

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 338/TT/2018

Coram:

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

Date of Order: 31.10.2019

In the matter of:

Approval under Regulation-86 of Central Electricity Regulatory Commission(Conduct of Business) Regulations1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 for determination of Transmission Tariff from COD to 31.03.2019 for "Asset-I: Combined assets: 1) LILO of both circuits of Bamnauli-Samaypur 400kV line at Tughlakabad along with associated bays; 2) 400/220 kV, 2x500 MVA ICT-I and II at 400 /220 kV GIS at TughlakabadSub-station along with associated bays; 3) 400kV, 125 MVAR Bus reactor at GIS TughlakabadSub-station along with associated bays and Asset-II: 400/220 kV, 2x500 MVA ICT-III and IV at 400 /220 kV GIS at TughlakabadSub-station along with associated bays under "Creation of 400/220 kV Substations in NCT of Delhi during 12th plan period (Part-B1) in Northern Region".

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, Rajasthan- 302 005
2. Ajmer Vidyut Vitran Nigam Ltd
132 kV GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar
Jaipur,Rajasthan-302017
3. Jaipur VidyutVitran Nigam Ltd
132 kV GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar
Jaipur, Rajasthan-302017



4. Jodhpur Vidyut Vitran Nigam Ltd
132 kV GSS RVPNL , Substation Building
Caligiri Road, Malviya Nagar
Jaipur, Rajasthan-302017
5. Himachal Pradesh State Electricity Board
Vidyut Bhawan
Kumar House Complex Building-II
Shimla-171 004
6. Punjab State Electricity Board
Thermal Shed Tia
Near 22 Phatak, Patiala-147001
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula(Haryana)-134109
8. Power Development Department
Govt. Of Jammu and Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Ltd.
Shakti Bhawan, 14, Ashok Marg
Lucknow- 226 001
10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road
New Delhi-110 002
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 and Load Dispatch Group
Cennet Building,
Adjacent to 66/11 kVPitampura-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**

For Petitioner: Shri S. S Raju, PGCIL
Shri A.K Verma, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents: Shri R. B.Sharma, Advocate, BRPL and BYPL
Shri Mohit Mudgal, Advocate BRPL and BYPL
Ms. Sanya Sood, Advocate, BRPL and BYPL
Shri Sanjay Srivastav, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter also referred to as “PGCIL”) for determination of transmission tariff from COD to 31.3.2019 for “Asset-I: Combined assets: 1) LILO of both circuits of Bamnauli- Samaypur 400kVline at Tughlakabad along with associated bays; 2) 400/220 kV, 2x500 MVA ICT-I and II at 400 /220 kV GIS at Tughlakabad Sub-station along with associated bays; 3) 400 kV, 125 MVAR Bus reactor at GIS Tughlakabad Sub-station along with associated bays and Asset-II: 400/220 kV, 2x500 MVA ICT-III and IV at 400 /220 kV GIS at Tughlakabad Sub-station along with associated bays under “Creation of 400/220 kV Sub-stations in NCT of Delhi during 12th Plan period (Part-B1) in Northern Region” in accordance with 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 prayer:-

- i) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition;
- ii) Allow the cost variation and admit the capital cost as claimed in the petition and approve the Additional Capitalisation incurred / projected to be incurred;
- iii) Allow tariff upto 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 of Central Electricity Regulatory Commission(Terms and Conditions of tariff) Regulations,2014 for purpose of inclusion in the Point of Connection charges;
- iv) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014;
- v) Approve the reimbursement of expenditure by the beneficiaries towards the 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 the petition;
- vi) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014;
- vii) Allow the petitioner to bill and adjust impact 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;
- viii) Allow the petitioner to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 1.1.2017 onwards;
- ix) 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;
- x) Approve the Additional ROE as claimed in the Petition."



Background

3. The petitioner has submitted that the investment approval and expenditure sanction was accorded by the Board of Directors of PGCIL, vide memorandum dated 15.5.2015 in their 314th meeting held on 11.5.2015 at an estimated cost of `78033 lakh including an IDC of `4174 lakh based on December 2014 price level .

4. The scope of work covered under “Creation of 400/220 kV Sub-stations in NCT of Delhi during 12th plan period (Part-B1) in Northern Region” is as follows:-

Transmission Lines:

(i) LILO of both circuits of Bamnauli- Samaypur 400 kV D/C line at Tughlakabad with twin HLTS Conductor.

Substations

(i) Establishment of 4x500 MVA, 400/220 kV GIS Substation at Tughlakabad

400kV

- | | | |
|-------------------------------|---|--|
| a) Line Bays | : | 4 nos. (with provision for future expansion) |
| b) 500 MVA, 400/220 kV ICT's: | | 4 nos. |
| c) 125 MVAR Bus Reactor: | | 1 no. |
| d) Transformer Bay: | | 4 nos. |
| e) Reactor Bay: | | 1 no. |

220 kV

- | | | |
|----------------------------|--|--|
| a) Line bays: | | 12 nos. |
| b) Transformer Bay: | | 8 nos. (4 nos. for 400/220 kV ICT's and
4 nos. for 220/33 kV ICT's) |
| c) Bus Coupler Bays: | | 2 nos. |
| d) Bus Sectionalizer bays: | | 2 nos. |

The revised scope of the subject scheme is as per the following:

Transmission Lines:

(i) LILO of both circuits of Bamnauli- Samaypur 400 kVD/C line at Tughlakabad with twin HLTS Conductor.

Substations

(i) Establishment of 4x500 MVA, 400/220 kV GIS Substation at Tughlakabad

400kV

- | | | |
|-------------------------------|---|--|
| a) Line Bays | : | 4 nos. (with provision for future expansion) |
| b) 500 MVA, 400/220 kV ICT's: | | 4 nos. |
| c) 125 MVAR Bus Reactor: | | 1 no. |
| d) Transformer Bay: | | 4 nos. |



e) Reactor Bay: 1 no.

220 kV

Transformer Bay: 4 nos.

5. The scope of the project covered under the instant petition is as follows:

Assets
Asset-I: Combined assets: 1) LILO of both circuits. of Bamnauli-Samaypur 400kV line at Tuglakabad along with associated bays ; 2) 400/220 kV, 2x500 MVA ICT-I and II at 400 /220 kV GIS at Tuglakabad Sub-station along with associated bays; 3) 400 kV, 125 MVAR Bus reactor at GIS Tuglakabad Sub-station along with associated bay
Asset-II (a): 400/220 kV, 500 MVA ICT-III at 400 /220 kV GIS at Tuglakabad Sub-station along with associated Bays
Asset-II (b): 400/220 kV, 500 MVA ICT-IV at 400 /220 kV GIS at Tuglakabad Sub-station along with associated Bays

6. The details of the Transmission charges claimed by the Petitioner are as under:

(` in lakh)

Particulars	2018-19 (Pro-rata)		
	Asset-I	Asset-II(a)	Asset-II(b)
Depreciation	869.48	42.76	39.82
Interest on Loan	972.22	55.83	56.74
Return on Equity	1072.01	62.31	63.05
Interest on Working Capital	72.76	5.16	5.70
OandM Expenses	246.61	36.50	47.96
Total	3233.08	202.56	213.27

7. The details of Interest on Working Capital claimed by the petitioner are as follows:

(` in lakh)

Particulars	2018-19(Pro-rata)		
	Asset-I	Asset-II(a)	Asset-II(b)
Maintenance Spares	79.54	16.02	16.02
OandM expenses	44.19	8.90	8.90
Receivables	1158.67	98.81	79.18
Total	1282.40	123.74	104.11
Rate of Interest	12.20%	12.20%	12.20%
Interest on working capital	156.45	15.10	12.70
Interest	72.76	5.16	5.70



8. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. 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 Electricity Act, 2003. Himachal Pradesh State Electricity Board(HPSEB), Respondent No. 1 has filed reply vide affidavit dated 23.05.2019. The petitioner has filed rejoinder dated 6.6.2019 and 7.6.2019 to the reply of HPSEB. We have considered the submissions made by the petitioner and HPSEB in the instant petition. Having heard the representatives of the petitioner present at the hearing and examined the material on record, we proceed to dispose of the petition.

Date of Commercial Operation(COD)

9. Initially, in the instant petition the petitioner had claimed anticipated COD of Asset-I and Asset-II as 13.8.2018. Later vide affidavit dated 5.4.2019 the petitioner bifurcated Asset-II as Asset-II(a) & Asset-II(b) and has claimed the actual COD as 14.10.2018, 28.11.2018 and 20.10.2018 for Asset-I, Asset-II(a) and Asset-II(b) respectively.

10. Taking into consideration the RLDC certificates dated 26.11.2018, 13.12.2018 and 31.10.2018 for Asset-I, Asset-II(a) and Asset-II(b) respectively, CEA certificates dated 18.6.2018 & 8.10.2018, 5.11.2018 and 15.10.2018 for Asset-I, Asset-II(a) and Asset-II(b) respectively and CMD certificates submitted by the petitioner in support of trial operation, the date of commercial operation is approved as 14.10.2018, 28.11.2018 and 20.10.2018 for Asset-I, II(a) and II(b) respectively as per the 2014 Tariff Regulations.



Time over-run

11. As per the investment approval, the transmission scheme was scheduled to be put in to Commercial Operation in 26 months from the date of receipt of confirmation from Government of NCT of Delhi regarding allotment of land for Tughlakabad Sub-station. The aforesaid land was allotted/handed over to the petitioner for construction of 400 kV Tughlakabad Sub-station on 27.7.2016. Therefore, SCOD (schedule COD) works out to be 26.9.2018 and thus, there is a time over-run of 18 days, 63 days and 24 days in commercial operation of Asset-I, II(a) and II(b) respectively. Although, as per the submissions of the Petitioner, the delay in actual commissioning of the assets is mentioned as 17 days, 62 days and 23 days for Asset-I, Asset-II(a) and Asset-II(b) respectively, we observe that as per our computations, the delay period is 18 days, 63 days and 24 days.

12. Reasons for time over-run submitted by the petitioner:-

Asset- I

S.no	Activity	Schedule		Actual		Remarks
		From	To	From	To	
1	Forest Proposal Submission and Final Approval	4.1.2017	3.11.2017	7.5.2016	12.9.2018	Time over-run of 17 days is mainly due to time over-run in getting Forest Clearance
2	Supplies	31.5.2017	24.7.2018	15.3.2017	27.4.2018	
3	Foundation	4.8.2017	5.7.2018	18.3.2017	27.10.2017	
4	Tower erection and Stringing	24.11.2017	5.9.2018	24.3.2018	27.6.2018	
5	Testing and COD	6.9.2018	26.9.2018	28.6.2018	14.10.2018	

Asset- II (a)

S.no	Activity	Schedule		Actual		Remarks
		From	To	From	To	
1	Forest Proposal Submission and Final Approval	4.1.2017	3.11.2017	7.5.2016	12.9.2018	Time over-run of 62 days is mainly due to time
2	Supplies	29.8.2017	13.8.2018	15.3.2017	27.4.2018	



3	Foundation/Civil works	14.3.2017	16.7.2018	18.3.2017	27.10.2017	over-run in getting Forest Clearance
4	Erection	26.9.2017	29.8.2018	24.3.2018	27.6.2018	
5	Testing and COD	2.8.2018	26.9.2018	28.6.2018	28.11.2018	

Asset- II (b)

S.no	Activity	Schedule		Actual		Remarks
		From	To	From	To	
1	Forest Proposal Submission and Final Approval	4.1.2017	3.11.2017	7.5.2016	12.9.2018	Time over-run of 23 days is mainly due to time over-run in getting Forest Clearance
2	Supplies	29.8.2017	13.8.2018	15.3.2017	27.4.2018	
3	Foundation/Civil works	14.3.2017	16.7.2018	18.3.2017	27.10.2017	
4	Erection	26.9.2017	29.8.2018	24.3.2018	27.6.2018	
5	Testing and COD	2.8.2018	26.9.2018	28.6.2018	20.10.2018	

13. The petitioner has submitted that time over-run in COD of Asset-I, II(a) and II(b) is mainly due to getting the forest clearance in Delhi Portion. Out of the total line length of 27.18 km, 6.18 km lies in Delhi and 21 km lies in Haryana. The line length of 6.18 km that falls under Delhi portion was routed through forest (Ridge) area for which NOC/ permissions from Forest dept., Ridge Management Board (RMB), Central Empowered Committee (CEC) formed by the Hon'ble Supreme Court and Archaeological Survey of India was required. The chronology of events in getting the forest clearance of Delhi portion is tabulated below:-

S.no.	Events	Date
1	As the land is handed over on 27.7.16 and on the basis of positive assumption by the govt. agencies in advance, Powergrid forwarded the proposal to forest dept.	7.5.16
2	Meanwhile the route survey work of TL up to Tuglakabad substation was started and on the basis of proposed route, tree enumeration list was prepared. This report was submitted to Forest dept.	13.7.16
3	The confirmation of acquisition of substation land received on 27.7.16	27.7.16



4	Letter from DFO asking to provide the List of tree including Khasra No. for every tower / line location.	22.8.16
5	Powergrid approached local Govt. authorities to list the khasra no. The officers from tehsil office undertook the survey again, marked each and every location in their map with the exact coordinates. Then Powergrid asked forest dept. to provide the forest map such that this khasra no. may be marked on it for further submission.	18.10.16
6	Letter to DCF for submission of list of affected trees in the line corridor.	24.10.16
7	Letter was forwarded to District magistrate, Tuglakabad for helping in expedition of process of tree enumeration.	25.10.16
8	Letter from DFO received asking to provide the exact area (in Sq. Mtrs.) for total no. of trees in the line corridor.	16.11.16
9	The total area (in Sq. Mtrs.) which was 27.68 Ha. was already confirmed to forest dept. vide letter dated: 13.07.16 and the same is forwarded them again.	28.11.16
10	Letter to Chief Conservator of Forest, Delhi requesting to expedite the case for approval at the earliest.	3.12.16
11	Letter to Member Secretary, RMB for helping in accordance of approval from RMB for further submission to MOEF.	14.12.16
12	As per the forest conservation act 1980, double the area of degraded forest land utilized for non-forest purpose shall be identified and handed over to forest dept. for compensatory afforestation. Thus Powergrid approached to DDA vide letter dated: 9.1.17 stating that Forest authority had expressed their concern of non-availability of land under their forest division in Delhi and requested to explore in other dept. like DDA or other revenue authorities. Thus requested for allotment of 56 ha land for compensatory afforestation.	9.1.17
13	The DDA officials done the survey and identified the land. During this process, letter to CCF, Delhi is forwarded to expedite the case as the verbal confirmation of allotment of 56 Ha of land is already given by DDA; however the approval is awaited shortly.	7.03.17
14	Addl. PCCF written letter to DM (s) for issuance of certificate of compliance of recognition of ST and other traditional forest dwellers act, 2006 which is mandatory for land diversion under forest conservation act 1980.	16.3.17
15	Letter to DCF, Delhi for submitted the report towards joint inspection of Forest officials and Powergrid for total nos. of trees to be enumerated.	23.3.17
16	Letter to APCCF, Delhi for expediting the forest proposal along with the current status and to provide the KML file of Asola Bird Sanctuary to identify the complete route of the line which was the requirement of CEC.	19.6.17
17	Letter of APCCF to Powergrid stating that the meeting of RMB in which the proposal is to be discussed had got cancelled and the new date shall be confirmed accordingly.	19.6.17
18	Letter to Lt. Governor, Delhi to intervene in the stuck up permissions from Forest dept. RMB	22.6.17



19	The matter had been taken up in the Ridge management Board Committee held on 3.8.17 and it was decided that the proposal would be forwarded to CEC as establishment of towers need minimum land area. The CEC is the empowered committee formed by Supreme Court of India consisting Secretary, GOI- MOEF, Addl. Director, MOEF, Advocate of Supreme Court and a member of NGO for accessing the cases related to usage of forest land for Non-forest purposes.	3.8.17
20	Letter of SDM (Kalkaji) to Powergrid stating that the concerned information regarding population of ST is available with forest dept. and the same may be forwarded after get it signed by Forest Authority and District Collector.	16.8.17
21	After the inspection of DFO, Tuglakabad at site on 28.09.17, request is again made to expedite the proposal to be forwarded to RMOEF, Lucknow.	28.9.17
22	As per the meeting of CEC held on 21.09.17, it was decided that the identified land for afforestation enmarked in the Jamuna flood plains near CWG village needs to be inspected before making any recommendation to supreme court.	29.9.17
23	Letter to DM (SE), Delhi for issuance of certificate of compliance of recognition of ST and other traditional dwellers act 2006 (In reference to point 16 above)	1.11.17
24	Letter to Principal Secretary (Env. and Forest) by CF (Central) for some additional requirements for approval. The major one was, the proposal required the decision of Supreme Court as per the recommendation of CEC, and secondly NOC from Archaeological Survey of India as the proposed site is in close proximity with archaeological monuments along with the permission of RMB.	26.12.17
25	A case had been filed by T.N GodavaramVs Union of India in which Powergrid is also party is related to the land issue. The verdict of supreme court came on 22.01.18 stating that the concerned authority shall raise the demand note within one week from the date of verdict.	22.1.18
26	Based on the above verdict of Supreme court, DDA allotted 57.33 Ha land subject to condition that the ownership of land will remain with DDA. However, the report of CEC vide letter dt: 06.12.17 directs Delhi Govt. to for mutate the said land in the name of Forest Dept. and notify the said land as protected forest / Reserve forest. DDA resisted allocating the land to any agency as there is no such policy in institutional branch of DDA to transfer mutation.	9.2.18
27	CEC called a meeting on 8.5.17 in reference to the verdict of Supreme Court, Dt: 22.1.18. The meeting is attended by APPCF, Principal Commissioner (Land), DDA, Jt. Secretary, MOP, MOEF and CC and Powergrid.	4.5.18
28	DDA then allocated the land near Yamuna Zone which falls under "ZONE O" and is already a belt for its ecological significance. CEC vide its letter to GM, Env. and Social management, Dt: 04.06.18 states that the land provided is	4.6.18



	to be maintained as green belt and the degraded forest lands in Asola ridge forest now proposed for afforestation and its demarcation and transfer to Forest dept. of NCT may take some more time. CEC also directed to take the approval of Supreme court as CEC is not competent to alter any conditions of afforestation. CEC also advised Powergrid to approach Min. of Urban Affairs through MOP for land allocation.	
29	A meeting was conducted in Min. of Housing and Urban affairs on 25.5.18 for allocation of land for afforestation considering VC- DDA, JS-MoHUA, Secretary (Power), GNCTD, Addl. PCCF, Land DO, MoHUA and CMD, Powergrid. It was stated that DDA cannot mutate the land in favor of any agency without realizing its cost which is Rs 400 Cr. Powergrid didn't agreed to pay this huge amount as the payment of such amount made the project unviable. Ultimately, it was decided that an alternate option of available degraded forest land may be considered for afforestation and accordingly Forest dept. may move the proposal for the consideration of the CEC.	29.5.18
30	Powergrid then written a letter to Secretary, MOP to take up the matter with Secretary, HUA for considering transfer and mutation of identified land at Yamuna flood plain at free of cost as the land is in under ZONE Ö" and cannot be used in any developmental activities.	11.6.18
31	As per the direction of CEC as mentioned above in para-30 , the petition is filed in Supreme Court against which the verdict received on 18.7.18 in which DDA is instructed to transfer/ handing over of land in Yamuna flood plains for compensatory afforestation.	18.7.18
32	Letter to Addl. PCCF for issuance of working permission for tree enumeration.	23.7.18
33	Letter to Addl. PCCF confirming physical transfer of land from DDA to Delhi Forest on 19.08.18.	20.8.18
34	Letter from Addl. PCCF (Nodal) to Addl. PCCF (central) for expediting the approval for stage-2.	21.8.18
35	Letter to Addl. PCCF for issuance of working permission for tree enumeration.	23.7.18
36	Letter from DFO, MoEF to Principal Secretary (Delhi) for depositing 5% of total project cost with the Ridge Management Board for conservation and development of Delhi Ridge area against construction of transmission line.	27.8.18
37	The final approval accorded on 12.9.2018.	12.9.18

14. The petitioner has submitted that the application for forest approval was made in May 2016 and it put all efforts to get the forest clearance through. However, forest clearance was granted in September 2018. This process took considerable amount of time i.e. approx. 29 months. After getting the forest clearance on 12.9.2018, the



petitioner has immediately completed all the work pertaining to forest (Ridge) area and finally put into Commercial Operation the Asset-I on 14.10.2018. Thereafter, Asset-II(b) and Asset-II(a) were put into Commercial Operation on 20.10.2018 and 28.11.2018 respectively. It is pertinent to mention that despite there being time over-run of 29 months in getting the forest clearance, the petitioner has completed the remaining work in less than 3 months from 12.9.2018 once it got the forest clearance.

15. We have considered the submissions made by the petitioner. Against the scheduled COD (SCOD) of 26.9.2018, Asset-I, Asset-II(a) and Asset-II(b) were put into commercial operation on 14.10.2018, 28.11.2018 and 20.10.2018 respectively after a time over-run of 18 days, 63 days and 24 days respectively. The petitioner has attributed the time over-run mainly due to time taken in getting the forest clearance in Delhi portion and has submitted detailed chronology of events and efforts made to expedite. From the chronology of events, it is seen that, the petitioner applied for forest approval on 7.5.2016 well in advance before the Investment Approval date of 27.7.2016. After this, the petitioner approached local authorities and respective forest department officers from time to time to resolve the issues of forest clearance. After several correspondences/efforts as mentioned above in paragraph-13, the final approval for forest clearance was accorded on 12.9.2018. Thus, the entire process took considerable amount of time i.e. 28 months 5 days (from 7.5.2016 to 12.9.2018). Further, after getting forest approval on 12.9.2018, the petitioner completed remaining work pertaining to forest area and testing between September 2018 to October 2018 and finally put into Commercial Operation the



Asset-I on 14.10.2018, Asset-II(a) on 28.11.2018 and Asset-II(b) on 20.10.2018. Thus, based on above, we are of the view that, the time over-run period up to actual COD of the instant Asset-I, Asset-II(a) and Asset-II(b) was beyond the control of the petitioner. Accordingly, the time over-run in COD of Assets-I, II (a) and II (b) of 18 days, 63 days and 24 days respectively is condoned.

Capital Cost

16. The details of apportioned approved cost, capital cost as on COD and projected additional capital expenditure and the estimated completion cost of the instant assets as per auditor certificate dated 3.5.2019 are as follows:-

(` in lakh)

Assets	Approved Cost (Apportioned)	Exp. Up to COD	Proposed Exp. For FY		Total Estimated Completion Cost
			2018-19	2019-20	
Asset-I	52737.00	34389.06	7681.19	2591.32	44661.57
Asset-II(a)	5626.36	2543.59	945.88	389.15	3878.62
Asset-II(b)	5626.35	1454.12	1757.65	608.07	3819.84
Total	63989.71	38386.77	10384.72	3588.54	52360.03

Cost Variation

17. The estimated completion cost of each asset is within the respective approved apportioned cost. Further, total estimated completion cost is within the total approved cost. Thus, there is no cost over-run in respect of the instant assets.

Incidental Expenditure During Construction (IEDC)

18. The petitioner has claimed IEDC of `716.00 lakh for Asset-I, `50.38 lakh for Asset-II(a) and `50.38 lakh for Asset-II(b). Usually, while granting transmission tariff, the IEDC limit mentioned in the "Abstract Cost Estimate" is considered for allowing the IEDC. In the instant case, we observe that the IEDC is within the percentage on



hard cost as indicated in the abstract cost estimate.

19. As such, the allowable IEDC has been determined by considering the hard cost of the completion cost which includes hard cost as on COD and add-cap on projected basis till cut-off date. As the IEDC claimed by the petitioner is within the allowable limit, the same has been allowed. It is presumed that the entire IEDC has been discharged on COD.

20. The petitioner is however directed to furnish at the time of true-up, the details pertaining to compensation toward forest included in the capital cost.

Interest During Construction (IDC)

21. The petitioner has claimed IDC of `1043.41 lakh for Asset-I, `111.66 lakh for Asset-II(a) and `52.89 lakh for Asset-II(b) respectively.

22. The petitioner has also submitted a statement showing calculation of IDC accrued/discharged upto COD, along with loan details such as date of drawl, amounts, rate of interest and interest payment dates. Based on these available details, the IDC has been worked out. It is noticed that in case of Asset-II, the petitioner has availed a loan from SBI for which applicable rate of interest has not been furnished. In absence of the same, rate of interest applicable to the SBI (2018-19) loan as perform 9C has been considered. Based on the workings, the IDC allowed on cash basis upto COD and to be discharged post COD is as follows:-



(` in lakh)

Assets	IDC IDC claimed as per Auditor's certificate dated 3.5.2019	Admissible IDC	IDC discharged upto COD	IDC discharged in 2018-19	IDC discharged 2019-20
Asset-I	1043.41	1043.41	620.34	301.96	121.11
Asset-II(a)	111.66	111.66	84.63	27.03	0.00
Asset-II(b)	52.89	52.89	12.38	40.51	0.00

23. The IDC allowed as above shall be reviewed at the time of truing up based on the complete loan details to be furnished by the petitioner including rate of interest applicable for SBI loan at the time of truing up.

Initial Spares

24. The initial spares are allowed as provided under Regulation 13 of the 2014 Tariff Regulations. The spares claimed are within the ceiling limit of the 2014 tariff Regulation. The details of initial spares claimed and allowed are as follows:

(` in lakh)

Asset	Particulars	Total Cost (P&M cost)*	Initial spares claimed	Ceiling limit (%) as per Reg.13	Initial Spares as per ceiling limits	Excess initial Spares	Initial Spares Allowed (restricted to claim)
Asset-I	Transmission line	27069.04	210.01	1.00%	271.30	0.00	210.01
	Sub-station	12128.39	505.49	5.00%	611.73	0.00	505.49
Asset-II(a)	Sub-station	2827.53	85.75	5.00%	144.30	0.00	85.75
Asset-II(b)	Sub-station	2827.53	85.75	5.00%	144.30	0.00	85.75



*Excluding IDC, IEDC, Land cost, Plant & Machinery cost and cost of civil works for the purpose of initial spares.

25. The petitioner has not submitted the details of discharge of initial spares. We have presumed that the initial spares have been discharged as on COD. The petitioner is directed to submit the actual discharge at the time of true up.

Capital Cost allowed as on COD

26. Based on the discussion in the preceding paragraphs, the capital cost allowed as on COD under Regulation 9(2) of the 2014 Tariff Regulation is summarized as under:-

(` in lakh)

Assets	Capital Cost claimed as on COD (A)	Un-discharged IDC as on COD (B)	Capital Cost as on COD considered for tariff calculation (F)=A-B
Asset-I	34389.06	423.07	33965.99
Asset-II(a)	2543.59	27.03	2516.56
Asset-II(b)	1454.12	40.51	1413.61

Additional Capital Expenditure (ACE)

27. The cut-off date for the instant assets is 31.3.2021 as per Clause (13) of regulation 3 of Central Electricity Regulatory Commission(Terms and Conditions of Tariff) Regulations 2014.

28. The claim of additional capital expenditure has been dealt in accordance with Regulation 14. The ACE claimed as per auditor certificate is ₹10272.51 lakh,



₹1335.03 lakh and ₹2365.72 lakh for 2018-19 and 2019-20 for Asset-I, Asset-II(a) and Asset-II(b) respectively as balance and retention payment.

29. The add cap for the financial year 2019-20 falls beyond the tariff period 2014-19, thus it shall be considered in next tariff period. The Additional Capital Expenditure allowed is summarized below which is subject to true up.

(` in lakh)

Allowed Add-cap (2018-19)	Asset-I	Asset-II(a)	Asset-II(b)
Estimated Add Cap 2018-19 as per auditor certificate	7681.19	945.88	1757.65
Discharge of IDC during 2018-19	301.96	27.03	40.51
Total allowed add-cap	7983.15	972.91	1798.16

Capital Cost summary from COD to 31.3.2019

30. Capital cost has been dealt in line with Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations. The details of apportioned approved cost, capital cost as on COD and projected additional capital expenditure and the estimated cost of the instant assets as per Auditor Certificate dated 3.5.2019. The capital cost considered for the purpose of computation of tariff is as follows:-

(` in lakh)

Assets	Capital cost allowed as COD	AddCap	Total Estimated Cost up to 31.03.2019
		2018-19	
Asset-I	33965.99	7983.15	41949.14
Asset-II(a)	2516.56	972.91	3489.47
Asset-II(b)	1413.61	1798.16	3211.77

Debt-Equity Ratio

31. Debt: Equity Ratio is considered as per Regulation 19 of the 2014 tariff



Regulations. The financial package upto COD as submitted in form 6 has been considered to determine the debt equity Ratio. The capital cost allowed as on the date of commercial operation arrived at as above and additional capitalization allowed have been considered in the debt-equity ratio of 70:30. The details of debt-equity as on dates of commercial operation and 31.3.2019 considered on normative basis are as under:-

(` in lakh)

Assets	Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
		Amount	%	Amount	%
Asset-I	Debt	23776.23	70	29364.43	70
	Equity	10189.76	30	12584.71	30
	Total	33965.99	100	41949.14	100
Asset-II(a)	Debt	1,761.59	70	2442.63	70
	Equity	754.97	30	1046.84	30
	Total	2516.56	100	3489.47	100
Asset-II(b)	Debt	989.53	70	2248.24	70
	Equity	424.08	30	963.53	30
	Total	1413.61	100	3211.77	100

Return on Equity

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

33. The Petitioner has claimed tariff for the assets covering the entire scope of the Project. Petitioner has submitted that proposed commercial operation dates of the assets covered under the instant petition are well within the timelines for claiming additional RoE of 0.5% as specified in 2014 Tariff Regulations. The matter of early commissioning of assets covered in the instant petition was discussed in 38th TCC & 41st NRPC meeting held on 27.2.2018. NRPC deliberated that early commissioning of Tughalakabad sub-station would avoid congestion in NR and overloading of lines



and even steady supply to South Delhi. Committee was also informed that Petitioner will be getting an additional RoE of 0.5% for commissioning of the said assets within time line specified in 2014 Tariff Regulations. Accordingly, Petitioner has invoked the provisions of Regulation 24(1)(i) of CERC Tariff Regulations and has calculated RoE at the rate of 20.243% after grossing up the RoE with MAT rate of 20.961% as per the 2014 Tariff Regulations.

34. Regulation 24(2) of 2014 Tariff Regulations reads as under:

24(2)xxxx

Provided that:

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

Xxxxx

35. The qualifying time schedules for new 400kV AC sub-station as specified in Appendix-I to 2014 Tariff Regulations is 30 months. We observe that the Asset-I, Asset-II(a) & Asset-II (b) in the present petition have been put into commercial operation on 14.10.2018 i.e. availing 26 months 18 days, on 28.11.2018 i.e. availing



28 months 1 day, and on 20.10.2018 i.e. availing 26 months 24 days respectively. Clearly, these three Assets have been commissioned within 30 months qualifying time schedules for new 400kV AC sub-station as per Appendix-I to the 2014 Tariff Regulations. Therefore, an additional RoE of 0.5% is admissible to the petitioner except for “LILO of both circuits of Bamnauli-Samaypur 400 kV (Twin & Triple conductor) transmission line” portion of Asset-I of the project since the line length is less than 50 km. All other assets, i.e. Asset-II (a), Asset-II (b) and substation portion of Asset-I qualify for additional RoE @ 0.5%. We observe that for transmission line portion and substation portion of Asset-I, segregated cost is not available in the petition. Therefore, the petitioner is granted liberty to file segregated cost of substation portion of Asset-I for claiming additional RoE at the time of true up.

36. 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)

Particulars	2018-19 (Pro-rata)		
	Asset-I	Asset-II(a)	Asset-II(b)
Opening Equity	10189.77	754.97	424.08



Addition due to Additional Capitalization	2394.95	291.87	539.45
Closing Equity	12584.71	1046.84	963.53
Average Equity	11387.24	900.90	693.81
Return on Equity (Base Rate)	15.50%	16.00%	16.00%
MAT rate for the Financial year 2013-14	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	20.243%	20.243%
Return on Equity (Pre-tax)	1033.93	61.96	62.72

Interest on loan (IOL)

37. The petitioner's entitlement to IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:-

- a) The Gross Normative loan has been considered as per the Loan amount determined based on the debt equity ratio applied on the allowed capital cost.
- b) The depreciation of every year has been considered as Normative repayment of loan of concerned year;
- c) The weighted average rate of interest on actual loan portfolio has been worked out by considering the Gross amount of loan, repayment and rate of interest as mentioned in the petition, which has been applied on the normative average loan during the year to arrive at the interest on loan.

38. The petitioner has submitted that the IOL has been claimed on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/ adjusted over the tariff block 2014-19. We have calculated Interest on Loan on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up.

39. The details of Interest on Normative Loan allowed are as under:-

(` in lakh)

Particulars	2018-19 (Pro-rata)
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	Asset-I	Asset-II(a)	Asset-II(b)
Gross Normative Loan	23776.23	1761.59	989.53
Cumulative Repayment up to previous Year	0.00	0.00	0.00
Net Loan-Opening	23776.23	1761.59	989.53
Addition due to Additional Capitalization	5588.21	681.04	1258.71
Repayment during the year	866.12	42.57	39.81
Net Loan-Closing	28498.32	2400.06	2208.44
Average Loan	26137.28	2080.82	1598.98
Weighted Average Rate of Interest on Loan	7.9995%	7.8539%	7.8680%
Interest on Loan	968.09	55.52	56.18

Depreciation

40. The petitioner has claimed the actual depreciation as a component of annual transmission charges as per Regulation 27 of 2014 Tariff Regulations. The instant transmission Asset-I, Asset-II(a) and Asset-II(b) were put under commercial operation on 14.10.2018, 28.11.2018 and 20.10.2018 respectively. Accordingly, it will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method in accordance with Regulation 27 at the rates specified in Appendix-II to the 2014 Tariff Regulations.

41. The details of the depreciation worked out are as under:-

(` in lakh)

Particulars	2018-19(Pro-rata)		
	Asset-I	Asset-II(a)	Asset-II(b)
Opening Gross Block	33965.99	2516.56	1413.61
Additional Capital expenditure	7983.15	972.91	1798.16
Closing Gross Block	41949.14	3489.47	3211.77
Average Gross Block	37957.57	3003.02	2312.69
Rate of Depreciation	4.9282%	4.1731%	3.8541%
Depreciable Value	32047.66	2172.79	1556.09
Remaining Depreciable Value	32047.66	2172.79	1556.09
Depreciation	866.12	42.57	39.81



Operation and Maintenance Expenses (O&M Expenses)

42. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line.

43. The O&M Expenses claimed by petitioner are as under:

(` in lakh)

Asset	Particulars	2018-19
Asset-I	O&M	246.61
Asset-II(a)	Expenses	36.50
Asset-II(b)		47.96

44. The petitioner has submitted that O&M Expenses for the tariff period 2014- 19. 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.

45. We have considered the submissions both by petitioner and respondents. 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. Accordingly, the O&M Expenses allowed is given as under:-



(₹ in lakh)

Element	2018-19(Pro-rata)
Asset-I (COD: 14.10.2018)	244.06
Asset-II (a):(COD: 28.11.2018)	35.99
Asset-II (b): (COD: 20.10.2018)	47.40

Interest on Working Capital (“IWC”)

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

I.Maintenance spares:

Maintenance spares @ 15 % of Operation and Maintenance expenses specified in Regulation 28.

II.O & M expenses:

O&M expenses have been considered for one month of the O&M expenses

III.Receivables:

The receivables have been worked out on the basis of 2 months' of annual transmission charges as worked out above.

IV.Rate of interest on working capital:

As per Clause 28 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, SBI Base Rate (8.70%) as on 01.04.2018 Plus 350 Bps i.e. 12.20 % have been considered as the rate of interest on working capital.

47. The interest on working capital allowed for the instant assets is shown in the table given below:-

(₹ in lakh)

Particulars	2018-19(Pro-rata)		
	Asset-I	Asset-II(a)	Asset-II(b)
Maintenance Spares	79.07	15.89	15.92
O & M expenses	43.93	8.83	8.85
Receivables	1146.07	98.68	79.03
Total	1,269.07	123.40	103.80
Rate of Interest (%)	12.20%	12.20%	12.20%
Interest	71.69	5.11	5.66



Annual Transmission Charges:

48. In view of the above, the annual transmission charges being allowed for the instant assets are summarized hereunder:-

(` in lakh)

Particulars	2018-19(Pro-rata)		
	Asset-I	Asset-II(a)	Asset-II(b)
Depreciation	866.12	42.57	39.81
Interest on Loan	968.09	55.52	56.18
Return on Equity	1033.93	61.96	62.72
Interest on Working Capital	71.69	5.11	5.66
O&M Expenses	244.06	35.99	47.40
Total	3183.89	201.15	211.76

Filing fee and the publication expenses

49. 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

50. 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.

Goods and Services Tax

51. The petitioner has prayed for reimbursement of tax, if any, on account of



proposed 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

52. 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..

53. This order disposes of Petition No. 338/TT/2018.

**Sd/
(I. S.Jha)
Member**

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

**Sd/
(P.K. Pujari)
Chairperson**

