# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

### Petition No. 6/TT/2018

#### Coram:

Shri P.K. Pujari, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Order: 22.06.2018

#### In the matter of:

Determination of transmission tariff for 400/220 kV New Wanpoh Sub-station: (+) 300 MVAR / (-) 200 MVAR SVC under "Static VAR Compensator (SVCs) in Northern Region" under Regulation86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2014.

#### And in the matter of:

Power Grid Corporation of India Ltd. 'SAUDAMINI', Plot No-2, Sector-29, Gurgaon -122001(Haryana)

....Petitioner

#### Vs

- Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur-302005
- Ajmer Vidyut Vitran Nigam Limited
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur
- Jaipur Vidyut Vitran Nigam Limited
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur.
- Jodhpur Vidyut Vitran Nigam Limited
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur
- 5. Himachal Pradesh State ElectricityBoard



Vidyut Bhawan, Kumar House Complex Building II, Shimla-171004

- 6. Punjab State Electricity Board Thermal Shed TIA,
  Near 22 Phatak
  Patiala-147001
- 7. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6 Panchkula (Haryana) 134109
- 8. Power Development Deptt. Govt. of Jammu & Kashmir, Mini Secretariat, Jammu
- Uttar Pradesh Power Corporation Ltd.
   (Formerly Uttar Pradesh State Electricity Board)
   ShaktiBhawan, 14, Ashok Marg
   Lucknow 226001
- Delhi TranscoLtd.
   Shakti Sadan, Kotla Road,
   NewDelhi-110002
- BSES Yamuna Power Ltd.
   BSES Bhawan, Nehru Place, NewDelhi.
- 12. BSES Rajdhani Power Ltd. BSES Bhawan, Nehru Place, NewDelhi
- 13. North Delhi PowerLtd.
  Power Trading & Load Dispatch Group
  Cennet Building,
  Adjacent to 66/11 kV, Pitampura-3,
  Grid Building, Near PP Jewellers,
  Pitampura, NewDelhi-110034
- 14. Chandigarh Administration Sector -9, Chandigarh.
- Uttarakhand Power Corporation Ltd.
   Urja Bhawan, Kanwali Road,
   Dehradun.
- North Central Railway, Allahabad.



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

NewDelhi-110002

....Respondents

For Petitioner: Shri Vivek Kumar Singh, PGCIL

Shri S. S. Raju, PGCIL

Shri Rakesh Prasad, PGCIL Shri S.K. Venketsan, PGCIL

Shri V. P. Rastogi, PGCIL

For Respondent: Shri R. B. Sharma, Advocate, BRPL

<u>ORDER</u>

The present petition has been filed by Power Grid Corporation of India Ltd. ("the

petitioner") for determination of tariff for "400/220 kV New Wanpoh Sub-station: (+) 300

MVAR/(-) 200 MVAR SVC"(hereinafter referred to as "asset") under "Static VAR

Compensator (SVCs) in Northern Region" (hereinafter referred to as "Transmission

Project") under Central Electricity Regulatory Commission (Terms and Conditions of

Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the

period 2014-19.

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 Northern Region.

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

The provision of SVC was approved in the 30<sup>th</sup> Standing Committee Meeting

held on 19.12.2011. The investment approval for the project was accorded by

Board of Directors of the petitioner company vide memorandum dated 16.5.2014 with an estimated cost of ₹82998 lakh including an IDC of ₹4527 lakh, based on price level of February, 2014. As per the investment approval, the transmission assets were scheduled to be commissioned within 27 months from the date of investment approval, i.e. by 15.8.2016.

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

		(₹ in lakh)
Particulars	2017-18	2018-19
	(pro-rata)	
Depreciation	189.89	906.24
Interest on Loan	205.58	937.18
Return on Equity	211.57	1,009.73
Interest on Working Capital	14.12	65.79
O&M Expenses	16.99	68.71
Total	638.15	2987.65

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

		(₹ in lakh)
Particulars	2017-18 (pro-rata)	2018-19
O & M Expenses	5.54	5.73
Maintenance Spares	9.98	10.31
Receivables	416.47	497.94
Total	432.00	513.97
Rate of Interest (%)	12.80%	12.80%
Interest	55.30	65.79
Pro rata interest on working capital	14.12	65.79

4. The petitioner has served the petition on 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. BSES

Rajdhani Power Limited (hereinafter called as "BRPL"), Respondent No. 12 has filed reply vide affidavit dated 25.9.2017 and Uttar Pradesh Power Corporation Ltd. (herein after called as "UPPCL"), Respondent No. 9 has filed reply vide affidavit dated 1.12.2017. UPPCL and BRPL have raised issue of time over-run, cost variation, initial spares, effective tax rate, reimbursement of expenditure towards filing fee, license fee etc. The petitioner has filed rejoinder to the reply vide affidavits dated 3.5.2018 and 12.4.2018. The hearing in this matter was held on 8.5.2018. The objections raised by the respondent and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

### Commercial Operation Date ("COD")

- 5. 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:"
- 6. The petitioner has submitted in the petition that instant asset was anticipated to be commissioned on 1.11.2017. Later, vide affidavit dated 26.2.2018 it was submitted that the date of actual commercial operation was 30.12.2017. The petitioner has submitted revised forms vide affidavit dated 5.3.2018. The petitioner vide affidavits dated 26.2.2018 and 28.3.2018 has submitted the COD letter, RLDC trial run certificate in accordance with Regulation 5(2) of the 2014 Tariff Regulations, CEA clearance certificate and CMD letter certifying charging of instant asset. Accordingly, the date of commercial operation

for instant asset is considered as 30.12.2017 and the tariff for the instant asset is worked out from 30.12.2017 (COD) to 31.3.2019.

### **Capital Cost**

- 7. 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 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:"
- 8. The petitioner has claimed the capital cost of ₹11692.03 lakh as on COD. The details of approved apportioned cost, capital cost on COD, additional capital expenditure projected to be incurred and estimated completion cost claimed by the petitioner are



### given below:-

(₹ in lakh)

Apportioned approved	Capital			•	Total estimated capital cost as on
cost as per FR	cost as on COD	2017-18	2018-19	Total	31.3.2019
26507.55	11692.03	5139.48	835.77	5975.25	17667.28

### Time over-run

- 9. As per the investment approval, the commissioning schedule of the project was 27 months from the date of investment approval. The investment approval was accorded on 16.5.2014 and hence the schedule date of commercial operation of the instant assets was 15.8.2016. COD of the asset has been approved at Para 6 as 30.12.2017. Hence, there is time over-run of 16 months 16 days in commissioning of the instant assets.
- 10. The petitioner vide affidavits dated 28.3.2018 and 11.6.2018 has submitted detailed justification for time over-run along with CPM/PERT chart. The reasons submitted by the petitioner for time over-run are as follows:
  - a) The subject asset commissioned at New Wanpoh Sub-station under Anantnag district which is a remote location in Kashmir Valley, which experiences unprecedented rainfall/snow fall in the valley that completely disrupted the work including on and off militant activity, disturbances. Considering the threat perception to non-locals in such hostile conditions, the work force had to be withdrawn/de-mobilized from the site and again mobilized after return of normalcy in the valley. The frequent de-mobilization/mobilization of work force had also affected the progress of work considerably. Such situation was experienced intermittently throughout the year and sometimes it was so intense that the work was stopped

completely. The petitioner has submitted the chronology of events.

- b) After the attack on pilgrims near Anantnag on July, 2017 which is just few kilometers away from New Wanpoh Sub-station, strict restrictions on movements of transport and locals was imposed for around 3 months which severely hampered the progress of work. In October, 2017, the restrictions like curfew was imposed further delaying the work.
- c) The frequent encounters between militants and armed forces and the search operations by security forces affected the work. Several times, site engineers with construction gangs were struck in these search operations and construction work was strictly prohibited at the construction sites. Labor arrangement and shifting of machinery at different sites was affected several times.
- d) The work also got hampered due to frequent rainfall, snowfall and floods leading to marshy land and transportation problem.
- 11. The petitioner has submitted that it faced lot of problems in executing the work at New Wanpoh area during May, 2015 to July, 2017 (26 months) due to recurrent militant activity in nearby area. The petitioner has further submitted that in the month of October, 2015, SIEMENS reported about agitation by some people before the sub-station leading to de-mobilization of the workers in October, 2017. The petitioner requested Ministry of Home Affairs for the deployment of CISF at New Wanpoh Sub-station for its safety and security. Due to the militant activity, the petitioner continuously faced law and order problem which led to delay in commissioning of the instant asset.
- 12. BRPL has submitted that the petitioner is well aware of the problems in executing

projects and taking them into consideration has fixed a time schedule of 27 months. The time over-run is due to slackness in project management for which the petitioner is solely responsible and hence time over-run may not be condoned. UPPCL has submitted that the merits of the reasons of time over-run needs to be considered. In response, the petitioner has submitted that the time over-run is not attributable to the petitioner and requested to condone the time over-run.

- 13. We have considered the submissions of the petitioner and respondents. The instant asset was put into commercial operation on 30.12.2017 and there is time over-run of 16 months 16 days. It is observed that the petitioner had awarded the Letter of Award as per the planned schedule. The petitioner faced various problems due to law and order, militant activity, floods and harsh weather conditions. These problems had cascading effect on the subsequent activities like civil works, erection and final testing leading to delay in COD. We are of the view that the time over-run due to the factor faced by the petitioner is beyond the control of the petitioner. Therefore, the time over-run of 16 months 16 days in the instant case is condoned. Accordingly, IDC and IEDC for 16 months 16 days of time over-run are allowed to be capitalized.
- 14. The petitioner vide affidavit dated 20.2.2017, has submitted the IDC and IEDC upto COD. The petitioner was directed to submit breakup of IDC and IEDC discharged upto SCOD, from SCOD to COD and beyond COD on cash basis as per Regulation 11(A)(1) of the 2014 Tariff Regulations. In response, petitioner has submitted the breakup of IDC and IEDC vide affidavit dated 30.5.2018. Accordingly, capital cost has been worked out by adjusting IDC and IEDC on cash basis, which is as under:-

		Capital Cost as on COD		II Capital E stment of I	DC	(₹ in lakh) Completion cost as on 31.3.2019
the petitioner On accrual basis			2016-17	2017-18	2018-19	
11692.03	0.00	11505.25	_	5154.57	1007.46	17667.30

15. The petitioner, vide auditor's certificate dated 17.2.2017, has submitted that the total estimated completion cost as on 31.3.2019 is ₹17667.28 lakh against apportioned approved cost of ₹26507.55 lakh. The estimated completion cost is within the apportioned approved cost.

### **Initial Spares**

- 16. Regulation 13(d) of the 2014 Tariff Regulations provides for ceiling norms for capitalization of initial spares. Regulation 13 of the 2014 Tariff Regulations specify as follows:-
  - "13. Initial Spares: Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:
  - (d) Transmission system
  - (i) Transmission line 1.00%
  - (ii) Transmission Sub-station (Green Field) -4.00%
  - (iii) Transmission Sub-station (Brown Field) -6.00%
  - (iv) Series Compensation devices and HVDC Station 4.00%
  - (v) Gas Insulated Sub-station (GIS) -5.00%
  - (vi) Communication system -3.5%"
- 17. The petitioner has claimed initial spares of ₹1062.39 lakh. The petitioner has submitted auditor's certificate dated 28.2.2018 in support of its claim. The petitioner has claimed initial spares of 6% for static VAR compensator and prayed that higher initial spares as claimed may be allowed. BRPL and UPPCL have submitted that initial spares



may be limited to the ceiling limits specified in the 2014 Tariff Regulations. In response, the petitioner has submitted that the equipments are imported and it would take time to arrange for spares at a later date in case of failure. Purchasing them in the initial stage is prudent than purchasing at a later date from vendors at higher price and hence initial spares as claimed may be allowed under Regulation 54 and 55 of "Power to Relax" and "Power to Remove Difficulty" provisions respectively of the 2014 Tariff Regulations.

18. The petitioner has claimed initial spares @ of 6.36% for the instant assets, which is higher than the norms specified for the Series Compensation Devices in Regulation 13 of the 2014 Tariff Regulations. As per Regulation 13(d)(iv) of the 2014 Tariff Regulations, the ceiling limit for Series Compensation Devices is 4%. Accordingly, the initial spares are allowed @ 4% as specified in the 2014 Tariff Regulations. The initial spares allowed for the instant asset is as under:-

(₹ in lakh)

Particulars Particulars	Sub-station
Plant and Machinery cost claimed as on cut-off date after deducting	16715.45
IDC,IEDC and civil works	
Initial spares as per Auditor's Certificate	1062.49
Ceiling limit as per Regulation 13 of 2014 regulations	4%
Initial spares worked out as per norms	652.21
Excess initial spares claimed	410.18

#### Additional Capital Expenditure

- 19. Clause (1)(i) of Regulation 14 of the 2014 Tariff Regulations provides as under:-
  - "(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudencecheck:
  - (i) Undischarged liabilities recognized to be payable at a futuredate;
  - (ii) Works deferred forexecution;
  - (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation13;
  - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court



of law:and

(v) Change in law or compliance of any existinglaw:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff."

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

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

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 madewithin the cut-off date for reasons beyond the control of the project developer;"

- 21. The petitioner has proposed additional capitalization of ₹6811.02 lakh towards balance and retention payment under Regulation 14(1) (i) of the 2014 Tariff Regulations.
- 22. The cut-off date of the instant transmission asset is 31.3.2020.
- 23. The petitioner has submitted that additional capital expenditure claimed is due to balance and retention payment pertaining to the instant assets and the claim is as per the 2014 Tariff Regulations.
- 24. We have considered the submission of the petitioner. The petitioner claim of additional capital expenditure for 2017-18 and 2018-19 is towards balance and retention. Hence, it is allowed under Regulation 14(1)(i) of 2014 Tariff Regulation, subject to true up on actual basis. The capital cost considered for the purpose of computation of tariff is as follows:-

(₹ in lakh)

Approved	Allowed cost	Additional capital expenditure		Total	Estimated
apportioned	as on COD				completion cost
cost		2017-18	2018-19		
26507.55	11095.07	5154.57	1007.46	6162.03	17257.10

### **Debt: Equity Ratio**

- 25. 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:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination oftariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of eachinvestment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equityratio."
- 26. The petitioner has considered debt:equity ratio as 70:30 as on COD and debt-equity ratio as 70:30 for additional capitalization during 2017-18 and 2018-19. Accordingly, we have considered the same for the purpose of tariff computation for the 2014-19 tariff period. The details of debt:equity as on COD, as on 31.3.2019 and for additional capital expenditure is as follows:-

(₹ in lakh)

Particulars	As on COD		As on 31.3.2019	
	Amount	(%)	Amount	(%)
Debt	7766.55	70.00	12079.97	70.00
Equity	3328.52	30.00	5177.13	30.00
Total	11095.07	100.00	17257.10	100.00

#### Return on Equity ("ROE")

27. 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:

#### 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 reasonswhatsoever:
- 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: xxx 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."

28. The petitioner has claimed ROE at the rate of 19.61% during 2017-18 and 2018-19 after grossing up the ROE of 15.50% with MAT rate as per the above said Regulation. 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.



- 29. BRPL have submitted that the petitioner sought tariff as per of MAT Rate, ROE and Service Tax etc. on the basis of norms would not be tenable. In response, the petitioner has submitted that ROE has been claimed by grossing up with MAT rate for 2014-15 in line with the 2014 Tariff Regulations.
- 30. We have considered the submissions made by the petitioner and the 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. The petitioner has claimed that MAT rate of 20.96% is applicable to the petitioner's company during 2016-17. Accordingly, the MAT rate applicable during 2016-17 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:-

		(₹ in lakh)
Particulars	2017-18	2018-19
	(pro-rata)	
Opening Equity	3328.52	4874.89
Additional Capitalization	1546.37	302.24
Closing Equity	4874.89	5177.13
Average Equity	4101.71	5026.01
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year	20.961%	20.961%
Rate of Return on Equity (Pre Tax)	19.610%	19.610%
Return on Equity	202.74	985.60

### Interest on Loan ("IOL")

- 31. 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."
- 32. 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. UPPCL has submitted that the loan portfolio of the petitioner is of the nature of the fixed yearly rates and there is no occasion of applying floating rate of interest. In response, the petitioner has submitted that SBI loan (floating rate of interest) has been deployed in the present case and requested to impact the interest on loan due to change in rate of interest on account of floating rate of interest.
- 33. We have considered the submissions of the petitioner and UPPCL. 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 petitioner has claimed proposed loan for 2014-19 tariff period. We have considered the proposed loan and the petitioner is directed to submit details with regard to the proposed loan at the time of truing up.

- 34. Detailed calculation of the weighted average rate of interest has been given in **Annexure** to this order.
- 35. Based on above, details of IOL calculated are as follows:-

	(	₹ in lakh)
Particulars Particulars	2017-18	2018-19
	(pro-rata)	
Gross Normative loan	7766.55	11374.75
Cumulative Repayment upto previous year	0.00	181.96
Net Loan-Opening	7766.55	11192.79
Additions during the year	3608.20	705.22
Repayment during the year	181.96	884.58
Net Loan-Closing	11192.79	11013.43
Average Loan	9479.67	11103.11
Rate of Interest	8.25%	8.24%
Interest on Loan	197.01	915.07

### **Depreciation**

36. 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."



- 37. 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 25years
  - (b) Gas/Liquid fuel based thermal generating station 25years
  - (c) AC and DC sub-station 25years
  - (d) Gas Insulated Substation (GIS) 25years
  - (d) Hydro generating station including pumped Storage hydro generating stations 35years
  - (e) Transmission line (including HVAC & HVDC) 35years
  - (f) Communication system 15years"
- 38. The weighted average useful life of the instant asset has been considered as 25 years in accordance with the above regulation. The details of the depreciation allowed is given hereunder:-

(₹ in lakh) **Particulars** 2017-18 2018-19 (pro-rata) Opening Gross block 11095.07 16249.64 Addition during 2014-19 5154.57 1007.46 16249.64 17257.10 Closing Gross block Average Gross block 13672.36 16753.37 Rate of Depreciation 5.28% 5.28% 12305.12 Depreciable Value 15078.03 Remaining Depreciable Value 12305.12 12123.16 Depreciation 181.96 884.58 Cumulative depreciation 181.96 1066.54

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

39. The norms for O&M Expenses specified for the instant asset in Regulation 29 of the 2014 Tariff Regulations is as follows:-

		(₹ in lakh)
Particulars	2017-18	2018-19
400 kV Bay		
Norms bays (₹ lakh per Bay)	66.5	1 68.71



40. The total allowable O&M Expenses for the instant assets as per the above norms is as follows:-

			(₹ in lakh)
Particulars 400 kV Bay	No. of Bay	2017-18 (pro-rata)	2018-19
Total O&M Expenses	1	16.54	68.71

- 41. 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 suchincrease. BRPL has submitted that the increase in the wages should be taken care by improving the productivity levels of the petition and the beneficiaries should not be burdened.
- 42. We have considered the submissions of the petitioner and the respondent. 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.

#### Interest on Working Capital

- 43. Clause 1 (c) and 3 of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-
  - "28. Interest on Working Capital: (1) The working capital shall cover:
  - (a)-----
  - (c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:



- (i) Receivables equivalent to two months of fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
- (iii) Operation and maintenance expenses for one month"
- (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later" "
- (5) "Bank Rate" means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;"
- 44. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 12.80% (SBI Base Rate as on 1.4.2017 i.e. 9.30% plus 350 basis points). The interest on working capital for the instant asset covered in the petition has been worked out accordingly.
- 45. Necessary computations in support of interest on working capital are as given under:-

		(₹ in lakh)
Particulars	2017-18	2018-19
	(pro-rata)	
O & M expenses	2.48	10.31
Maintenance Spares	1.38	5.73
Receivables	101.96	486.38
Total	105.82	502.41
Interest rate (%)	12.80	12.80
Interest	13.55	64.31

### **Annual Transmission Charges**

46. The transmission charges allowed for the instant transmission asset is summarized as follows:-

		(₹ in lakh)
Particulars	2017-18	2018-19
	(pro-rata)	
Depreciation	181.96	884.58
Interest on Loan	197.01	915.07
Return on Equity	202.74	985.60
Interest on Working Capital	13.55	64.31
O&M Expenses	16.54	68.71
Total	611.79	2918.26

47. The petitioner has submitted that the claim for transmission charges and other charges is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess filing fees, license fee, RLDC fees and charges or any other kind of impositions etc. The same if imposed shall be borne and additionally paid by the respondents. The petitioner is entitled to FERV as provided under Regulation 50 of the 2014 Tariff Regulations and the petitioner can make other claims as per the 2014 Tariff Regulations.

### Filing Fee and Publication Expenses

48. 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 has filed the details of expenditure towards publishing of notices in newspaper vide affidavit dated 6.3.2018. BRPL has submitted that the filing fees and the publication may not be allowed. In response, the petitioner has submitted that the petitioner is entitled for filing fee and publication expenses under 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

49. The petitioner has requested to allow the petitioner to bill and recover license fee and RLDC fees and charges, separately from the respondents. BRPL have submitted that the petitioner has not submitted the details of RLDC fees and license fees and the same may not be allowed. In rejoinder, the petitioner has submitted that license fee shall be recovered separately from the respondents as per Central Electricity Regulatory Commission (Terms and Conditions on Tariff) (Third Amendment), Regulations 2012. 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 TariffRegulations.

### **Goods and Services Tax**

50. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. The petitioner has submitted that the Commission should allow to recover GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. We are of the view that petitioner's prayer ispremature.

#### **Sharing of Transmission Charges**

51. The billing, collection and disbursement of the transmission charges approved shall be governed by 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.

52. This order disposes of Petition No.6/TT/2018.

Sd/- Sd/- Sd/- Sd/(Dr. M. K. Iyer) (A. S. Bakshi) (A. K. Singhal) (P. K. Pujari)
Member Member Member Chairperson

Order in Petition No. 6/TT/2018

## **ANNEXURE**

Name of loan	Particulars	2017-18	2018-19
Bond LI	Net opening loan	1580.50	1580.50
	Add: Addition during the period		
	Less: Repayment	-	
	Net Closing Loan	1580.50	1580.50
	Average Loan	1580.50	1580.50
	Rate of Interest	8.4000%	8.4000%
	Interest	132.76	132.76
Bond LIII	Net opening loan	1792.00	1792.00
BOHU LIII	Add: Addition during the period	1102100	1102100
	Less: Repayment		
	Net Closing Loan	1792.00	1792.00
	Average Loan	1792.00	1792.00
	Rate of Interest	8.1300%	8.1300%
	Interest	145.69	145.69
BOND LIV	Net opening loan	323.84	323.84
DOND LIV	Add: Addition during the period	323.04	323.04
	Less: Repayment		
	Net Closing Loan	323.84	323.84
	Average Loan	323.84	323.84
	Rate of Interest	7.9700%	7.9700%
	Interest	1	25.81
Bond LVIII		25.81 31.32	31.32
Bona Evili	Net opening loan	31.32	31.32
	Add: Addition during the period		
	Less: Repayment	24.22	24.22
	Net Closing Loan	31.32	31.32
	Average Loan	31.32	31.32
	Rate of Interest	7.8900%	7.8900%
BOND IV	Interest	2.47	2.47
BOND LV	Net opening loan	100.00	100.00
	Add: Addition during the period		
	Less: Repayment	100.00	400.00
	Net Closing Loan	100.00	100.00
	Average Loan	100.00	100.00
	Rate of Interest	7.5500%	7.5500%
	Interest	7.55	7.55
Rep Scheduled			
Bond LIX	Net opening loan	275.70	275.70
	Add: Addition during, the period	-	-
	Less: Repayment		
	Net Closing Loan	275.70	275.70
	Average Loan	275.70	275.70
	Rate of Interest	7.3000%	7.3000%
	Interest	20.13	20.13
SBI (2015-2016) (Q4)	Net opening loan	2084.84	2084.84
	Add: Addition during, the period		
	Less: Repayment.		



	Net Closing Loan	2084.84	2084.84
	Average Loan	2084.84	2084.84
	Rate of Interest	8.9000%	8.9000%
	Interest	185.55	185.55
Bond LX	Net opening loan	45.85	45.85
	Add: Addition during the period	-	
	Less: Repayment		
	Net Closing Loan	45.85	45.85
	Average Loan	45.85	45.85
	Rate of Interest	7.2000%	7.2000%
	Interest	3.30	3.30
Bond LXI 7.74%	Net opening loan	1819.62	1830.18
	Add: Addition during the period	10.56	120.18
	Less: Repayment.		
	Net Closing Loan	1830.18	1950.36
	Average Loan	1824.90	1890.27
	Rate of Interest	7.7400%	7.7400%
	Interest	141.25	146.31
Gross Total	Net opening loan	8053.67	8064.23
	Add: Addition during the period	10.56	120.18
	Less: Repayment	0.00	0.00
	Net Closing Loan	8064.23	8184.41
	Average Loan	8058.95	8124.32
	Rate of Interest	8.25%	8.24%
	Interest	664.51	669.57