

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 72/GT/2021

Coram:

**Shri P.K. Pujari, Chairperson
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member**

Date of Order: 24th December, 2021

In the matter of

Petition for determination of tariff of the generating stations operated and managed by Bhakra Beas Management Board (BBMB) for the 2019-24 tariff period.

And

In the matter of

Bhakra Beas Management Board,
Sector 19-B, Madhya Marg,
Chandigarh – 160019

...Petitioner

Vs.

1. Punjab State Power Corporation Limited,
The Mall, Patiala (Punjab)
2. Haryana Vidyut Prasaran Nigam Limited,
Shakti Bhawan, Sector-6, Panchkula (Haryana)
3. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Janpath, Jaipur (Rajasthan)
4. Himachal Pradesh State Electricity Board Limited,
Vidyut Bhawan, Shimla (Himachal Pradesh)
5. Union Territory of Chandigarh,
Sector-9, UT Secretariat, Chandigarh
6. Rajasthan Urja Vikas Nigam Limited,
Vidyut Bhawan, Janpath, Jyoti Nagar, Jaipur (Rajasthan)

...Respondents



Parties Present:

Shri M.G. Ramachandran, Senior Advocate, BBMB

ORDER

This Petition has been filed by the Petitioner, Bhakra Beas Management Board (in short 'BBMB') for determination of tariff of its generating stations for the 2019-24 tariff period in accordance the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as the '2019 Tariff Regulations').

Background

2. The genesis of Bhakra Beas Management Board may be traced to the provisions of Sections 78 to 80 of the Punjab Reorganisation Act, 1966 (hereinafter referred to as "the 1966 Act"). Section 78 of the 1966 Act provides for the manner of transfer of rights and liabilities in regard to Bhakra-Nangal and Beas Projects to the successor States after operation of the 1966 Act. Section 79 of the 1966 Act provides that the Central Government shall constitute a Board to be called the Bhakra Management Board for the administration, maintenance and operation of the works of Bhakra Dam, Nangal Dam and Nangal-Hydel Channel up to Kotla Power House; the irrigation headworks at Rupar, Harike and Ferozepur; Bhakra Power House; Gunguwal and Kotla Power Houses; sub-stations at Ganguwal, Ambala, Panipat,



Delhi, Ludhiana, Sangrur and Hissar; and the main 220 kV transmission lines connecting the said sub-stations and power houses. Sub-section (2) of section 79 of the 1966 Act provides for constitution of Bhakra Management Board consisting of a whole time Chairperson and two whole time members to be appointed by the Central Government and a representative each of the Governments of the States of Punjab, Haryana and Rajasthan and Himachal Pradesh to be nominated by the respective Governments.

3. The functions of Bhakra Management Board include the regulation of power generated at the power-houses to any Electricity Board or authority in charge of distribution of power as per the existing agreement or arrangements. Sub-section (6) of section 79 of the 1966 Act provides that the Bhakra Management Board shall be under the control of the Central Government and shall comply with such directions as may, from time to time, be given to it by the Central Government.

4. The administration, maintenance and operation of Bhakra Nangal Project were handed over to Bhakra Management Board w.e.f. 1.10.1967. The Beas Project Works, on completion, were transferred by Government of India from Beas Construction Board (BCB) to Bhakra Management Board as per the provisions of Section 80 of the 1966 Act. Pursuant to this, Bhakra Management Board was renamed as Bhakra Beas Management Board (BBMB).



5. It is noted that BBMB has an installed capacity of 2918.72 MW from the Bhakra-Nangal and Beas Project and has a transmission network of 3708.21 ckt-km of 400 kV, 220 kV, 132 kV and 66 kV transmission lines for supply of power to the States of Punjab, Rajasthan, Haryana, Himachal Pradesh, Delhi and Union Territory of Chandigarh. It is evident from the provisions of the 1966 Act that BBMB is functioning under the control of the Central Government and has been vested with the responsibilities to supply power from the projects to the States of Punjab, Rajasthan, Haryana, Himachal Pradesh, Delhi and Union Territory of Chandigarh through wide network of transmission lines and sub-stations. In other words, the functions assigned to BBMB under the 1966 Act establish beyond doubt that BBMB is a generating company owned or controlled by the Central Government and is also involved in inter-state transmission of electricity. Accordingly, after coming into effect of the Electricity Act, 2003 (hereinafter referred to as 'the 2003 Act'), the regulation and determination of tariff for generation and inter-State transmission of electricity by BBMB are vested in the Commission by virtue of the provisions of Section 174 read with Section 79 of the 2003 Act.

6. The Petitioner, BBMB operates three hydroelectric power projects which have a total installed capacity of 2918.72 MW. The details of installed capacity and date of commissioning of various generating stations operated by the Petitioner is summarized in the following table:



Details regarding Hydro generating stations								
Generating Station	Category	Original Installed Capacity	COD	1 st Stage RMU		2 nd Stage RMU		Present Installed Capacity
Bhakra HEP		MW	Date	Date	MW	Date	MW	MW
Unit 1	Bhakra Left Bank	90	14.11.1960	22.2.1985	108	-		108
Unit 2	Bhakra Left Bank	90	2.2.1961	11.3.1984	108	19.7.2013	126	126
Unit 3	Bhakra Left Bank	90	7.7.1961	10.4.1983	108	-		108
Unit 4	Bhakra Left Bank	90	8.11.1961	6.2.1982	108	5.8.2015	126	126
Unit 5	Bhakra Left Bank	90	10.12.1961	21.1.1981	108	2.10.2013	126	126
Unit 6	Bhakra Right Bank	120	24.5.1966	16.10.1980	132	18.6.1997	157	157
Unit 7	Bhakra Right Bank	120	5.12.1966	16.10.1980	132	12.2.2001	157	157
Unit 8	Bhakra Right Bank	120	13.3.1967	16.10.1980	132	5.4.1998	157	157
Unit 9	Bhakra Right Bank	120	13.11.1967	16.10.1980	132	26.2.1996	157	157
Unit 10	Bhakra Right Bank	120	19.12.1968	16.10.1980	132	8.6.2000	157	157
Total Bhakra HEP		1050			1200			1379
Ganguwal								
Unit 1		29.25	23.1.1962					27.99
Unit 2		24.2	2.1.1955					24.20
Unit 3		24.2	2.1.1955					24.20
Total Ganguwal		77.65						76.39
Kotla								
Unit 1		29.25	14.7.1961					28.94
Unit 2		24.2	27.8.1956					24.20
Unit 3		24.2	23.5.1956					24.20
Total Kotla		77.65						77.34
Grand Total Bhakra Complex		1205.30						1532.73
Pong								
Unit 1		60	20.1.1978	15.2.2002	66			66
Unit 2		60	30.3.1978	11.4.2000	66			66



Unit 3		60	26.10.1978	23.2.1998	66		66
Unit 4		60	6.3.1979	11.2.2001	66		66
Unit 5		60	19.9.1982	25.1.2003	66		66
Unit 6		60	25.2.1983	07.2.2004	66		66
Total Pong		360			396		396
Dehar							
Unit 1		165	2.11.1977				165
Unit 2		165	3.3.1978				165
Unit 3		165	12.6.1979				165
Unit 4		165	12.6.1979				165
Unit 5		165	17.7.1983				165
Unit 6		165	10.11.1983				165
Total Dehar		990					990
Total BBMB		2555.30					2918.73

7. The Commission by its order dated 15.9.2011 in Petition No. 181/2011 (*suo motu*) held that the regulation and determination of tariff for generation and inter-State transmission of electricity by the Petitioner, BBMB are vested in this Commission by virtue of the provisions of section 174 of the Act. Accordingly, BBMB was directed to file appropriate applications before this Commission for approval of tariff of its generating stations and transmission systems, in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, for the period 2009-14. Aggrieved by order dated 15.9.2011, the Petitioner filed Appeal No.183/2011 before the Appellate Tribunal for Electricity (APTEL) challenging the jurisdiction of the Commission to determine the tariff of its generating stations and transmission systems.

8. During the pendency of this appeal, the Commission vide its order dated 14.3.2012 in Petition No.15/SM/2012 directed as under:



"5. It has come to the notice of the Central Commission that the some of the owners/developers of the inter-State transmission lines of 132 kV and above in North Eastern Region and 220 kV and above in Northern, Eastern, Western and Southern regions as mentioned in the Annexure to this order have approached the Implementing Agency for including their transmission assets in computation of Point of Connection transmission charges and losses under the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 (hereinafter "Sharing Regulations").

6. As a first step towards inclusion of non-ISTS lines in the POC transmission charges, the Commission proposes to include the transmission lines connecting two States, for computation of POC transmission charges and losses. However, for the disbursement of transmission charges, tariff for such assets needs to be approved by the Commission in accordance with the provisions of Sharing Regulations. Accordingly, we direct the owners of these inter-State lines to file appropriate application before the Commission for determination of tariff for facilitating disbursement.

We direct the respondents to ensure that the tariff petitions for determination of tariff is filed by the developers/owners of the transmission line or by State Transmission Utilities where the transmission lines are owned by them in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009...".

9. Thereafter, APTEL by its judgment dated 14.12.2012 in Appeal No.183/2011 dismissed the appeal filed by the Petitioner and upheld the jurisdiction of this Commission to determine the tariff of the generating stations and transmission systems of BBMB. Against the said judgment dated 14.12.2012, the Petitioner has filed Civil Appeal before the Hon'ble Supreme Court of India and the same is pending adjudication. Thereafter, the Commission by order dated 10.1.2013 in Petition No.181/2011 (*suo motu*) directed the Petitioner to file tariff petitions in accordance with the provisions of the 2009 Tariff Regulations, separately for the generating stations and for the transmission systems, after serving copies of the said petitions on the beneficiary States and impleading them as respondents.



10. In compliance with the directions of the Commission in order dated 14.3.2012 in Petition No.15/SM/2012 (quoted at paragraph 8 above), the Petitioner filed Petition No. 200/TT/2013 for approval of the annual transmission charges for 220 kV Panipat-Narela Ckt-1, 220 kV Panipat-Narela Ckt-2, 220 kV Panipat-Narela Ckt-3, 220 kV BTPS-Ballabgarh Ckt-1 and 220 kV BTPS-Ballabgarh Ckt-1 inter-State transmission lines connecting two States (in short “transmission assets”) for 2009-14. Also, in compliance with order dated 10.1.2013 in Petition No.183/2011 (*para 9 above*), the Petitioner filed Petition No.251/GT/2013 for determination of tariff of generation and transmission activities undertaken by the Petitioner, in accordance with the provisions of the 2009 Tariff Regulations. Since Petition No. 251/GT/2013 and Petition No.200/TT/2013 were filed by the Petitioner in terms of the above directions, Petition No.181/2011 (*suo motu*) was disposed of by order dated 29.9.2014. Also, as the transmission assets covered in Petition No.200/TT/2013 were included as inter-state transmission lines in Petition No.251/GT/2013, the Commission, by order dated 7.8.2015, disposed of Petition No.200/TT/2013 as infructuous.

11. Thereafter, the Commission vide its order dated 12.11.2015 in Petition No.251/GT/2013, granted O&M expenses for the transmission elements of the Petitioner covered in the said petition for the 2009-14 tariff period. Subsequently, by order dated 21.3.2016 in Petition No.251/GT/2013, the Commission allowed the actual O&M expenditure incurred by the Petitioner, as against the normative O&M



expenditure in terms of the 2009 Tariff Regulations. In the said order, the Petitioner was directed to file appropriate application for determination of tariff of the generating stations and inter-State transmission systems for the 2014-19 tariff period, in terms of the 2014 Tariff Regulations and with certain directions.

12. In compliance to the directions in order dated 21.3.2016 in Petition No.251/GT/2013, the Petitioner filed Petition No.22/GT/2017 for approval of tariff of its generating stations (Bhakra, Dehar and Pong) for the 2014-19 tariff period, in terms of the 2014 Tariff Regulations. After examining the deviations claimed by the Petitioner and in terms of Regulation 29(3)(b) of the 2014 Tariff Regulations {applicable for stations which have been in commercial operations for more than three years as on 1.4.2014 and whose normative O&M expenditure has not been indicated in the table under Regulation 29(3)(a)}, the Commission vide its order dated 19.9.2018 in Petition No.22/GT/2017 allowed the O&M expenses for the 2014-19 tariff period, as follows, without considering the wage revision impact and the revenue earned from sale of power to common pool customers.

	<i>(Rs in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Bhakra	16481.13	17575.47	18742.49	19986.99	21314.12
Dehar	16338.68	17423.56	18580.49	19814.23	21129.90
Pong	2494.99	2660.66	2837.33	3025.72	3226.63



13. With respect to the sale of power to common pool customers and the claim of the Petitioner for transition period, the Commission in its order dated 19.9.2018 held as under:

Sale of power to common pool customers

“28.5 With respect to sale of power to common pool customers, it is observed that BBMB offsets a reasonable percentage of its O&M expenses by way of sale of power to common pool customers and also passes the revenue earned to the participating States. Since, BBMB board derives its power from the participating States, the Board's decision to sell power at certain rates to common pool customers has implied agreement of all participating States. However, this practice is in contravention to the provisions of the 2014 Tariff Regulations according to which all power must be sold at the single tariff as determined by the Commission. It is also observed that respondents have also submitted that tariff which is decided ought to be applied uniformly to all the purchasers of electricity, which includes the distribution licensees and also the common pool consumers.

Transition period

“33. The participating States have adopted different methodologies in respect of treatment of capital and revenue expenditure in their books of accounts. The capital base on which the tariff has been claimed by the petitioner is not reconciling with the GFA booked in the books of the participating States. The GFA of the generating stations as claimed by the petitioner being on the higher side in comparison to the GFA in books of participating States, it is not possible to determine the tariff components based on capital base i.e ROE, IOL and Depreciation. However, allowable O&M expenses for generating assets of BBMB as calculated as per the 2014 Tariff Regulations, are very close to the actual O&M expenditures of BBMB. As such, agreeing to the request of petitioner for suitable transition period or in other words agreeing to maintain status-quo till 31.03.2019 would be the most prudent option. This would allow time to the petitioner and participating States to come to a common platform with respect to capital base of generating assets (i.e gross block, cumulative depreciation already recovered and net block), gross loan, cumulative repayment, Interest on Loan, performance parameters of NAPAF, design energies and rate/volume of power to be sold to common pool customers.

14. Accordingly, Petition No. 22/GT/2017 was disposed of by order dated 19.9.2018 with direction to the Petitioner and the participating States to continue the existing methodology till 31.3.2019.



Present Petition

15. Under the 2019 Tariff Regulations, special provisions relating to BBMB have been provided as under:

Regulation 35. Operation and Maintenance Expenses:

(1) Thermal Generating Station: Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:

(1) xxxxx

Provided that

Provided further that operation and maintenance expenses of generating station and the transmission system of Bhakra Beas Management Board (BBMB) and Sardar Sarovar Project (SSP) shall be determined after taking into account provisions of the Punjab Reorganization Act, 1966 and Narmada Water Scheme, 1980 under Section 6-A

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Regulation 73. Special Provisions relating to BBMB and SSP: *The tariff of generating station and the transmission system of Bhakra Beas Management Board (BBMB) and Sardar Sarovar Project (SSP) shall be determined after taking into consideration, the provisions of the Punjab Reorganization Act, 1966 and Narmada Water Scheme, 1980 under Section 6-A of the Inter-State Water Disputes Act, 1956, respectively.*

TARIFF FILING FORMS (HYDRO) FOR DETERMINATION OF TARIFF, PART-II, Annexure-I - PART-II - Checklist of Forms and other information/ documents for tariff filing for Hydro Stations

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11. BBMB is maintaining the records as per the relevant applicable Acts. Formats specified herein may not be suitable to the available information with BBMB. BBMB may modify tariff filing forms suitably as per available information to them for submission of required information for tariff purpose.

16. The Petitioner has filed the present petition for determination of tariff of the generating stations for the 2019-24 tariff period, in terms of the provisions of the 2019 Tariff Regulations. None of the Respondents have filed reply in the matter. The



petition was heard on 24.8.2021 through video conferencing and the Commission reserved its order.

17. The Petitioner has submitted that all expenses of BBMB, including the working capital requirements, the additional capital expenditure, RM&U expenditure etc. are being paid for by the partner States/ State utilities. It has also submitted that in consideration of the 1966 Act, the only element applicable to the Petitioner is the O&M expenses. As regards O&M expenses, the second proviso to Regulation 35(1) of the 2019 Tariff Regulations, provides that the provisions of the 1966 Act shall be taken into consideration for determining the O&M expenses of the generating stations of the Petitioner.

18. The Petitioner has furnished details of the actual O&M expenses incurred for the 2014-19 tariff period along with details of the assimilated fixed assets and other financial details of operation, which include the statement of expenditure incurred by the Petitioner during the 2014-19 tariff period and the corresponding remittance made by the partner States/ State utilities, to meet the expenditure in the statement of receipt and payments of the Petitioner for the said period.

19. The Petitioner has submitted that in line with the provisions of the 1966 Act, the Ministry of Power, Government of India in its various notifications, issued from time to time, has specified the methodology for apportionment of expenses incurred by each



of the projects under the Petitioner, amongst the successor States. The methodology for such apportionment as furnished by the Petitioner is as under:

Sl. No.	Name	Power		Irrigation	
		Share of Power	Share of Irrigation	Share of Power	Share of Irrigation
1.	Bhakra Power Project	100%	0%	Unit 1, Unit 2 and Unit 3: 50%	50%
				Unit 4: 100%	0%
2.	Dehar Power Project	94%	6%	94%	6%
3.	Pong Power Project	23.50%	76.5%	23.50%	76.5%

Table: Sharing of partner State Utilities in BBMB Projects – Power Wing

Project Name	PSPCL	HVPNL	RRVNL	HPSEBL	UT Chandigarh
Bhakra Power Plant	51.8% (after deducting share of Rajasthan)	37.51% (after deducting share of Rajasthan)	15.22%	7.19% (after deducting share of Rajasthan)	3.5% (after deducting share of Rajasthan)
Dehar Power Plant	51.8% (after deducting share of Rajasthan)	37.51% (after deducting share of Rajasthan)	20%	7.19% (after deducting share of Rajasthan)	3.5% (after deducting share of Rajasthan)
Pong Power Plant	51.8% (after deducting share of Rajasthan)	37.51% (after deducting share of Rajasthan)	58.50%	7.19% (after deducting share of Rajasthan)	3.5% (after deducting share of Rajasthan)

Table: Sharing of partner States in BBMB Projects – Irrigation Wing

Project Name	Punjab	Haryana	Rajasthan
Bhakra Unit 1	60% (after deducting share of Rajasthan)	40% (after deducting share of Rajasthan)	15.22%
Bhakra Unit 2 & Unit 3	60% (after deducting share of Rajasthan)	40% (after deducting share of Rajasthan)	19.06%



Project Name	Punjab	Haryana	Rajasthan
	of Rajasthan)	of Rajasthan)	
BSL, Sunder Nagar	51%	34%	15%
Pong Dam, Talwara	24.9%	16.9%	58.5%

20. The Petitioner has submitted that based on the respective shares of the partner States/ State utilities, the Petitioner raises demand notes with respect to the O&M expenses (both Power Wing & Irrigation wing). It has stated that major capital works such as RM&U work on hydroelectric power projects, once approved by the Board of the Petitioner company, are financed by the partner States, in terms of their respective sharing ratio. In addition to this, a select quantum of power is being sold to common pool consumers in the Bhakhra Nangal project as detailed below:

- a) National Fertilizer Limited, Naya Nangal (5 MW at 85% Load Factor - 1.02 LU/day);
- b) Rajasthan Fertilizer Factory (RFF) in Rajasthan – (25 MW at 85 % Load Factor – 5 LU/day);
- c) UT Chandigarh (1 LU/day- Adhoc Assistance) + 10 LU/day Special Assistance); and
- d) Old HP (10 MW at 50 % Load Factor– 1.2 LU/Day)

21. The Petitioner has further submitted that supply to common pool consumers is first charged on the quantum of electricity generated and the balance quantum is shared among the partner utilities in their prescribed ratio. It has stated that the revenue derived from these common pool consumers are passed on to the



participating States including UT of Chandigarh in proportion to their respective shares in the projects of the Petitioner. The Petitioner has pointed out that the respective State Electricity Regulatory Commission of the partner States, duly considers the expenditure incurred by the State utilities, in line with their respective shares in the projects of the Petitioner, in the Aggregate Revenue Requirement (ARR) filed by the utilities.

22. We have considered the submissions of the Petitioner. It is evident from the provisions of the 1966 Act that BBMB is functioning under the control of the Central Government and has been vested with the responsibilities to supply power from its projects to the States of Punjab, Rajasthan, Haryana, Himachal Pradesh, Delhi and Union Territory of Chandigarh, through its network of transmission lines and substations. All expenses of the Petitioner including working capital requirements, additional capital expenditure, RM&U expenditure etc. are being paid for by the partner States/ State utilities. Therefore, on a careful consideration of the 1966 Act read with Regulation 35 and Regulation 73 of the 2019 Tariff Regulations, we allow to recover the actual O&M expenses from the participating/ partner states, after normalization, as calculated in the subsequent paragraphs.

23. The details of the actual O&M expenses for the 2014-19 tariff period as submitted by the Petitioner are as under:



(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Breakup of O&M expenses					
Consumption					
Consumption of Stores & Spares	(-)277.40	636.31	750.32	930.22	2423.54
Add from IW	(-)122.28	(-)41.36	285.75	202.28	(-)481.10
Total Consumption	(-)399.68	594.95	1036.07	1132.50	1942.44
Repair & Miscellaneous Expenses					
Normal expenditure	1807.52	1632.43	306.15	1737.11	1429.28
Add From IW	1829.68	1671.43	1907.36	2072.96	1564.31
Total Repair & Miscellaneous Expenses	3637.20	3303.86	2213.51	3810.07	2993.59
Administrative Expenses					
Insurance				0.03	
Security	332.63	163.67	265.3	212.01	379.94
Rent	0.03	0.00	0.00	0.00	0.00
Electricity Charges	11.47	13.42	13.99	10.85	13.83
Travelling and Conveyance	90.63	82.56	79.55	83.90	38.30
Communication expenses	49.37	10.87	9.01	8.39	6.01
Advertising	0.28	0.09	0.28	0.76	1.04
Foundation laying and inauguration	0.00	0.00	0.00	0.00	0.00
Donations	0.00	0.00	0.00	0.00	0.00
Entertainment	0.19	0.40	0.91	0.47	0.55
Total Administrative Expenses	484.60	271.01	369.04	316.41	439.67
Employee Expenses					
Salaries Wages and Allowance	9570.71	10579.01	9853.8	10069.15	10263.23
Staff Welfare expenses					
Productivity Linked Incentive					
Expenditure on VRS					
Ex-gratia					658.61
Total Employee Cost	9570.71	10579.01	9853.8	10069.15	10921.84
Loss of Store					
Provisions					
Corporate office expenses					
Others	28191.30	31859.78	32738.90	34515.28	37538.08
Sub-total	28191.30	31859.78	32738.90	34515.28	37538.08
Total O&M Expenses	41484.13	46608.61	46211.40	49843.41	53835.62



24. We observe that in addition to ex-gratia, charges towards hot and cold weather, sports expenses, incentive to partner states, award, prizes and mementos and scholarships have also been included under the head 'Other expenses', for the 2014-19 tariff period as tabulated below:

(Rs in lakh)

	Heads	2014-15	2015-16	2016-17	2017-18	2018-19
(a)	Ex-Gratia	0.00	0.00	0.00	0.00	658.61
(b)	Hot and Cold weather charges	0.88	1.43	2.88	2.28	0.41
(c)	Sports Expenses	6.89	9.90	7.18	9.03	10.27
(d)	Incentive to Partner States	88.65	165.87	134.08	120.74	208.41
(e)	Award Prizes and Mementos	1.36	3.36	12.57	2.17	2.82
(f)	Scholarships	0.49	1.79	0.92	1404.46	1.06
	Total	98.27	182.35	157.63	1538.68	881.58

25. As the charges under the heads as indicated in the table under paragraph 24 above are not directly related to the operation and maintenance of the generating stations, these expenses have not been considered for working out the normative O&M expenses for the 2019-24 tariff period. Accordingly, the O&M expenses for the 2014-19 tariff period, considered for the purpose of normalization are tabulated below:

(Rs in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Breakup of O&M expenses					
Consumption					
Consumption of Stores & Spares	(-)277.40	636.31	750.32	930.22	2423.54
Add from IW	(-)122.28	(-)41.36	285.75	202.28	(-)481.10
Total Consumption	(-)399.68	594.95	1036.07	1132.50	1942.44
Repair & Miscellaneous					



	2014-15	2015-16	2016-17	2017-18	2018-19
Expenses					
Normal expenditure	1807.52	1632.43	306.15	1737.11	1429.28
Add From IW	1829.68	1671.43	1907.36	2072.96	1564.31
Total Repair & Miscellaneous Expenses	3637.20	3303.86	2213.51	3810.07	2993.59
Administrative Expenses					
Insurance				0.03	
Security	332.63	163.67	265.3	212.01	379.94
Rent	0.03	0.00	0.00	0.00	0.00
Electricity Charges	11.47	13.42	13.99	10.85	13.83
Travelling and Conveyance	90.63	82.56	79.55	83.90	38.30
Communication expenses	49.37	10.87	9.01	8.39	6.01
Advertising	0.28	0.09	0.28	0.76	1.04
Foundation laying and inauguration	0.00	0.00	0.00	0.00	0.00
Donations	0.00	0.00	0.00	0.00	0.00
Entertainment	0.19	0.40	0.91	0.47	0.55
Total Administrative Expenses	484.60	271.01	369.04	316.41	439.67
Employee Expenses					
Salaries Wages and Allowance	9570.71	10579.01	9853.8	10069.15	10263.23
Staff Welfare expenses					
Productivity Linked Incentive					
Expenditure on VRS					
Ex-gratia					0.00
Total Employee Cost	9570.71	10579.01	9853.8	10069.15	10921.84
Loss of Store					
Provisions					
Corporate office expenses					
Others	28093.03	31677.43	32738.90	34515.28	37538.08
Sub-total	28093.03	31677.43	32738.90	34515.28	37538.08
Total O&M Expenses	41385.86	46426.26	46053.73	48304.73	52954.04

26. The 2019 Tariff Regulations do not provide for O&M expenses for the generating stations of the Petitioner. However, Regulation 35(2)(a) of the 2019 Tariff Regulations, specifies the normative O&M expenses allowable for other hydro projects, whose tariff is determined by the Commission. It is observed that the



normative O&M expenses specified under Regulation 35(2)(a) of the 2019 Tariff Regulations, have been arrived at by normalizing the actual O&M expenses of the 2014-19 tariff period, with an escalation rate of 5%.

27. In line with the above methodology, the normalized O&M expenses arrived for the year 2018-19 are as follows:

(Rs in lakh)

	Normalized O&M expenses for 2018-19 (Base year)
Bhakra	25808.78
Dehar	23934.18
Pong	4023.89

28. Since, normative O&M expenses have not been specified for the projects of the Petitioner, as stated earlier, we are inclined to adopt the methodology [as considered while framing Regulation 35(2)(a)] for determining the normative O&M expenses for the projects of the Petitioner for the 2019-24 tariff period.

29. The normalized expenses thus arrived at for each station for the year 2018-19, has been further escalated with an escalation factor of 4.77% per year to arrive at the normative O&M expenses for the 2019-24 tariff period. Based on the above, the normative O&M expenses for the projects of the Petitioner have been worked out and allowed as follows:

(Rs. in lakh)

Projects	2019-20	2020-21	2021-22	2022-23	2023-24
Bhakra	27039.86	28329.66	29680.99	31096.77	32580.09
Dehar	25075.84	26271.96	27525.13	28838.08	30213.65
Pong	4215.83	4416.92	4627.61	4848.35	5079.61
Total	56331.53	59018.54	61833.73	64783.2	67873.35



30. Accordingly, the Petitioner is permitted to recover the aforesaid normative O&M expenses or the actual O&M expenses incurred, for the 2019-24 tariff period, whichever is less, directly from the partner States/ State utilities.

31. Petition No. 72/GT/2021 is disposed of in terms of the above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(P. K. Pujari)
Chairperson

