

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 58/RP/2016
in
Petition No. 291/GT/2014

Coram:
Shri A.S. Bakshi, Member
Dr. M. K. Iyer, Member

Date of Order : 6.4.2017

In the matter of

Review of order dated 23.8.2016 in Petition No. 291/GT/2014 regarding approval of tariff of Rihand Super Thermal Power Station, Stage-I (1000 MW) for the period from 1.4.2014 to 31.3.2019.

And in the matter of

NTPC Ltd
NTPC Bhawan,
Core-7, SCOPE Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110003)

.....Petitioner

Vs

1. Uttar Pradesh Power Corporation Ltd.
Shakti Bhawan, 14, Ashok Marg,
Lucknow – 226 001

2. Jaipur Vidyut Vitran Nigam Ltd.
Vidyut Bhawan, Janpath,
Jaipur 302 005 Rajasthan

3. Ajmer Vidyut Vitran Nigam Ltd.
Old Power House, Hathi Bhata,
Jaipur Road, Ajmer-305001
Rajasthan

4. Jodhpur Vidyut Vitran Nigam Ltd.
New Power House, Industrial Area,
Jodhpur, Rajasthan

5. Tata Power Delhi Distribution Ltd.
Grid Substation, Hudson Road
Kingsway Camp
Delhi-110009

6. BSES Rajdhani Power Ltd.,
2nd floor, B-Block



BSES Bhawan, Nehru Place
New Delhi-110019

7. BSES Yamuna Power Ltd.,
Shakti Kiran Building
Karkardooma
Delhi-110092

8. Haryana Power Purchase Centre
Shakti Bhawan, Sector – VI,
Panchkula
Haryana – 134109

9. Punjab State Power Corporation Ltd.
The Mall
Patiala – 147001

10. Himachal Pradesh State Electricity Board Ltd.
Kumar Housing Complex Building-II
Vidyut Bhawan
Shimla – 171004

11. Power Development Department
Govt. of J&K, Secretariat
Srinagar

12. Electricity Department (Chandigarh)
Union Territory of Chandigarh
Addl. Office Building
Sector-9 D, Chandigarh

13. Uttarakhand Power Corporation Ltd.
Urja Bhawan, Kanwali Road
Dehradun – 248001
Uttarakhand

...Respondents

Parties present:

For Petitioner: Shri Ajay Dua, NTPC
Shri E. P. Rao, NTPC
Shri Vivek Kumar, NTPC
Shri Nishant Gupta, NTPC
Shri A. Basu Roy, NTPC
Shri Rajeev Chaudhary, NTPC

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



ORDER

Petition No. 291/GT/2014 was filed by the petitioner, NTPC for approval of tariff of Rihand Super Thermal Power Station, Stage-I (1000 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2014 to 31.3.2019 in terms of the Regulation 6(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and the Commission vide order dated 23.8.2016 had approved the annual fixed charges of the generating station based on projected additional capital expenditure incurred for the period 2014-19 as under:

	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	5033.70	5033.70	1258.42	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	23563.03	23677.30	23677.30	23677.30	23677.30
Interest on Working Capital	4301.31	4373.94	4346.31	4451.82	4527.02
O&M Expenses	16131.61	17141.61	18211.61	19351.61	20561.61
Compensation Allowance	1000.00	500.00	0.00	0.00	0.00
Special allowance	0.00	3988.13	8482.74	9021.40	9594.25
Total	50029.64	54714.67	55976.38	56502.12	58360.18
Unrecovered Depreciation	-	-	179.12	-	-
Annual Fixed Charges	50029.64	54714.67	56155.50	56502.12	58360.18

2. Aggrieved by the said order dated 23.8.2016, the petitioner has sought review of the said order on Non-consideration of water charges of ₹394.82 lakh actually paid by the petitioner to Uttar Pradesh Jal Vidyut Nigam Limited(UPJVNL) for Rihand Stage-I.

3. During the hearing on 11.11.2016, the representative of the petitioner submitted that the Commission in order dated 23.8.2016 had considered an amount of ₹131.61 lakh as the projected water charges during the period 2014-19 instead of the actual water charges of ₹394.82 lakh paid to Uttar Pradesh Jal Vidyut Nigam Limited in respect of the generating station. It has submitted that during the year 2013-14, the actual amount of ₹989.96 lakh was paid/deposited to UPJVNL as the water charges for the entire Rihand



STPS (Stage-I, II & III combined) on the terms and conditions agreed during the meeting held on 3.4.1999 between the petitioner, Govt of UP & UPSEB. It has also submitted that as per the minutes of meeting (MoM) dated 3.4.1999, the water charges payable to UPJVNL in respect of Rihand STPS are to be considered at the normative cooling water consumptive rate of 0.037188306 cusec/MW. It has further submitted that as the charges for such water consumption would be the cost of corresponding generation loss at hydro power generating station on Rihand Reservoir i.e. Rihand hydro & Obra hydro station on account of water consumed by the generating station of the petitioner Stations from Rihand Reservoir based on certain normative values as indicated in the said MoM. It has further stated that as per agreement, the rate of charges for such generation loss at Rihand hydro & Obra hydro shall be taken as 3 times the highest average annual rate of electricity charge during the year 1998 amongst Northern Region coal based stations of the petitioner. It has further submitted that this works out to `6.0558/ kwh of hydro generation lost (3 x `2.0186/kwh) and the same was to be applied for the period from 1.1.1999 to 31.12.2003, which is subject to revision of 10% after every five years. The petitioner has also submitted the copy of the Minutes of Meeting dated 3.4.1999, month wise calculation of water charges paid to UPJVNL for Rihand STPS (Stage-I, II & III) during the year 2013-14 and copy of bills raised by UPJVNL.

4. The learned counsel for the respondent, BRPL has submitted that the water charges has been disallowed on account of the non submission of relevant information by the petitioner the same has been observed by the Commission in order dated 23.8.2016 in Petition No. 291/GT/2014. It has also submitted that the claim of the petitioner is liable to be rejected as the petitioner had failed to furnish the relevant information for prudence check of the Commission. It has also submitted that since the petitioner has been directed to submit the additional information as regards water charges at the time of truing up of tariff of generating station for the period 2014-19, there is no ground for review of the



order. Accordingly, the learned counsel has submitted that the prayer of the petitioner may be disallowed.

5. We have considered the submission of the parties. The Commission vide order dated 23.8.2016 in Petition No. 291/GT/2014 had disposed of the claim of the petitioner for grant of water charges as stated under:-

“49.We have considered all the submissions made. It was observed from the above table that the petitioner has claimed water charges for the year 2014-15 considering the actual water charges for the year 2013-14 and escalating the same @ of 6.35% on year to year for the period 2014-19. However, the petitioner has not furnished the basis of calculation of quantity of Consumptive Water (CW) of 0.037188 cusecs/MW during the year 2014-15 to 2018-19 and reason of calculating final water charges by multiplying by factor “3”. In this backdrop, the actual water charges paid during 2013-14 is allowed as projected water charges for the period 2014-19 without any escalation and without multiplying by factor “3”, as detailed under:-. Based on this, water charges for the period 2014-19 are allowed as under:

(₹ in lakh)

Year	Water charges allowed
2014-15	131.61
2015-16	131.61
2016-17	131.61
2017-18	131.61
2018-19	131.61

50. The petitioner is directed to furnish the details such as the contracted quantity, allocation of water, the actual water consumed during 2014-19, the basis of calculation of quantity of CW and computation of water charges at the time of truing-up of tariff in terms of the 2014 Tariff Regulations. In addition, the petitioner shall also confirm / clarify as to whether the water charges have been paid on the basis of contracted quantity or on the basis of allocation.”

6. It is evident from the above, that the Commission while considering the prayer of the petitioner for grant of water charges had examined the claim of the petitioner and had observed that the petitioner had not furnished the basis for calculation of quantity of consumptive water (CW) and the reason for calculation of water charges by multiplying factor '3' for prudence check of the claim made by the petitioner. Accordingly, the Commission in its order dated 23.8.2016 had restricted the water charges to ₹131.61 for each year of the tariff period 2014-19 without considering the multiplicative factor '3'. Also, by the said order, liberty was granted to the petitioner to submit the detailed information for consideration of the Commission at the time of truing up of tariff in terms of Regulation 8 of the 2014-19 Tariff Regulations. It is however noticed that the petitioner has referred to



a clause in the agreement dated 3.4.1998 entered into between the State Govt of U.P.(UPJVNL) and has submitted that the water charges have been charged based on generation loss due to spill over. The relevant clause is quoted as under:

“To provide for generation loss on account of spillover of water, the charges for consumptive use will be worked out on the basis of 3.0 (Three) times of the above rate in place of 2 (two) times as earlier proposed. No separate payments towards spillover water will be admissible.”

7. It is observed from the above provision of the agreement that the charges for consumptive use of water is to be worked out on the basis of three times of the rate in place of two times in order to provide for generation loss on account of spill over of water. This aspect was not considered by the Commission at the time of passing of order dated 23.8.2016, restricting the water charges without considering the multiplying factor ‘3’. This in our view is an error apparent on the face of the order and is required to be rectified. Accordingly, review on this ground is allowed.

8. It is observed that the petitioner is procuring water from Rihand Reservoir both for Singrauli STPS and Rihand STPS as per the terms and conditions agreed during the meeting held on 3.4.1999. The petitioner, during hearing on 11.11.2016 has clarified that there is no formal agreement and the payment is against generation loss on account of spill over of water as per the terms of the minutes of meeting dated 3.4.1999.

9. Accordingly, the actual water charges paid by the petitioner during the year 2013-14 and claimed as such is allowed as projected water charges for the period 2014-19 without any escalation subjected review at the time of true up.

<i>(₹ in lakh)</i>	
Year	Water charges allowed
2014-15	394.82
2015-16	394.82
2016-17	394.82
2017-18	394.82
2018-19	394.82



10. This is however subject to revision based on the details/documents regarding contracted quantity, allocation of water, actual water consumption during 2014-19 furnished by the petitioner in terms of our direction contained in order dated 23.8.2016. The prayer is disposed of accordingly.

11. It is noticed that the petitioner had filed review petition (Petition No. 53/RP/2016) against the order dated 29.7.2016 in Petition No. 317/GT/2014 wherein the Commission has determined the tariff of the generating station for the period 2009-14. In the said review petition, the petitioner has raised objections on the consideration of freehold land of ₹2580.67 lakh as leasehold land in 2008-09 and the Commission by order dated 29.7.2016 had allowed the said prayer of the petitioner as under:

“17. Based on the above discussions, the annual fixed charges determined by order dated 29.7.2016 stand revised as stated in subsequent paragraphs:

....

Annual Fixed Charges

22. Accordingly, the revised annual fixed charges allowed for the period 2009-14 are summarized as under:

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4913.42	5074.13	5020.95	5048.94	5077.63
Interest on Loan	28.56	0.00	0.00	0.00	0.00
Return on Equity	28077.74	27825.11	27577.19	27569.83	28211.87
Interest on Working Capital	4624.16	4666.42	4716.49	4754.87	4818.37
O&M Expenses	13000.00	13740.00	14530.00	15360.00	16240.00
Secondary fuel oil cost	1603.37	1603.37	1607.76	1603.37	1603.37
Compensation Allowance	350.00	500.00	650.00	650.00	650.00
Total	52597.26	53409.02	54102.39	54987.01	56601.23

23. All other terms contained in order dated 29.7.2016 in Petition No. 317/GT/2014 remain unaltered. Consequent upon the revision of capital cost as on 31.3.2014 by this order, the capital cost as on 1.4.2014 shall be revised and tariff determined by order dated 23.8.2016 in Petition No. 291/GT/2014 for the period 2014-19 shall be revised through a separate order.”



12. Based on the above, the tariff of the generation station was revised for the period 2009-14. However, it was observed in the said order that the revision of tariff for the period 2014-19 will be considered separately. Accordingly, we revise the tariff for this generating station for the period of 2014-19 as stated below:

Depreciation

13. The cumulative depreciation amounting to ₹203221.03 lakh as on 31.3.2014 as considered in order dated 23.8.2016 has been considered for the purpose of tariff. Further, the value of freehold land included in the average capital cost has been adjusted while calculating depreciable value for the purpose of tariff. Accordingly, the balance depreciable value (before providing depreciation) for the year 2014-15 works out to ₹12092.62 lakh. Since the used life of the generating station as on 1.4.2014 exceed 12 years from the effective station COD, the depreciation for the period 2014-19 shall be calculated using spreading of the remaining depreciable value over the balance useful life for respective years. Accordingly, depreciation has been computed as follows:

	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	242348.24	242348.24	242348.24	242348.24	242348.24
Add: Additional Capital Expenditure	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	242348.24	242348.24	242348.24	242348.24	242348.24
Average Capital Cost	242348.24	242348.24	242348.24	242348.24	242348.24
Balance useful life at the beginning of the period	2.25	1.25	0.25	0.00	0.00
Depreciable value (excluding land) @ 90%	215313.64	215313.64	215313.64	215313.64	215313.64
Balance depreciable Value	12092.62	6718.12	1343.62	0.00	0.00
Depreciation (annualized)	5374.50	5374.50	1343.62	0.00	0.00
Cumulative depreciation at the beginning	203221.03	208595.52	213970.02	215313.64	215313.64
Less: Cumulative Depreciation adjustment on account of un-discharged liabilities	0.00	0.00	0.00	0.00	0.00
Less: Cumulative Depreciation reduction due	0.00	0.00	0.00	0.00	0.00



	2014-15	2015-16	2016-17	2017-18	2018-19
to de-capitalization					
Cumulative depreciation (at the end of the period)	208595.52	213970.02	215313.64	215313.64	215313.64

Receivables

14. Receivables equivalent to two months of capacity charge and energy charges has been worked out and allowed as under:

	2014-15	2015-16	2016-17	2017-18	2018-19
	(₹ in lakh)				
Variable Charges (two months)	10879.21	10909.01	10879.21	11141.36	11141.36
Fixed Charges (two months)	8276.31	9140.48	9390.52	9463.62	9773.29
Total	19155.52	20049.49	20269.73	20604.97	20914.65

Interest on Working Capital

15. In terms of the above regulations, SBI PLR of 13.50% (Bank rate 10.00 + 350bps) has been considered for the purpose of calculating interest on working capital. Interest on working capital has been computed as under:

	2014-15	2015-16	2016-17	2017-18	2018-19
	(₹ in lakh)				
Cost of coal towards stock- 15 days	2639.09	2646.32	2639.09	2702.68	2702.68
Cost of coal towards generation- 30 days	5278.18	5292.64	5278.18	5405.37	5405.37
Cost of secondary fuel oil- 2 months	322.84	323.73	322.84	330.62	330.62
Maintenance Spares	3278.96	3480.96	3694.96	3922.96	4164.96
Receivables- 2 months	19155.52	19384.81	18855.94	19101.41	19315.61
O & M expenses- 1 Month	1366.24	1450.40	1539.57	1634.57	1735.40
Total Working Capital	32040.83	32578.86	32330.58	33097.61	33654.65
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	4325.51	4398.15	4364.63	4468.18	4543.38

16. Based on the above, annual fixed charges for the generating station for the period from 1.4.2014 to 31.3.2019 stand revised as under:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	5374.50	5374.50	1343.62	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	23563.03	23677.30	23677.30	23677.30	23677.30
Interest on Working Capital	4325.51	4398.15	4364.63	4468.18	4543.38
O&M Expenses	16394.82	17404.82	18474.82	19614.82	20824.82
Compensation Allowance	1000.00	500.00	0.00	0.00	0.00
Special allowance	0.00	3988.13	8482.74	9021.40	9594.25
Annual Fixed Charges	50657.86	55342.89	56343.11	56781.69	58639.75
Unrecovered Depreciation	-	-	179.12	-	-
Total Annual Fixed Charges	50657.86	55342.89	56522.23	56781.69	58639.75

17. Except for the above, all other terms contained in order dated 23.8.2016 in Petition No. 291/GT/2014 shall remain unaltered.

18. Petition No. 58/RP/2016 is disposed of at the admission stage.

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

Sd/-
(A. S. Bakshi)
Member

