

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 230/TT/2015

Coram:

**Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member**

**Date of Hearing : 29.04.2016
Date of Order : 31.05.2016**

In the matter of:

Determination of transmission tariff for 2019 for 400 kV D/C (Quad) Kishanganj - Patna transmission line along with associated bays at Kishanganj Sub-station including 2 no of 63 MVAR Switchable Line Reactor at Kishanganj Sub-station under "Transmission System for Transfer of Power from Generation Projects in Sikkim to NR/WR Part-B" in Eastern Region for the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

Power Grid Corporation of India Ltd.
'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon -122 001 (Haryana).

.....**Petitioner**

Versus

1. GATI INFRASTRUCTURE CHUZACHEN LTD.
1-7-293, Mg Road, 268 Udyog Vihar, Phase-Iv,
Secunderabad, Andhra Pradesh - 500003
2. PTC INDIA LTD.
2nd FLOOR, NBCC TOWER
15, BHIKAJI CAMA PALACE,
NEW DELHI



3. LANCO ENERGY PVT. LTD.
Plot no. 397, phase-iii, 2nd floor,
Udyog vihar, gurgaon,
Haryana- 120016
4. DANS ENERGY PRIVATE LTD.
5TH Floor, Dlf Building No. 8, Tower C,
Dlf Cyber City Phase- li
Gurgaon, Haryana- 122002
5. JAL POWER CORPORATION LTD,
405-406, Raja House, 30-31,
Nehru Place, New Delhi- 110019
6. Madhya Bharat Power Corporation Ltd.
NH-31-A, Golitar, Singtam,
Gangtok -737 134, Sikkim
7. BIHAR STATE POWER (HOLDING) COMPANY LTD
(FORMERLY BIHAR STATE ELECTRICITY BOARD -BSEB)
Vidyut Bhavan, Bailey Road, Patna — 800 001
8. WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY
Bidyut Bhawan, Bidhan Nagar
Block Dj, Sector-li, Saltlakecity
Calcutta - 700 091 I
9. GRID CORPORATION OF ORISSA LTD.
Shahid Nagar, Bhubaneswar - 751 007
10. DAMODAR VALLEY CORPORATION
DVC Tower, Maniktala
Civic Centre, Vip Road, Calcutta - 700 054
11. POWER DEPARTMENT
Govt. of Sikkim, Gangtok - 737 101
12. JHARKHANDSTATE ELECTRICITY BOARD
In Front Of Main Secretariat
Doranda, Ranchi - 834002

....Respondents



The following were present:-

For Petitioner: Shri S. S. Raju, PGCIL
Shri M. M. Mondal, PGCIL
Shri Rakesh Prasad, PGCIL
Shri Amit Yadav, PGCIL

For Respondent: Shri Jatinder Singh, Lanco Teesta Hydro Power Pvt Ltd.
Shri Amit Bannerjee, Lanco Teesta Hydro Power Pvt Ltd.

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for determination of tariff for 400 kV D/C (Quad) Kishanganj - Patna transmission line along with associated bays at Kishanganj Sub-station including 2 no of 63 MVAR Switchable Line Reactor at Kishanganj Sub-station under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period from date of commercial operation to 31.3.2019.

2. The respondents are distribution licensees or electricity departments or power procurement companies of States, who are procuring transmission service from the petitioner, mainly beneficiaries of Eastern Region.

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

(a) The investment approval for the project was accorded by Board of Directors of the petitioner company, vide Memorandum C/CP/Sikkim Generation Projects-Part-B dated 17.3.2011 for ₹158512 lakh including an



IDC of ₹10183 lakh based on 3rd quarter, 2010 price level. The total approved apportioned cost for the instant assets is ₹82353.95 lakh. As per the investment approval, the transmission asset was scheduled to be commissioned within 32 months from the date of investment approval, i.e. by 1.12.2013.

(b) The scope of work covered under “Transmission system for transfer of power from generation projects in Sikkim to NR/WR Part-B in Eastern Region” is as follows:-

Transmission line

- (i) LILO of Teesta-III Kishanganj 400 kV D/C line (quad) at Rangpo
- (ii) Rangpo-New Melli 220 kV D/C line
- (iii) LILO of Gangtok—Rangit 132 kV S/C line at Rangpo and Termination of Gangtok – Rangpo/Chuzachen & Melli- Rangpo/ Chuzachen 132 kV line at Rangpo
- (iv) LILO of Teesta V- Siliguri 400 kV D/C line at Rangpo
- (v) Kishanganj-Patna 400 kV D/C (quad) line

Sub-stations

- (i) Establishment 400/220/132 kV Gas insulated at Rangpo with 16x105 MVA, 400/220 1-Phase transformers and 3x100 MVA, 220/132 kV 1-Phase transformer.
- (ii) Establishment of 220 kV GIS switching station at New Melli
- (iii) Extension of bays at Kishanganj 400/220 kV Sub-station
- (iv) Extension of bays at Patna 400/220 kV Sub-station

(c) The above system requirements under Part-B, were discussed and agreed in the 29th SCM of WR held on 10.9.2009 and SCM of Power



System Planning in ER held on 14.9.2009. The scope of system was further discussed in the 16th ERPC held on 18.12.2010.

(d) The transmission charges claimed by the petitioner are as under:-

Particulars	(₹ in lakh)			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	55.32	5264.82	5408.65	5456.18
Interest on Loan	54.65	5138.51	4963.87	4572.63
Return on Equity	61.93	5893.71	6054.63	6107.83
Interest on Working Capital	4.31	409.00	413.13	407.60
O&M Expenses	6.38	613.23	633.70	654.79
Total	182.59	17319.27	17473.98	17199.03

(e) The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

Particulars	(₹ in lakh)			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	49.46	51.10	52.81	54.57
Maintenance Spares	89.02	91.98	95.06	98.22
Receivables	2830.84	2886.55	2912.33	2866.51
Total	2969.32	3029.63	3060.20	3019.20
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest (pro-rata)	4.31	409.00	413.13	407.60

4. The annual fixed charges for the instant asset were allowed under Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges vide order dated 17.12.2015 based on anticipated COD. The petitioner has submitted the actual COD, IDC on cash basis, Auditor Certificates and tariff



forms vide affidavit dated 16.5.2016 and the same has been considered for the purpose of computation of tariff.

5. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 29.4.2016. Respondent No. 4, LANCO Teesta Hydro Power Ltd. (hereinafter to be referred as "LTHPL"), has filed its reply vide affidavit dated 16.5.2016. The petitioner has submitted the rejoinder to the reply vide affidavit dated 23.5.2016.

6. LTHPL in its reply submitted that the 400 kV D/C Kishanganj-Patna transmission line alongwith associated bays is covered under Sikkim Part B transmission projects (Part of High Capacity Power Transmission Corridor). The HCPTC and its various phases were approved by the Commission vide order dated 31.5.2010 in Petition No. 233 of 2009. Subsequent to the regulatory approval, the petitioner entered into the BPTA with the respondent on 24.02.2010. The respondent has submitted that the instant the transmission asset and the associated system cannot be considered as ready and complete for the purpose of tariff determination and the transmission asset is only a part of the entire scheme. Unless the entire identified network under BPTA is not operationalized, declaring COD of any one of these assets in isolation cannot be the basis for undertaking tariff determination of the transmission lines. Referring



to the Hon`ble Supreme Court judgment dated 3.3.2016 in case of PGCIL vs Punjab State Power Corporation Ltd and Ors. The petitioner has submitted that the assets under the instant petition have be to complete in all respects including provisions of switchgear, metering and charging from both ends in order to be held to be operational.

7. The respondent has further submitted that the commissioning of LTHPL's generation project is delayed due to force majeure events such as, delay in obtaining forest diversion approval from MoEF, geological surprises including unprecedented rains/floods and massive earthquakes which are reasonably beyond the control of the generator. Due to aforementioned delays, the project suffered cost overruns and is in severe financial stress. In order to protect the interest of all stakeholders, project has gone under SDR (Strategic Debt Restructuring) Scheme issues by RBI. The revival plan is being worked out under the aegis of Ministry of Power and all stakeholders which include consortium of Lenders and Government of Sikkim. Further, LTHPL requested to consider these reasons while determining tariff for the subject transmission assets and should not be made applicable to LTHPL which is under severe financial stress. Under the BPTA, the petitioner as well as all Long Term Transmission customers including LTHPL has agreed to pay the applicable transmission charges from the scheduled commissioning date of generating unit. At the same time the BPTA provided for suspension of all activities during the time generation project was affected by force majeure. The petitioner was fully aware of the delay suffered by



the LTHPL's generation project and did not oppose the same at any given point of time. The petitioner by its conduct has waived off its right to raise any dispute in this regard. Therefore the petitioner is now estopped from claiming transmission tariff from LTHPL or making LTHPL liable for the payment of transmission tariff.

8. The petitioner has submitted rejoinder to the reply to LTHPL vide affidavit dated 23.5.2016. The petitioner has submitted that the 400 kV D/C Kishenganj-Patna line has been declared under commercial operation w.e.f. 28.3.2016. The LILO of Siliguri-Purnea 400 kV D/C at Kishenganj Sub-station , LILO of Siliguri-Dhalkola 220 kV D/C line at Kishenganj & Kishenganj Sub-station (ICT & Bus Reactor) were commissioned and declared under commercial operation w.e.f. 18.3.2016 (*these assets are covered under Sikkim Part A in Petition No. 258/TT/2015*). Thus, it may be seen that Power flow is taking flow through Kishenganj sub-station from 18.3.2016 onwards. Therefore, by commissioning of Kishenganj-Patna transmission line with associated bays at Kishenganj sub-station on 28.3.2016, the line along with bays is complete in all respects and power is flowing from Patna to Siliguri, Purnea & Dhalkola with the help of ICT-II at Kishenganj Sub-station. It is not a correct statement to say that unless the entire identified transmission network under BPTA is not operational and declaring COD of any one of the asset in isolation cannot be the basis for undertaking the tariff determination process. So from the day since declaration of its commercial operation, the 400 kV & 220 kV LILOs at Kishenganj Sub-station



have been wheeling power and so is the 400 kV D/C Kishenganj-Patna transmission line from 28.3.2016 onwards.

9. The petitioner has further submitted that instant asset is completed in all respects (Transmission line along with Switchgear of both ends and continuous power flow) because both Patna and Kishenganj are existing Sub-stations as on 28.3.2016 and hence it is not right to compare this case with Barh-Balia transmission line and Hon'ble Supreme Court of India judgment in the matter. The petitioner has submitted that the current petition is for determination of transmission tariff of transmission line built by the petitioner whereas the respondent has raised the issues of delay in generation which are not relevant to the current petition. The transmission charges of the subject transmission line shall be shared by various DICs as per the prevailing sharing regulations.

10. We have considered the submission of the respondent and the petitioner. We are of the view that as per the BPTA agreement between PGCIL and seven Long Term Transmission Customers, the scope of work of the scheme was divided into Part A and Part B. It is observed that the Kishenganj Sub-station is a pooling station is at a critical position providing a connecting point to the Part A and Part B of the scheme. The LILO of Siliguri-Purnea 400 kV D/C, LILO of Siliguri-Dhalkola 220 kV D/C line at Kishenganj Sub-station has already been done and power is flowing through the sub-station. The petitioner has further submitted that the instant asset i.e. 400 kV D/C (Quad) Kishenganj - Patna transmission line along with associated bays is critical for power evacuation



between north and north east region. In view of the above, we hold that since the assets is utilized, the tariff of subject assets should be included in the Yearly Transmission Charges (YTC) of transmission system and the petitioner should operationalize the LTA of the generating stations from the actual date of commissioning of the instant assets.

11. Having heard the petitioner and respondents, we proceed for determination of tariff based on the information placed on record by the petitioner and respondents.

Commercial Operation Date (“COD”)

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

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

xxx

(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:

xxx

xxx”

13. The petitioner, vide affidavit dated 16.5.2016, has submitted that the instant asset was put under commercial operation on 28.3.2016. The petitioner has also submitted the letter declaring COD and the trial run certificate dated



16.5.2016 issued by RLDC in support of claim of commercial operation. The petitioner has complied with the requirement of above said Regulation 4(3) of the 2014 Tariff Regulations for declaring COD and hence, the commercial operation date has been considered as 28.3.2016 for the purpose of tariff. The tariff is worked out for the instant assets from the COD to 31.3.2019.

Capital Cost

14. The petitioner has claimed the capital cost ₹99046.25 lakh for instant asset respectively as on actual COD. In the auditor certificate and tariff forms the petitioner has claimed the following cost:-

(₹ in lakh)

Approved apportioned cost	Capital Cost as on COD	Projected Additional Capital Expenditure				Estimated completion cost
		2015-16	2016-17	2017-18	2018-19	
82353.95	99046.25	0.00	2700.00	1350.00	450.00	103546.25

15. Regulation 9 (1), 9(2) and 10 (1) of the 2014 Tariff Regulations specify as follows:-

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

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

- a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- c) Increase in cost in contract packages as approved by the Commission;
- d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
- e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;



- f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
- g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
- h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.”

“10. Prudence Check of Capital Expenditure: The following principles shall be adopted for prudence check of capital cost of the existing or new projects:

(1) In case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Commission from time to time: Provided that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, incidental expenditure during construction for its reasonableness, use of efficient technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff.”

16. The petitioner, vide Auditor certificate dated 14.5.2016, has submitted that IEDC and IDC of ₹1474.08 and ₹14201.76 has been discharged upto COD and remaining has been discharged from COD to 31.3.2019. For the purpose of determination of tariff for the 2014-19 tariff period of the instant transmission assets, we have considered the capital cost as on COD after considering the IDC discharged on cash basis. The capital cost allowed is discussed in subsequent paragraphs.

Time over-run

17. As per the investment approval, the commissioning schedule of the project is 32 months from the date of investment approval. The investment approval was accorded on 17.3.2011 and hence the schedule date of commercial operation was 1.12.2013. The actual COD for the instant transmission asset was



28.3.2016. Hence, there is time over-run of 848 days in case of instant asset.

The petitioner has submitted following reasons for time overrun:-

Delay due to court cases & obstruction by villagers in transmission line:-

18. The landowners at location No. 191/2, 202/0, 200/1 to 201/3 obstructed foundation work at this location and the land owner at location No. 191/2 filed a Writ Petition 12108/2012 in Patna High court on 29.6.2012. The Hon'ble court vide order dated 25.9.2013 direct to put up the matter after decision in other matter under SLA No 14939/2011 filed by the petitioner, in the Supreme Court. The petitioner has submitted that during construction of 400 kV D/C Biharsharif - Sasaram line under DVC Supplementary Transmission System, a person namely Shri Ram Naresh Singh had objected to laying of transmission line in his field and filed Writ Petition no. 6993/2010 in Patna High Court praying for stay order which was awarded by the Court vide Order dated 17.5.2010 against this order the petitioner approached Hon'ble Supreme Court and filed the above said SLP No 14939/11. The Supreme Court vacated the stay and ordered to put up this matter with some other appeal vide order dated 20.10.2011. After the order dated 20.11.2011, local administration was approached to provide police protection for taking up the work of foundation at Location No 191/2. However the concerned magistrate was reluctant to exercise his powers stating that the order dated 25.9.2013 of Patna High Court is not clear whether stay as requested by the petitioner has been granted or not. Since local administration was reluctant to act due to lack of clarity as per the High Court order, the petitioner approached DM



Patna for providing necessary direction. DM, Patna preferred to obtain legal opinion on the matter from Secretary (Law) Government of Bihar. The matter was referred by DM Patna to Secretary (Energy) Government of Bihar. Through different channels of Energy Department and BSPHCL, the matter could be referred to Secretary (Law) Government of Bihar whose opinion that there is no legal obstruction in getting the work completed at Location No 191/2 and the same was conveyed on 5.6.2015 after obtaining this order. The petitioner followed up local administration for police protection. The work was executed amidst police protection and stringing could be completed in the section 191/0 to 192/0 in July 2015. The erection work of these location was affected from June 2012 to June 2015 i.e. for 3 years.

Pile Foundation in river Ganga

19. The work of pile foundation was badly affected due to poor law and order situation prevailing in the area. Even the commencement of pile foundation work was delayed due to obstructions created by the villagers of Mahendrapur of Begusarai district in February, 2012. After intervention of DM Begusarai, the work could be started after 8 months i.e in October 2012. Again the progress of work of pile foundation was marred due to local law and order issues. Local administration and Police Authorities were approached a number of times to help in sorting out the issues vide letters dated 15.5.2013, 25.5.2013. However at Location number 128F/0 which is mid-stream location of river Ganga, was most severely affected due to stoppage of movement of man and construction



material. The approach to the location was through agricultural field for 8-9 km which is a Ganga river basin area in February/ March 2013. Being remote and difficult area, there is very poor law and order situation in this area. The crew of the barge mobilized for foundation work at this location was severely beaten by local criminals and their personal belongings like mobile, money, clothes etc were taken away. The crew members deserted the site due to fear. After a lot of persuasion through the letter dated 27.3.2014 and 30.1.2015, deployment of 10 nos. of armed police force for the round the clock security. The work of tower erection and stringing is to be taken up amidst full blown monsoon with extensive mobilization of 2 nos. of barges and 4 nos. of boats.

20. The petitioner vide affidavit dated 23.5.2015, has submitted the additional delay reasons stating that after erection of four legs, there was sudden rise in water level of Ganga River which forced the work to be stopped from 2.8.2015. All man & materials were shifted from the bank of river to a safe location and only after the reduction in water level of the river, the work was resumed from first week of October 2015, but due to bad law & order situation in the area, the transportation of tower parts was stopped. The District administration was not able to provide police force due to State Assembly Election in Bihar in the month of October 2015 in Begusarai Distt. As a result, the work was suspended till 29.10.2015. Further, the vehicle movement of the petitioner's officials were also affected due to state assembly election during the month of October 2015. The petitioner further submitted a letter written to Principal Secretary, Home Government of Bihar dated 9.10.15 for requesting to provide the police protection



to resume the work. After rigorous follow up with administration and signing of the an agreement with District Commandant of Home guard Begusarai on 30.10.2015 for providing security forces for the period from 30.10.15 to 13.12.15, the work could be resumed on 30.10.2015 at Location no.: 128F/0. The tower was erected and stringing of the adjoining sections was completed by 25.12.2015. The petitioner has submitted all the relevant letters, documents in this respect.

Change in the scope of kishanganj Sub-station:

21. Around 3 years to finalize the location of Kishanganj GIS Sub-station which was discussed in various Standing Committees on Power System Planning of ER & ERPC meetings. The chronological details are as follows:-

- a) The Transmission System for transfer of power from Generation Projects in Sikkim to NR/WR Part-A in Eastern Region was approved in SCM on power System Planning of ER dated 14.9.2009. Subsequently the investment approval was accorded by the Board of Directors for execution of 2x315MVA 400/220/33 kV Kishanganj Sub-station along with LILO lines.
- b) In the SCM on Power System Planning of ER dated 28.12.2010, it was agreed to change the location of the sub-station from Kishanganj, Bihar to Karandighi, West Bengal, as a part of the transmission scheme for evacuation and transfer of power from generation projects in Sikkim. Even after persistent efforts and constant persuasion by the petitioner and local administration of West Bengal Government, the



land for sub-station could not be acquired near Karandighi in West Bengal. The matter was taken up by the petitioner at higher level of West Bengal Government. Further the matter was also discussed in various ERPC meetings where the time taken in acquisition of land was discussed and help of state government was sought. However no development on this front was observed. CEA vide, letter dated 13.9.2012, considering fair possibility of getting land in Kishanganj area in Bihar, had agreed in principle for locating the Sub-station as GIS Sub-station at Kishanganj in Bihar. It was subsequently discussed and ratified in the SCM held on 5.1.2013 and also in TCC / ERPC held on 26/27 April, 2013.

- c) After CEA concurrence, vide letter dated 13.9.2012, to locate the new sub-station at Kishanganj in Bihar, suitable land was identified in consultation with DM of Kishanganj and land acquisition process was started by the petitioner for approximately 28 acres near village Kutti and Barmasia in Kishanganj District of Bihar. With expeditious follow up with district administration, the possession of the land was obtained in September 2013.

22. We have considered the submissions of the petitioner. With regards the first issue, in delay due to court cases & obstruction by villagers in transmission line, it is observed that local residents of village Mahadipur, Patna had written letter to EMC Pvt. Ltd. (contractor of PGCIL) for illegal excavation on 27.6.2012 at their land and the petitioner had sent a letter dated 4.8.2012 to the local



residents stating the reasons for excavation. However, due to further obstruction by the locals, the petitioner had written letters to SDM, Patna dated 6.6.2013 and 22.8.2013 with name of the persons responsible for obstruction of the work. The petitioner had again submitted the letters dated 10.1.2014 and 21.2.2014 to DM, Patna with regard to obstruction of work with the list of persons responsible for obstruction. The petitioner also requested to Police in charge, Gaurichak, Patna vide letter dated 7.5.2014 to take action on the locals for obstruction of work. The petitioner also submitted letter of SDM, Masaurhi informing that no work could be carried out till disposal of the case filed by one of the land owner at Patna High Court. The petitioner had further, requested the Principal Secretary, Home Department, Government of Bihar vide letter dated 7.1.2015 to take action on land owner as he was demanding to change the route of the line. In response, the Principal Secretary, Home Department, Government of Bihar directed DSP, Patna vide letter dated 7.1.2015 to provide police protection to the petitioner. The work was started only after the letter dated 5.6.2015 from Energy Department, Government of Bihar directing to start work at the specified location. It is evident that the petitioner made all efforts from local authority to the Principal Secretary, Govt. of Bihar in the matter to resolve the issues. However, due to obstruction by the locals, it became difficult to start the work. Hence the delay with regard to ROW issue is condoned.

23. Second issue is rise in the level of river Ganga and local hindrances for pile foundation works. The petitioner has submitted that Simplex Projects Ltd.



(Contractor) informed the petitioner about the hindrances at river Ganga by the locals. The petitioner has also submitted letters dated 15.2.2012, 4.4.2012, 9.10.2012, 25.5.2013 and 27.3.2014 to DM, Begusarai with regard to obstruction in construction work near village Mahendrapur. The petitioner had also requested SP, Begusarai vide letters dated 15.5.2013 and 30.1.2015 to provide police protection. The petitioner has further submitted the news paper cutting dated 12.5.2013 in support of his claim of the rise in water level of river Ganga. The petitioner had submitted letter to DM, Begusarai dated 26.10.2015, regarding extension in police protection (round the clock) at construction site. As per the petitioner's submissions, it is evident that due to assembly elections in state, the work was affected and could only start from 30.10.2015. We are of the view that the petitioner made all the necessary efforts, but due to local obstructions, pile foundation work was not started before October, 2015. Hence, reason for pile foundation is not attributable to the petitioner and condoned.

24. With regards to the third issue of change in the scope of kishanganj Sub-station due to delay in finalization of location of sub-station. We have considered the petitioner's submission. The petitioner had submitted a letter to CEA on 31.8.2012 to change location of Sub-station from Karandighi in West Bengal to Kishanganj (Bihar) and Sub-station to be changed to GIS from AIS. CEA permitted in-principle approval for establishment of 400 kV GIS at Kishanganj in Bihar instead of AIS at Karandighi in West Bengal. Further, the petitioner has also submitted a letter written to DM, Kishanganj for land acquisition dated 15.10.2012. The petitioner has further submitted reply of letter from Collector,



Kishanganj dated 5.12.2012 with regard to compensation amount to the petitioner, letter from Revenue Department, Government of Bihar dated 24.1.2013, letter dated 12.2.2013 from CEA regarding summary record of discussions of the 1st standing committee meeting on power system planning in Eastern Region held on 5.1.2013 at PGCIL, Gurgaon and letter from Additional Collector, Kishanganj dated 13.7.2013 regarding submission of compensation amount. It is evident from the letter dated 13.7.2013 regarding demand of compensation amount from Additional Collector, Kishanganj for land acquisition that issue was resolved July, 2013. As per documents placed on record by the petitioner, the issue of change in scope was resolved in July, 2013. We are of the view that change in scope was due to unforeseen reasons and is not attributable to the petitioner.

25. It is observed that the petitioner has made all efforts to resolve the issues and after all the issues were resolved, the work could only start from 30.10.2015 due to ROW problem. It is noted that all the issues discussed above, were beyond the control of the petitioner and the petitioner made all the necessary efforts to resolve them, however the same were resolved till 30.10.2015 only. In view of above, we are condoning the delay of 848 days which is not attributable to the petitioner.



IDC and IEDC

26. The petitioner vide Auditor's certificate dated 16.5.2016 has submitted IDC and IEDC up to COD on accrual basis is ₹14201.76 lakh for instant asset as below:

(₹ in lakh)		
Asset	IEDC up to COD	IDC up to COD
Asset	1474.08	14201.76

27. The petitioner has submitted that entire IEDC has been discharged up to COD. The IDC discharged on cash basis is as below:

(₹ in lakh)			
Asset	IDC discharged up to COD	IDC discharged during 2015-16	IDC discharged during 2016-17
Asset 1	12399.54	407.77	1394.44

28. For determination of tariff for the 2014-19 tariff period for the instant transmission assets we have considered the capital cost as on COD after adjusting the IDC and IEDC discharged on cash basis.

29. Based on the above submissions of the petitioner, IDC is being capitalised up to COD for instant assets and IDC discharged during 2015-16 and 2016-17 has been added to the additional capital expenditure during 2015-16 and 2016.

30. Capital Cost after adjustment of IDC is as follows:-

(₹ in lakh)					
Asset	Capital Cost as on COD after adjustment of IDC	Additional Capital Expenditure after adjustment of IDC			
		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Asset	97244.03	407.77	4,094.44	1,350.00	450.00



Cost over-run

31. The petitioner, vide Auditor's certificate dated 12.5.2016 has submitted that capital cost as on COD is ₹99046.25 lakh and total estimated completion cost as on 31.3.2019 is ₹103546.25 lakh against apportioned approved cost of ₹82353.95 lakh. Hence there is cost overrun. The petitioner has submitted following reasons for cost overrun:-

- a) The expenditure towards crop tree, PTCC, land and forest compensation resultant in as increase of around ₹2331 lakh in cost of project due to actual compensation paid on account of Right of Way (RoW) issues, based on the rates and assessment of District Administration/Revenue authorities.
- b) The FR cost of individual items/materials is exclusive of taxes and duties which have been indicated under a separate head while the cost of the items as expenditure cost is inclusive of taxes and duties. Actual expenditure of ₹2471 lakh is incurred against the supply and erection of materials.
- c) The cost variation is mainly attributed to change in the scope of the project as per original configuration i.e. a) Construction of 2X500 MVA GIS Sub-station in place of AIS Sub-station at Kishanganj. The cost of GIS Sub-station is more than a similar size of AIS Sub-station due to higher technology cost and costly components that's the approx. ₹2300 lakh is increased due to change in layout or scope.
- d) Cost variation with respect to FERV (Foreign Exchange Rate variation) is about ₹ 3081 lakh, which was not envisaged earlier as the bays were to be



AIS. However, due to change in scope of substation work from AIS substation to GIS Substation which was procured through Global tendering.

e) It may be mentioned that the type of various towers and foundation in the FR were estimated on the basis of walk-over/preliminary survey. However, during execution of the project, there was reduction in line length but the numbers of tension towers were increased resulting in increase of quantity. However, the overall cost has reduced due to award cost received in competitive bidding compared to initial estimates (FR cost).

f) For procurement, open competitive bidding route was followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services was obtained and contracts were awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.

32. We have considered the submissions of the petitioner. There is cost overrun as on COD itself w.r.t. the approved apportioned cost. Even after considering the time overrun, deducting IDC and IEDC for the period not condoned and considering IDC discharged on COD as on cash basis, the capital cost as on COD i.e. ₹96047.61 lakh exceeds the apportioned approved cost for the asset. The petitioner has not submitted RCE for the same. Hence capital cost as on COD has been restricted to apportioned approved cost which will be reviewed at the time of truing up on submission of RCE by the petitioner. Therefore the



capital cost as on COD considered for the purpose of tariff calculation is ₹82353.95 lakh.

Initial Spares

33. The petitioner has claimed initial spares of ₹784.00 lakh and ₹219.76 lakh, pertaining to Transmission line and Sub-station (GIS Sub-station) on the cut-off date of 31.3.2018 vide Auditor's certificate dated 12.5.2016.

34. Regulation 13 of the 2014 Tariff Regulations provide for ceiling norms for capitalization of initial spares. The ceiling limit of GIS Sub-station is 5.00%, transmission line it is 1.00% of the Plant and Machinery Cost of the element. Accordingly, the initial spares are allowed as specified in the 2014 Tariff Regulations and it is as under:-

(₹ in lakh)

Particulars	Formula	Sub-station (GIS)	Transmission Line
Capital cost claimed as on cut-off date after deducting IDC,IEDC and civil works	(a)	5494.03	78425.68
Capital cost as on cut-off date after deducting IDC,IEDC and civil works (after deducting excess IDC/restricting upto RCE)	(b)	3393.86	63265.49
Initial spares as per Auditor's Certificate	(c)	219.76	784.00
Proportionate initial spares claimed after deducting DC/ restricting upto RCE	(d)= (c)/ (a)* (b)	135.75	632.45
Ceiling limit as per Regulation 13 of 2014 regulations	(e)	5.00%	1.00%
Initial spares worked out as per norms	(f)= ((b-d) *e)/ (100% -e)	171.48	632.66
Excess initial spares claimed	(g)= (d)- (f)	0.00	0.00



35. The initial spares claimed by the petitioner for instant Asset is within the limits prescribed under Regulation 13 of the Tariff Regulation, 2014.

Additional Capital Expenditure

36. The petitioner has proposed additional capitalization of ₹2700.00 lakh, ₹1350.00 and ₹450.00 for the year 2016-17, 2017-18 and 2018-19 towards balance and retention payment under Regulation 14(1) (i) of 2014 Tariff Regulations.

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

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

Provided that the cut-off date may be extended by the Commission if it is proved on the basis of documentary evidence that the capitalisation could not be made within the cut-off date for reasons beyond the control of the project developer;”

38. The cut-off date of the transmission asset is 31.3.2018. It is observed that total estimated completion cost of ₹103546.25 lakh. However, since, the capital cost as on COD has been restricted to the approved apportioned cost, the additional capital expenditure during 2014-19 shall not be considered for the purposed of tariff calculations. Accordingly, additional capitalization for the subject asset is allowed under Regulation 14(1)(i) of 2014 Tariff Regulations.

(in ₹ lakh)				
Approved cost for the	Particulars	Capital Cost as on COD	Additional Capital expenditure	Estimated completion cost



project			2016-17	2017-18	2018-19	
82353.95	Claimed by the petitioner	99046.25	2700.00	1350.00	450.00	103546.25
	Allowed in this Order	82353.95	0.00	0.00	0.00	82353.95

Debt: Equity Ratio

39. Regulation 19 (1) of the 2014 Tariff Regulations specifies as under:-

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

Provided that:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- 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.”

40. The petitioner has considered debt:equity ratio as 70:30 as on COD and debt:equity ratio as 70:30 for additional capitalization during 2015-16, 2016-17, 2017-18 and 2018-19. Accordingly, we have considered the same for the purpose of tariff computation for the 2014-19 tariff period is as follows:-

(₹ in lakh)

Particulars	As on COD		Additional capitalization during 2014-19		As on 31.3.2019	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	57647.76	70.00	0.00	0.00	57647.76	70.00
Equity	24706.18	30.00	0.00	0.00	24706.18	30.00
Total	82353.95	100.00	0.00	0.00	82353.95	100.00

Interest on Loan (“IOL”)



41. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations provides as under:-

“(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.”

42. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. Further, the petitioner has prayed to allow it 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. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The petitioner’s prayer to bill and adjust the impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period from the respondents will be considered at the time of truing up. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out as follows:-

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross loan opening	57647.76	57647.76	57647.76	57647.76
Cumulative Repayment upto previous year	0.00	47.53	4396.36	8745.19
Net Loan-Opening	57647.76	57600.24	53251.41	48902.58



Additions during the year	0.00	0.00	0.00	0.00
Repayment during the year	47.53	4348.83	4348.83	4348.83
Net Loan-Closing	57600.24	53251.41	48902.58	44553.75
Average Loan	57624.00	55425.82	51076.99	46728.16
Rate of Interest (%)	7.4559%	7.6582%	7.7966%	7.7681%
Interest on Loan	46.96	4244.62	3982.27	3629.89

Return on Equity (“ROE”)

43. Clause (1) & (2) of Regulation 24 and Clause (2) of Regulation 25(2) 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:

xxx”

“25. Tax on Return on Equity:

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

Rate of pre-tax return on equity = Base rate / (1-t)

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

44. The petitioner has claimed ROE at the rate of 19.705% after grossing up the ROE of 15.5% with MAT rate as per the above said Regulation. The petitioner has further submitted that the grossed up ROE is subject to truing up



based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 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.

45. 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.

46. We have considered the submissions made by the petitioner. 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. The petitioner has submitted that MAT rate of 21.342% is applicable to the petitioner's company during 2015-16. Accordingly, the MAT rate applicable during 2015-16 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. The ROE allowed for the instant transmission asset is given below:-



Particulars	2015-16	2016-17	2017-18	2018-19
	(pro-rata)			
Opening Equity	24706.18	24706.18	24706.18	24706.18
Additional Capitalization	0.00	0.00	0.00	0.00
Closing Equity	24706.18	24706.18	24706.18	24706.18
Average Equity	24706.18	24706.18	24706.18	24706.18
Return on Equity (Base Rate) (%)	15.500%	15.500%	15.500%	15.500%
Tax rate for the year (%)	21.342%	21.342%	21.342%	21.342%
Rate of Return on Equity (Pre Tax) (%)	19.705%	19.705%	19.705%	19.705%
Return on Equity	53.21	4,868.47	4,868.47	4,868.47

(₹ in lakh)

Depreciation

47. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

(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"

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

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

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



48. Clause (67) of Regulation 3 of the 2014 Tariff Regulations defines useful life as follows:-

“(67) ‘Useful life’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:

- (a) Coal/Lignite based thermal generating station 25 years
- (b) Gas/Liquid fuel based thermal generating station 25 years
- (c) AC and DC sub-station 25 years
- (d) Gas Insulated Substation (GIS) 25 years
- (d) Hydro generating station including pumped Storage hydro generating stations 35 years
- (e) Transmission line (including HVAC & HVDC) 35 years
- (f) Communication system 15 years”

49. The weighted average useful life of the asset has been considered as 35 years in accordance with the above regulation. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)				
Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Gross block	82353.95	82353.95	82353.95	82353.95
Additional Capitalization	0.00	0.00	0.00	0.00
Closing Gross block	82353.95	82353.95	82353.95	82353.95
Average Gross block	82353.95	82353.95	82353.95	82353.95
Rate of Depreciation (%)	5.28%	5.28%	5.28%	5.28%
Depreciable Value	74118.55	74118.55	74118.55	74118.55
Elapsed Life of the assets at beginning of the year	35	34	33	32
Weighted Balance Useful life of the assets	0	1	2	3
Remaining Depreciable Value	74118.55	74071.03	69722.20	65373.37
Depreciation during the year	47.53	4,348.83	4,348.83	4,348.83
Depreciation upto previous year	0.00	47.53	4396.36	8745.19
Cumulative depreciation	47.53	4396.36	8745.19	13094.01

Operation & Maintenance Expenses (“O&M Expenses”)

50. The petitioner has submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike



which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the 2014-19 tariff period. The petitioner has also submitted that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

51. We have considered the submissions of the petitioner. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission assets as per the prevailing norms.

52. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specify the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant assets are as follows:-

Particulars	(in ₹ lakh)			
	2015-16 (Pro Rata)	2016-17	2017-18	2018-19
400 kV GIS Bays :				
No. of Bays	4	4	4	4
Norms (₹ lakh/Bay)	0.58	55.02	56.84	58.73
Double Circuit (Bundled conductor with four or more sub-conductors)				
Length (KM)	347.00	347.00	347.00	347.00
Norms (₹ Lakhs/KM))	0.01	1.133	1.171	1.21
Total O&M Expenses	6.49	613.23	633.70	654.79

Interest on Working Capital ("IWC")



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

(i) Receivables

As per Regulation 28(1) (c) (i) of the 2014 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Maintenance Spares

Regulation 28 (1) (c) (ii) of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2014. The petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

(iii) O & M Expenses

Regulation 28 (1) (c) (iii) of the 2014 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M Expenses for the instant asset and value of O & M Expenses has accordingly been worked out by considering 1 month O&M Expenses.



(iv) Rate of interest on working capital

Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the 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. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).

54. The interest on working capital allowed is shown in the table below:-

Particulars	(₹ in lakh)			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
O & M expenses	49.45	51.08	52.79	54.54
Maintenance Spares	89.05	91.98	95.05	98.22
Receivables	29.48	2403.15	2362.02	2305.64
Total	167.98	2546.21	2509.86	2458.41
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest on Working Capital	22.68	343.74	338.83	331.88



Annual Transmission Charges

55. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

	(₹ in lakh)			
Particulars	2015-16	2016-17	2017-18	2018-19
Depreciation				
Opening Gross Block	82353.95	82353.95	82353.95	82353.95
Additional Capitalisation	0.00	0.00	0.00	0.00
Closing Gross Block	82353.95	82353.95	82353.95	82353.95
Average Gross Block	82353.95	82353.95	82353.95	82353.95
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%
Depreciable Value	74118.55	74118.55	74118.55	74118.55
Balance Useful life of the asset	35	34	33	32
Elapsed Life	0	1	2	3
Remaining Depreciable Value	74118.55	74071.03	69722.20	65373.37
Depreciation	47.53	4348.83	4348.83	4348.83
Cumulative depreciation (incl. of AAD)	47.53	4396.36	8745.19	13094.01
Interest on Loan				
Gross Normative Loan	57647.76	57647.76	57647.76	57647.76
Cumulative Repayment upto Previous Year	0.00	47.53	4396.36	8745.19
Net Loan-Opening	57647.76	57600.24	53251.41	48902.58
Additions	0.00	0.00	0.00	0.00
Repayment during the year	47.53	4348.83	4348.83	4348.83
Net Loan-Closing	57600.24	53251.41	48902.58	44553.75
Average Loan	57624.00	55425.82	51076.99	46728.16
Weighted Average Rate of Interest on Loan	7.4559%	7.6582%	7.7966%	7.7681%
Interest	46.96	4244.62	3982.27	3629.89
Return on Equity				
Opening Equity	24706.18	24706.18	24706.18	24706.18
Additions	0.00	0.00	0.00	0.00
Closing Equity	24706.18	24706.18	24706.18	24706.18
Average Equity	24706.18	24706.18	24706.18	24706.18
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year	21.342%	21.342%	21.342%	21.342%
Rate of Return on Equity	19.705%	19.705%	19.705%	19.705%
Return on Equity	4868.47	4868.47	4868.47	4868.47
Interest on Working Capital				



Particulars	2015-16	2016-17	2017-18	2018-19
O & M expenses	49.45	51.08	52.79	54.54
Maintenance Spares	89.05	91.98	95.05	98.22
Receivables	29.48	2403.15	2362.02	2305.64
Total	167.98	2546.21	2509.86	2458.41
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%
Interest on working capital	22.68	343.74	338.83	331.88
Annual Transmission Charges				
Depreciation	47.53	4348.83	4348.83	4348.83
Interest on Loan	46.96	4244.62	3982.27	3629.89
Return on Equity	53.21	4868.47	4868.47	4868.47
Interest on Working Capital	22.68	343.74	338.83	331.88
O & M Expenses	6.49	613.23	633.70	654.79
Total	176.86	14418.88	14172.09	13833.86

Filing Fee and Publication Expenses

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

Licence Fee and RLDC Fees and Charges

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



Service Tax

58. The petitioner has sought to recover service tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer of service tax is premature.

Sharing of Transmission Charges

59. The billing, collection of the transmission charges of the instant assets shall be shared by the long term customers/beneficiaries in accordance to the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 43 of the 2014 Tariff Regulations.

60. This order disposes of Petition No. 230/TT/2015.

(Dr. M. K. Iyer)
Member

(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2014-19**

Particulars	Interest Rate (%)	Loan deployed as on COD	(in ₹ lakh)	
			Additions during the tariff period	Total
BOND XXXIV-DOCO Loan-	8.84	3557.00	0.00	3557.00
BOND XXXV DOCO Loan1-	9.64	59.00	0.00	59.00
BOND XXXVII DOCO Loan2	9.35	612.00	0.00	612.00
BOND XXXVII DOCO Loan3	9.25	3450.00	0.00	3450.00
BOND XXXIX DOCO Loan4	9.40	4338.00	0.00	4338.00
SBI (21.3.2012)- DOCO Loan5	9.55	2500.00	0.00	2500.00
BOND XL DOCO Loan6	9.30	6000.00	0.00	6000.00
BOND XLII - DOCO Loan7	8.80	1628.93	0.00	1628.93
IFC (IFC-A Loan) (31419-00) - DOCO Loan 18-67.28	3.44	1995.52	0.00	1995.52
IFC (IFC-B Loan) (31419-00) - DOCO Loan 19-67.28	2.59	7294.50	0.00	7294.50
IFC (ICFF Loan) (31419-02)- DOCO Loan 20-67.28	3.44	2463.12	0.00	2463.12
FC Bond (17.1.2013)-DOCO Loan - 17-67.28	4.10	8500.83	0.00	8500.83
BOND XLIII DOCO Loan8	7.93	5200.00	0.00	5200.00
BOND XLIV DOCO Loan9	8.70	9500.00	0.00	9500.00
SBI (2014-15)- ADDCAP FOR 2015-16 add cap loan	9.55	0.00	285.44	285.44
SBI (2014-15) - DOCO Loan 13	9.55	2000.00	0.00	2000.00
SBI (2014-15) - DOCO Loan 16	9.55	2650.45	0.00	2650.45
BOND XLVII - DOCO Loan 10	8.93	834.32	0.00	834.32
BOND XLIX- DOCO Loan11	8.15	358.28	0.00	358.28
BOND L DOCO Loan 12	8.40	1564.41	0.00	1564.41
BOND LI DOCO Loan 14	8.40	3564.46	0.00	3564.46
		68070.82	285.44	68356.26



**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
FOR TARIFF PERIOD 2014-19**

(₹in lakh)

Particulars	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	68070.82	68356.26	68356.26	68356.26
Cumulative Repayments of Loans upto Previous Year	2708.87	4532.49	9536.65	11772.75
Net Loans Opening	65361.95	63823.77	58819.61	56583.51
Add: Draw(s) during the Year	285.44	0	0	0
Less: Repayments of Loan during the year	1823.62	5004.16	2236.1	5472.3
Net Closing Loan	63823.77	58819.61	56583.51	51111.21
Average Net Loan	64592.86	61321.69	57701.56	53847.36
Rate of Interest on Loan (%)	0.074559	0.076582	0.077966	0.077681
Interest on Loan	4815.996	4696.132	4498.759	4182.913

