

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 272/TT/2015

Coram:

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

Date of Order : 12.10.2018

In the matter of:

Revision of order dated 20.9.2017 in Petition No. 272/TT/2015 in the light of order dated 19.7.2018 in Review Petition No. 45/RP/2017.

And in the matter of:

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

.....Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
Vidyut Bhawan, Vidyut Marg,
Jaipur - 302005
2. Ajmer Vidyut Vitran Nigam Limited
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
3. Jaipur Vidyut Vitran Nigam Limited
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
4. Jodhpur Vidyut Vitran Nigam Limited
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
5. Himachal Pradesh State Electricity Board
Vidyut Bhawan
Kumar House Complex Building II
Shimla-171004



6. Punjab State Power Corporation Limited
Thermal SHED TIA
Near 22 Phatak, Patialia-147001
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134109
8. Power Development Department
Government of Jammu & Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226001
10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road,
New Delhi-110002
11. BSES Yamuna Power Ltd.
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Ltd.
BSES Bhawan, Nehru Place,
New Delhi
13. North Delhi Power Ltd.
Power Trading and Load Dispatch Group
Cennet Building, Adjacent to 66/11 kV Pitampura-3
Grid Building, Near PP Jewellers
Pitampura, New Delhi-110 034.
14. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002.
15. U.P. Power Transmission Corporation Limited
11th Floor, Shakti Bhawan, 14-Ashok Marg,
Lucknow-226001

....Respondents



ORDER

This order is being issued for giving effect to the order dated 19.7.2018 in Review Petition No. 45/RP/2017.

Brief background

2. The Commission vide its order dated 20.9.2017 in Petition No. 272/TT/2015 determined the final tariff for (a) 315 MVA 400/220 kV ICT-I and associated bays and 03 Nos. 220 kV line bays at Saharanpur Sub-station (“Asset-I”); (b) 315 MVA 400/220 kV ICT-II and associated bays and 03 Nos. 220 kV line bays at Saharanpur Sub-station (“Asset-II”), (c) 50 MVA, 400 kV Bus Reactor-I at Saharanpur Sub-station (“Asset-III”) and (d) 50 MVA, 400 kV Bus Reactor-II at Saharanpur Sub-station (“Asset-IV”) under “Northern Region Transmission Strengthening Scheme” in Northern Region for the period from date of commercial operation to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (“2014 Tariff Regulations”).

3. Aggrieved by the Commission’s order dated 20.9.2017 in Petition No. 272/TT/2015, the petitioner filed Review Petition No.45/RP/2017 on the issues of (a) disallowance of the cost of the 4 nos. of line bays of 220 kV at Saharanpur amounting to ₹800 lakh, (b) non-consideration of the Revised Cost Estimate (“RCE”) placed on record by the petitioner vide affidavit dated 14.6.2017 and (c) non-consideration of the time over-run of 1271 days in case of the instant assets.



4. In order dated 20.9.2017, the tariff for four line bays of 220 kV at Saharanpur was not allowed as the petitioner did not furnish appropriate evidence to indicate the successful COD of the 4 line bays and further, the RCE placed on record by the petitioner vide affidavit dated 14.6.2017 was not considered inadvertently as a result of which the capital cost of the assets as on COD was restricted to the apportioned FR cost. As regards cost over-run, the Commission observed that the same will be considered alongwith the 400 kV D/C (Quad) Roorkee-Saharanpur line at the time of truing-up of the 2014-19 tariff.

5. The Commission in order dated 19.7.2018 in Review Petition No. 45/RP/2017 approved the COD of the 4 line bays at Saharanpur under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as 9.5.2016 and observed that the transmission charges of the 4 bays from 9.5.2016 upto the date of commercial operation of the downstream assets under the scope of UPPTCL will be borne by UPPTCL. The relevant portion of the order dated 19.7.2018 is extracted hereunder:-

“9.The Review Petitioner has sought approval of the COD of the 4 bays for the first time under Regulation 4(3) of 2014 Tariff Regulations in the instant review petition.

.....We are of the view that the Review Petitioner was ready on 9.5.2016 but was prevented from putting the 4 bays into regular use as the downstream assets under the scope of UPPTCL were not ready. Therefore, we approve the COD of the 4 bays at Saharanpur as 9.5.2016 under proviso (ii) of Regulations 4(3) of the 2014 Tariff Regulations. Consequently, the transmission charges of the 4 bays from 9.5.2016 upto the date of commercial operation of the downstream assets under the scope of UPPTCL will be borne by UPPTCL. Accordingly, the review on this count is allowed.”

6. In order dated 19.7.2018, the Commission observed that the RCE filed by the petitioner vide affidavit dated 14.6.2017 was not considered inadvertently and allowed



revision of capital cost of the assets considering the RCE. The relevant portion of the order dated 19.7.2018 is as under:-

“10.The Review Petitioner vide its affidavit dated 14.6.2017 has placed on record the RCE. In para 3, of the said affidavit, the Review Petitioner has deposed that the apportioned cost of the combined asset as per FR is ₹8295.10 lakh, apportioned cost as per RCE is ₹16007.61 lakh and the completed cost as per Auditor's certificate is ₹15600.20 lakh which was within the ceiling of ₹16007.61 of the RCE. We have considered the submissions of the Review Petitioner. The Commission while approving the capital cost of the assets inadvertently failed to take into consideration the RCE placed on record vide affidavit dated 14.6.2017, as a result of which cost over-run of ₹6930 lakh was not allowed. Non-consideration of the RCE that was placed on record is an error apparent on the face of the record and is required to be modified. Review on this account is therefore allowed.”

7. As regards the time over-run of 1271 days, the Commission in its order dated 19.7.2018 has reaffirmed its view in order dated 20.9.2017 and observed that the time over-run in the case of the instant assets and the 400 kV D/C (Quad) Roorkee-Saharanpur line will be considered together at the time of truing up of 2014-19 tariff.

8. In order to give effect to the order dated 19.7.2018 in Review Petition No. 45/RP/2017, the following consequential changes are being made to order dated 20.9.2017 in Petition No. 272/TT/2015.

9. As the instant consequential order could not be issued before one of the two Members who passed the order dated 20.9.2017 demitted the office, the matter was heard on 20.9.2018 and accordingly the instant order is issued.

Capital cost

10. PGCIL vide affidavit dated 25.5.2016 has submitted the Auditor's Certificates and revised tariff forms for the subject asset. The apportioned approved cost, cost as



on COD and additional capitalization incurred/projected to be incurred for the Combined Asset are as follow:-

(₹ in lakh)

Apportioned approved cost (as per FR)	Apportioned approved cost (as per RCE)	Cost as on COD	Est. Add Cap 2016-17	Est. Add Cap 2017-18	Est. Add Cap 2018-19	Total estimated completion cost
8295.10	16007.61	13696.68	1037.52	866.00	-	15600.20

11. The capital cost of ₹13696.68 as on COD of 9.5.2016 is considered for the purpose of computation in terms of Regulation 9(2) of 2014 Tariff Regulations. The annual transmission charges have been worked out as per the following methodology and associated assumptions.

IDC and IEDC

12. As held in order dated 20.7.2017 in Petition No.272/TT/2015 and 19.7.2018 in Petition No.45/RP/2017, the time over-run of 1271 days in case of the instant assets will be considered at the time of truing-up alongwith 400 kV D/C (Quad) Roorkee-Saharanpur line. Accordingly, IDC and IEDC corresponding to time over-run of 1271 days has not been considered in this order.

Initial Spares

13. The petitioner's claim of ₹166.84 lakh towards Initial Spares for the Combined Asset is allowed as it is within the ceiling limit specified in Regulation 8 of the 2014 Tariff Regulations. Accordingly, the capital cost considered for the purpose of tariff computation is as follows:-



(₹ in lakh)

Capital Cost considered for tariff before adjustment of IEDC and IDC and Initial Spares as on COD (A)	IDC disallowed as on COD (B)	IEDC disallowed as on COD	Excess Initial Spares disallowed as on COD (D)	Capital Cost (E)=(A)-(B+C+D)
13696.68	897.87	527.36	0.00	12271.45

Projected additional capitalization

14. The petitioner has claimed the following Additional Capital Expenditure for the period from COD to 31.3.2019 towards balance and retention payment as provided under Regulation 14(1) of 2014 Tariff Regulations:-

(₹ in lakh)

2016-17	2017-18	2018-19	Total
1037.52	866.00	0.00	1903.52

15. As the additional capital expenditure is towards the balance and retention payment, the same is allowed under Regulation 14(1) of 2014 Tariff Regulations subject to true up. Accordingly, the following capital cost as on 31.3.2019 has been allowed:-

(₹ in lakh)

Expenditure up to COD	2016.17	2017-18	2018-19	Total estimated completion cost up to 31.3.2019
12271.45	1037.52	866.00	0.00	14174.97

Debt- Equity Ratio

16. The debt:equity as on COD and 31.3.2019 of the asset has been considered in the ratio of 70:30 in terms of Regulation 19 of 2014 Tariff Regulations. The details of the debt: equity ratio are as follows:-



(₹ in lakh)

Combined Asset	As on COD		As on 31.3.2019	
	Amount	%	Amount	%
Debt	8590.02	70.00	9922.48	70.00
Equity	3681.43	30.00	4252.49	30.00
Total	12271.45	100.00	14174.97	100.00

Return on Equity (RoE)

17. The revised RoE allowed in terms of Regulation 24 of 2014 Tariff Regulations is as follows:-

(₹ in lakh)

Particulars	Combined Asset		
	2016-17 (pro-rata)	2017-18	2018-19
Opening Equity	3681.43	3992.69	4252.49
Addition due to Additional Capitalization	311.26	259.80	0.00
Closing Equity	3992.69	4252.49	4252.49
Average Equity	3837.06	4122.59	4252.49
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	674.11	808.44	833.91

Interest on Loan (IoL)

18. The revised IoL allowed in terms of Regulation 26 of 2014 Tariff Regulations are as follows:-

(₹ in lakh)

Particulars	Combined Asset		
	2016-17 (pro-rata)	2017-18	2018-19
Gross Normative Loan	8590.02	9316.28	9922.48
Cumulative Repayment upto previous Year	0.00	369.05	826.11
Net Loan-Opening	8590.02	8947.23	9096.37
Addition due to Additional Capitalization	726.26	606.20	0.00
Repayment during the year	369.05	457.06	476.83
Net Loan-Closing	8947.23	9096.37	8619.54
Average Loan	8768.63	9021.80	8857.95
Weighted Average Rate of Interest on Loan	7.8761%	7.8360%	7.7918%
Interest on Loan	618.73	706.95	690.20



19. The revised calculation of the weighted average rate of interest is given in **Annexure** to this order.

Depreciation

20. The revised depreciation allowed as per Regulation 27 of 2014 Tariff Regulations are as under:-

(₹ in lakh)

Particulars	Combined Asset		
	2016-17 (pro-rata)	2017-18	2018-19
Opening Gross Block	12271.45	13308.97	14174.97
Additional Capital expenditure	1037.52	866.00	0.00
Closing Gross Block	13308.97	14174.97	14174.97
Average Gross Block	12790.21	13741.97	14174.97
Rate of Depreciation	3.2207%	3.3260%	3.3639%
Depreciable Value	7501.58	8358.17	8747.87
Remaining Depreciable Value	7501.58	7989.11	7921.75
Depreciation	369.05	457.06	476.83

Interest on Working Capital (IWC)

21. The revised IWC allowed is as under:-

(₹ in lakh)

Particulars	Combined Asset		
	2016-17 (pro-rata)	2017-18	2018-19
Maintenance Spares	65.66	67.84	70.09
O & M expenses	36.48	37.69	38.94
Receivables	392.68	415.22	422.71
Total	494.81	520.75	531.73
Interest	56.74	66.66	68.06

22. The revised transmission tariff allowed for the Combined Asset is as follows:-



(₹ in lakh)

Particulars	Combined Asset		
	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	369.05	457.06	476.83
Interest on Loan	618.73	706.95	690.20
Return on Equity	674.11	808.44	833.91
Interest on Working Capital	56.74	66.66	68.06
O & M Expenses	392.15	452.24	467.24
Total	2110.78	2491.35	2536.24

23. All other contents of order dated 20.9.2017 shall remain unaltered.

sd/-
(Dr. M.K. Iyer)
Member

sd/-
(P. K. Pujari)
Chairperson



Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
			(₹ in lakh)
Details of Loan	2016-17	2017-18	2018-19
1 Bond XXXVIII			
Gross loan opening	250.00	250.00	250.00
Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
Net Loan-Opening	250.00	250.00	250.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	250.00	250.00	250.00
Average Loan	250.00	250.00	250.00
Rate of Interest	9.25%	9.25%	9.25%
Interest	23.13	23.13	23.13
Rep Schedule	Bullet Payment as on 9.3.2027		
2 Bond XXXIX			
Gross loan opening	500.00	500.00	500.00
Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
Net Loan-Opening	500.00	500.00	500.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	500.00	500.00	500.00
Average Loan	500.00	500.00	500.00
Rate of Interest	9.40%	9.40%	9.40%
Interest	47.00	47.00	47.00
Rep Schedule	Bullet Payment as on 29.3.2027		
3 SBI (21.3.2012)			
Gross loan opening	450.00	450.00	450.00
Cumulative Repayment upto COD/previous year	0.00	40.91	81.82
Net Loan-Opening	450.00	409.09	368.18
Additions during the year	0.00	0.00	0.00
Repayment during the year	40.91	40.91	40.91
Net Loan-Closing	409.09	368.18	327.27
Average Loan	429.55	388.64	347.73
Rate of Interest	9.55%	9.55%	9.55%
Interest	41.02	37.11	33.21
Rep Schedule	22 half yearly installment from 31.8.2016		
4 Bond XL			
Gross loan opening	2500.00	2500.00	2500.00



	Cumulative Repayment upto COD/previous year	0.00	208.33	416.67
	Net Loan-Opening	2500.00	2291.67	2083.33
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	208.33	208.33	208.33
	Net Loan-Closing	2291.67	2083.33	1875.00
	Average Loan	2395.83	2187.50	1979.17
	Rate of Interest	9.30%	9.30%	9.30%
	Interest	222.81	203.44	184.06
	Rep Schedule	12 annual installments from 28.6.2016		
5	FC Bond			
	Gross loan opening	2153.80	2153.80	2153.80
	Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
	Net Loan-Opening	2153.80	2153.80	2153.80
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	2153.80	2153.80	2153.80
	Average Loan	2153.80	2153.80	2153.80
	Rate of Interest	4.10%	4.10%	4.10%
	Interest	88.31	88.31	88.31
	Rep Schedule	Repayment due on 17.1.2023		
6	Bond XLIII			
	Gross loan opening	1200.00	1200.00	1200.00
	Cumulative Repayment upto COD/previous year	0.00	0.00	100.00
	Net Loan-Opening	1200.00	1200.00	1100.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	100.00	100.00
	Net Loan-Closing	1200.00	1100.00	1000.00
	Average Loan	1200.00	1150.00	1050.00
	Rate of Interest	7.93%	7.93%	7.93%
	Interest	95.16	91.20	83.27
	Rep Schedule	12 annual installments from 20.5.2017		
7	SBI (2014-15)			
	Gross loan opening	1194.26	1194.26	1194.26
	Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
	Net Loan-Opening	1194.26	1194.26	1194.26
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1194.26	1194.26	1194.26
	Average Loan	1194.26	1194.26	1194.26



	Rate of Interest	9.55%	9.55%	9.55%
	Interest	114.05	114.05	114.05
	Rep Schedule			
8	Bond XLVI			
	Gross loan opening	200.00	200.00	200.00
	Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
	Net Loan-Opening	200.00	200.00	200.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	200.00	200.00	200.00
	Average Loan	200.00	200.00	200.00
	Rate of Interest	9.30%	9.30%	9.30%
	Interest	18.60	18.60	18.60
	Rep Schedule	Redeemable at par in 3 equal installments on 4.9.2019, 4.9.2024 & 4.9.2029		
9	Bond XLVII			
	Gross loan opening	100.00	100.00	100.00
	Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
	Net Loan-Opening	100.00	100.00	100.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	8.33
	Net Loan-Closing	100.00	100.00	91.67
	Average Loan	100.00	100.00	95.83
	Rate of Interest	8.93%	8.93%	8.93%
	Interest	8.93	8.93	8.56
	Rep Schedule	Redeemable in 12 equal annual installments from 20.10.2018		
10	Bond XLVIII			
	Gross loan opening	250.00	250.00	250.00
	Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
	Net Loan-Opening	250.00	250.00	250.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	250.00	250.00	250.00
	Average Loan	250.00	250.00	250.00
	Rate of Interest	8.20%	8.20%	8.20%
	Interest	20.50	20.50	20.50
	Rep Schedule	Redeemable in 4 equal installments on 23.1.2020, 23.1.2022, 23.1.2025 and 23.1.2030.		



11	Bond-L			
	Gross loan opening	500.00	500.00	500.00
	Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
	Net Loan-Opening	500.00	500.00	500.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	500.00	500.00	500.00
	Average Loan	500.00	500.00	500.00
	Rate of Interest	8.40%	8.40%	8.40%
	Interest	42.00	42.00	42.00
	Rep Schedule	12 annual installments from 27.5.2019		
12	Bond-LI			
	Gross loan opening	100.00	100.00	100.00
	Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
	Net Loan-Opening	100.00	100.00	100.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	100.00	100.00	100.00
	Average Loan	100.00	100.00	100.00
	Rate of Interest	8.40%	8.40%	8.40%
	Interest	8.40	8.40	8.40
	Rep Schedule	12 annual installments from 14.9.2019		
13	Bond-LIII			
	Gross loan opening	189.61	189.61	189.61
	Cumulative Repayment upto COD/previous year	0.00	0.00	0.00
	Net Loan-Opening	189.61	189.61	189.61
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	189.61	189.61	189.61
	Average Loan	189.61	189.61	189.61
	Rate of Interest	8.13%	8.13%	8.13%
	Interest	15.42	15.42	15.42
	Rep Schedule	12 annual installments from 25.4.2020		
	Total Loan			
	Gross loan opening	9587.67	9587.67	9587.67
	Cumulative Repayment upto COD/previous year	0.00	249.24	598.48
	Net Loan-Opening	9587.67	9338.43	8989.19
	Additions during the year	0.00	0.00	0.00



	Repayment during the year	249.24	349.24	357.58
	Net Loan-Closing	9338.43	8989.19	8631.61
	Average Loan	9463.05	9163.81	8810.40
	Rate of Interest	7.8761%	7.8360%	7.7918%
	Interest	745.32	718.08	686.49

