmission as required by Generation which was 30.11.2016 in instant case. It is noted that NTPC vide letter dated 8.8.2013 has informed to PGCIL that the investment approval of the generating station has been accorded and the Unit is scheduled to be commissioned in 40 months from the date of investment approval (30.7.2013), which works out to 30.11.2016. To which CTU-POWERGRID informed RECTPCL on 11.09.2013, indicating the commissioning schedule for generation project as Nov'16 and it was informed that the associated Transmission system should be matched with the generation. However, REC has not given schedule to transmission accordingly. REC being BPC should have handled the scheduling better to avoid such circumstances. No heed was given to the fact as to who will bear the liability in case transmission is commissioned and generation doesn't require it.

68. The Commission vide Order dated 3.7.2014 has adopted transmission charges with respect to Transmission system being established by Unchahar Transmission Limited and 21.7.2014 has granted transmission license to Unchahar Transmission Limited. The Commission after considering the recommendation of CTU and in terms of Section 15 of the Act read with Transmission License Regulations for construction, operation and maintenance



of the transmission system granted transmission license. However, it is noticed that CTU while granting recommendation for grant of transmission license to Commission has not apprised the Commission about any mismatch in planning of the Transmission line, associated transmission system and generation project. NTPC was not made the party at the time of grant of Transmission License. At the same time, NTPC should have been vigilant and should have responded to the advertisement for the grant of license for the evacuation line from their generating station.

69. It is noticed that the PTUL has also filed a petition No. 99/MP/2017 for seeking deemed COD of the line as 1.10.2016, after completion of mandatory seven days period in terms of Clause 6.2.1 of the TSA and the petitioner vide letter dated 1.10.2016, informed all the LTTCs about deemed COD of the line. The issue of the recovery of the IDC/IEDC has been dealt at para- 29.

70. Under Regulation 8(8) of Connectivity Regulation, the transmission charges from 21.12.2016 till date of start of LTA shall be borne by NTPC and thereafter the transmission charges shall be considered under POC and the billing collection and disbursement of transmission charges shall be governed by provision of Central Electricity Regulatory Commission (sharing of Interstate Transmission Charges and Losses) Regulations, 2010 amended from time to time.



71. This order disposes of Petition No. 48/TT/2017.

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

Sd/-  
**(A.S. Bakshi)**  
Member

Sd/-  
**(A.K. Singhal)**  
Member

Sd/-  
**(Gireesh B. Pradhan)**  
Chairperson



## Annexure-1

## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2016-17	2017-18	2018-19
<b>1</b>	<b>SBI 10000</b>			
	Gross loan opening	55.00	<b>55.00</b>	<b>55.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	55.00	55.00	55.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	55.00	55.00	55.00
	Average Loan	55.00	55.00	55.00
	Rate of Interest	9.35%	9.35%	9.35%
	Interest	5.14	5.14	5.14
	Rep Schedule	20 Half yearly equal installment w.e.f. 15-06-2019		
<b>2</b>	<b>Bond LIII</b>			
	Gross loan opening	167.00	<b>167.00</b>	<b>167.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	167.00	167.00	167.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	167.00	167.00	167.00
	Average Loan	167.00	167.00	167.00
	Rate of Interest	8.13%	8.13%	8.13%
	Interest	13.58	13.58	13.58
	Rep Schedule	12 Yearly equal installment w.e.f. 25-04-2020		
<b>3</b>	<b>Bond LV</b>			
	Gross loan opening	0.00	<b>0.50</b>	<b>0.50</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	0.00	0.50	0.50
	Additions during the year	0.50	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.50	0.50	0.50
	Average Loan	0.25	0.50	0.50
	Rate of Interest	7.55%	7.55%	7.55%
	Interest	0.02	0.04	0.04
	Rep Schedule	Bullet Payment as on 20-09-2031		
<b>4</b>	<b>Bond LV</b>			
	Gross loan opening	0.00	<b>0.00</b>	<b>3.50</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	0.00	0.00	3.50
	Additions during the year	0.00	3.50	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	3.50	3.50



	Average Loan	0.00	1.75	3.50
	Rate of Interest	7.55%	7.55%	7.55%
	Interest	0.00	0.13	0.26
	Rep Schedule	Bullet Payment as on 20-09-2031		
<b>5</b>	<b>Bond LVII</b>			
	Gross loan opening	0.00	<b>37.00</b>	<b>37.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	0.00	37.00	37.00
	Additions during the year	37.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	37.00	37.00	37.00
	Average Loan	18.50	37.00	37.00
	Rate of Interest	7.20%	7.20%	7.20%
	Interest	1.33	2.66	2.66
	Rep Schedule	Bullet Payment as on 21-12-2021		
<b>6</b>	<b>Bond LIV</b>			
	Gross loan opening	148.50	<b>148.50</b>	<b>148.50</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	148.50	148.50	148.50
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	148.50	148.50	148.50
	Average Loan	148.50	148.50	148.50
	Rate of Interest	7.97%	7.97%	7.97%
	Interest	11.84	11.84	11.84
	Rep Schedule	3 Equal installment as on 15-07-2021, 15-07-2026 and 15-07-2031		
<b>7</b>	<b>Bond LIV</b>			
	Gross loan opening	0.00	<b>0.00</b>	<b>2.50</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	0.00	0.00	2.50
	Additions during the year	0.00	2.50	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	2.50	2.50
	Average Loan	0.00	1.25	2.50
	Rate of Interest	7.97%	7.97%	7.97%
	Interest	0.00	0.10	0.20
	Rep Schedule	3 Equal installment as on 15-07-2021, 15-07-2026 and 15-07-2031		
<b>8</b>	<b>Bond LVIII</b>			
	Gross loan opening	0.00	<b>31.66</b>	<b>31.66</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	0.00	31.66	31.66
	Additions during the year	31.66	0.00	0.00
	Repayment during the year	0.00	0.00	0.00



	Net Loan-Closing	31.66	31.66	31.66
	Average Loan	15.83	31.66	31.66
	Rate of Interest	7.89%	7.89%	7.89%
	Interest	1.25	2.50	2.50
	Rep Schedule	Bullet Payment as on 09-03-2027		
<b>9</b>	<b>SBI (2016-17)</b>			
	Gross loan opening	0.00	<b>37.00</b>	<b>37.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	0.00	37.00	37.00
	Additions during the year	37.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	37.00	37.00	37.00
	Average Loan	18.50	37.00	37.00
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	1.65	3.29	3.29
	Rep Schedule	20 Half yearly equal installment w.e.f. 15-06-2019		
	<b>Total Loan</b>			
	Gross loan opening	370.50	476.66	482.66
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	370.50	476.66	482.66
	Additions during the year	106.16	6.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	476.66	482.66	482.66
	Average Loan	423.58	479.66	482.66
	Rate of Interest	8.2160%	8.1890%	8.1862%
	<b>Interest</b>	<b>34.80</b>	<b>39.28</b>	<b>39.51</b>

