

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 97/GT/2020**

**Coram:**

**Shri P.K. Pujari, Chairperson  
Shri I.S. Jha, Member  
Shri Pravas Kumar Singh, Member**

**Date of Order: 13<sup>th</sup> May 2022**

**IN THE MATTER OF**

Determination of tariff of Tehri Hydroelectric Power Project, Stage-I (1000 MW) for the period from 1.4.2019 to 31.3.2024

**AND**

**IN THE MATTER OF**

THDC India Limited,  
Bhagirath Puram,  
Rishikesh-249001, Uttarakhand

**.... Petitioner**

**Vs**

1. Punjab State Power Corporation Limited,  
The Mall,  
Patiala – 147001 (Punjab)
2. Haryana Power Utilities,  
Shakti Bhawan, Sector 6,  
Panchkula – 134 109 (Haryana)
3. Uttar Pradesh Power Corporation Limited,  
Shakti Bhawan, 14 Ashok Marg,  
Lucknow – 226001 (UP)
4. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
Behind Nehru Place Bus Terminal,  
New Delhi-110019



5. BSES Yamuna Power Limited,  
3rd Floor, Shakti Kiran Building,  
Karkardooma, Near Court,  
New Delhi-110092
6. Tata Power Delhi Distribution Limited,  
33 KV Grid Sub-Station Building, Hudson Lane,  
Kingsway Camp, Delhi-110009
7. Chandigarh Administration,  
1st Floor, UT Secretariat, Sector 9-D,  
Chandigarh-160009
8. Uttarakhand Power Corporation,  
Limited, Urja Bhawan, Kanwali Road,  
Dehradun-248001
9. Himachal Pradesh State Electricity Board Limited,  
Vidyut Bhawan, Shimla-171004
10. Jaipur Vidyut Vitran Nigam Limited,  
Vidyut Bhawan, Janpath, Jyotinagar,  
Jaipur-302005 (Rajasthan)
11. Ajmer Vidyut Vitran Nigam Limited,  
Old Powerhouse, Hatthi Bhatta, Jaipur road,  
Ajmer-305001 (Rajasthan)
12. Jodhpur Vidyut Vitran Nigam Limited,  
New Powerhouse, Industrial Area,  
Jodhpur-342003 (Rajasthan)
13. Power Development Department,  
Government of J&K, Civil Secretariat,  
Jammu -180001 (J&K)

....Respondents

**Parties present:**

Ms. Anushree Bardhan, Advocate, THDCIL  
Ms. Srishti Khindaria, Advocate, THDCIL  
Shri Ravi Nair, Advocate, THDCIL  
Shri Rajesh Sharma, THDCIL  
Shri Mukesh Kumar Verma, THDCIL  
Shri Ajay Vaish, THDCIL  
Shri Rakesh Singh, BRPL  
Shri Brijesh Kumar Saxena, UPPCL  
Shri Raunak Jain, Advocate, TPDDL



Shri Ravindra Khare, MPPMCL  
Ms. Megha Bajpeyi, BRPL  
Shri R.B. Sharma, Advocate, BRPL  
Shri Mohit Moudgal, Advocate, BYPL

## **ORDER**

This petition has been filed by the Petitioner THDC, for determination of the tariff of Tehri Hydroelectric Power Project, Stage-I (4x250 MW) (the generating station) for the period from 1.4.2019 to 31.3.2024 in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short 'the 2019 Tariff Regulations').

### **Background**

2. The generating station located in the State of Uttarakhand is a storage type hydro power generating station, providing peaking power and is designed to produce annual energy generation of 2797 MUs. The Tehri Hydro Power Complex comprises of the generating station (1000 MW), Tehri Pumped Storage Generating station (1000 MW) and downstream power station at Koteshwar (400 MW). The entire generating station is scheduled to have an aggregate capacity of 2400 MW. The generating station comprises of four units with a capacity of 250 MW each. The date of commercial operation of the units of the generating station are as under:

Unit-IV	22.9.2006
Unit-III	9.11.2006
Unit-II	30.3.2007
Unit- I/ Generating station	9.7.2007

3. The Commission vide its order dated 29.3.2017 in Petition No. 178/GT/2015 had determined the tariff of the generating station for the 2014-19 tariff period. Thereafter, the Commission vide its order dated 5.12.2017 in Review Petition No.



20/RP/2017 (in Petition No. 172/GT/2015), revised the capital cost and annual fixed charges for the 2014-19 tariff period. Further, the Commission vide its order dated 2.5.2022 in Petition No. 98/GT/2020 revised the tariff of the generating station for the 2014-19 tariff period after truing-up exercise. Subsequently, the Commission vide corrigendum order dated 10.5.2022 in Petition No. 98/GT/2020, after rectification of certain clerical/arithmetical errors, revised the tariff of the generating station for the 2014-19 tariff period, as under:

### Capital Cost allowed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	705372.64	708741.89	712806.14	716361.33	721586.93
Add: Additional capital expenditure allowed	3369.25	4064.25	3555.19	5225.59	390.89
Closing Capital Cost as on 31 <sup>st</sup> March of the year	<b>708741.89</b>	<b>712806.14</b>	<b>716361.33</b>	<b>721586.93</b>	<b>721977.82</b>

### Annual Fixed Charges allowed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	37094.91	37214.35	37339.57	37484.21	37578.38
Interest on Loan	24423.09	20270.90	16134.27	9630.35	6042.95
Return on Equity	53355.92	53614.07	53614.07	53614.07	53754.64
Interest on Working Capital	3823.08	3814.48	3805.63	3748.27	3766.03
O&M Expenses	21340.78	22757.81	24268.93	25880.39	27598.84
<b>Total</b>	<b>140037.79</b>	<b>137671.61</b>	<b>135162.47</b>	<b>130357.29</b>	<b>128740.84</b>

4. The Petitioner vide affidavit dated 28.10.2019 has filed the present petition for determination of tariff of the generating station for the 2019-24 tariff period in terms of the provisions of the 2019 Tariff Regulations. The capital cost and the annual fixed charges claimed by the Petitioner for the 2019-24 tariff period are as follows:



## Capital Cost claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	724349.05	729791.21	733529.56	734321.36	735619.16
Add: Addition during the year / period	5442.16	3738.35	791.80	1297.80	564.60
Closing Capital Cost	729791.21	733529.56	734321.36	735619.16	736183.76
Average Capital Cost	727070.13	731660.39	733925.46	734970.26	735901.46

## Annual Fixed Charges claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	37884.87	7710.07	7795.91	7835.40	7874.22
Interest on Loan	3039.52	1347.36	836.61	255.39	0.00
Return on Equity	51099.66	51099.66	51099.66	51099.66	51099.66
Interest on Working Capital	3063.56	2621.00	2705.23	2792.87	2891.17
O & M Expenses	34953.18	36850.93	38857.99	40980.68	43225.52
<b>Total</b>	<b>130040.79</b>	<b>99629.02</b>	<b>101295.40</b>	<b>102963.99</b>	<b>105090.57</b>

5. The Petitioner had filed the additional information vide affidavit dated 15.12.2020 and has served copies of the same on the Respondents. The Respondent UPPCL, Respondent, MPPCL and Respondent, BRPL have filed their reply affidavits on 19.10.2020, 4.11.2020 and 22.6.2021 respectively. In response, the Petitioner has filed their rejoinder affidavits on 27.11.2020, 7.12.2020 and 12.7.2021 respectively. The matter was heard through video conferencing along with Petition No. 98/GT/2020 (for truing up of tariff of the generating station for the period 2014-19 tariff period) on 29.6.2021 and the Commission, after permitting the Respondent TPDDL to file its reply, reserved its order in the matter. In compliance to the directions, the Respondents TPDDL has filed its reply on 19.7.2021 and the Petitioner has filed its rejoinder to the said reply on 27.7.2021. Based on the submissions of the parties and the documents available on record and on prudence check, we proceed to determine the tariff of the generating station for 2019-24 tariff period as stated in the subsequent paragraphs.



## **Capital Cost**

6. Clause (1) of Regulation 19 of the 2019 Tariff Regulations provides that the capital cost as determined by the Commission, after prudence check, in accordance with this regulation shall form the basis for determination of tariff for existing and new projects. However, capital cost for an existing project is governed as per clause (3) of Regulation 19 of the 2019 Tariff Regulations, which is provided as under:

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of renovation and modernization as admitted by this Commission in accordance with these regulations;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

7. The Petitioner vide Form-I(I) of this petition has claimed capital cost as indicated in the table under paragraph 4 above. The Commission vide its order dated 2.5.2022 in Petition No.98/GT/2020, had approved the closing capital cost of Rs.721977.82 lakh as on 31.3.2019. Accordingly, in terms of Regulation 19(3) of the 2019 Tariff Regulations, the capital cost of Rs.721977.82 lakh as on 31.3.2019 has been considered as the opening capital cost as on 1.4.2019 for the purpose of determination of tariff for the 2019-24 tariff period.



## **Discharge of liabilities**

8. The Petitioner has not claimed any discharge of liabilities during the 2019-24 tariff period. However, the Petitioner is directed to submit the reconciliation statement showing details of such liabilities as per balance sheet for the 2019-24 tariff period, duly certified by auditor and also furnish the break-up of discharges included in the liabilities discharged against admitted items within the original scope of work or other than within the original scope of work of the project, at the time of truing-up of tariff exercise.

## **Additional Capital Expenditure**

9. Clauses (1) and (2) of Regulations 25 and Regulation 26 of the 2019 Tariff Regulations, provides as under:

*“25. Additional Capitalization within the original scope and after the cut-off date:*

*(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:*

- a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- b) Change in law or compliance of any existing law;*
- c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- d) Liability for works executed prior to the cut-off date;*
- e) Force Majeure events;*
- f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- g) Raising of ash dyke as a part of ash disposal system.*

*(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*

- a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*
- b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- c) The replacement of such asset or equipment is necessary on account of*



*obsolescence of technology; and*

*d) The replacement of such asset or equipment has otherwise been allowed by the Commission.*

*26. Additional Capitalization beyond the original scope*

*(1) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:*

*a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;*

*b) Change in law or compliance of any existing law;*

*c) Force Majeure events.*

*d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;*

*e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case basis:*

*Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M) or repairs and maintenance under O&M expenses, the same shall not be claimed under this Regulation;*

*(f) Usage of water from sewage treatment plant in thermal generating station.*

*(2) In case of de-capitalization of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of de-capitalization shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalization takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalized. “*

10. The Petitioner has claimed projected additional capital expenditure during the 2019-24 tariff period under Regulation 76 i.e. 'Power to Relax' and Regulation 77 i.e. 'Power to Remove difficulty', Regulation 26(1)(c) and Regulation 26(1)(d) of the 2019 Tariff Regulations. The Respondent, UPPCL in its reply has submitted that the Petitioner has claimed assets/works such as photocopies, duplicating machine, Guest house fittings, after office equipment, office furniture, guest house furniture, TV, projectors etc., in recurring manner, but has not submitted any justification for such recurrence, without exhausting the useful life of the assets/works. It has also submitted that the Petitioner in its claim for 25 jeeps, has not clarified as to whether the old vehicles were scrapped and/or if their salvage value has been adjusted. Accordingly,





the Respondent, UPPCL has submitted that the Petitioner may be directed to revise the annual estimates during the 2019-24 tariff period. The Respondent, MPPMCL has submitted that the Petitioners claim for additional capital expenditure, under Regulation 76 and Regulation 77 is without proper justification. It has also submitted that the expenditures claimed do not fall under any of the provisions of the 2019 Tariff Regulations and the claims made under Regulation 26(1)(c) are also not tenable. The Respondent BRPL has submitted that the prayer of the Petitioner for relaxation is liable to be rejected. It has also submitted that the Petitioners claim of additional capital expenditure under Regulation 26(1)(c) of the 2019 Tariff Regulations is for assets/works which cannot be categorized under 'Force Majeure' clause, and these expenses may be met from the normative O&M expenses allowed to the generating station. The Respondent TPPDL has submitted that the claim of the Petitioner for additional capitalization is not due to any specified Force Majeure events and hence the same is liable to be rejected. It has also submitted that the components of additional capital expenditure, unrelated to the project, may be rejected by the Commission.

11. In response to the above, the Petitioner has submitted as under:

(a) The projected expenditure claimed for assets/works are necessary and required for successful and efficient plant operation. Also, the existing vehicles shall be replaced with newer vehicles in a phased manner, considering the condition of the vehicle.

(b) It is not possible to envisage all situations and the implications of the Regulations, as they differ for all generating stations. Hence, the expenditures have been claimed under Regulation 76 (Power to Relax) and Regulation 77- '(Power to Remove Difficulty)' of the 2019 Tariff Regulations.

(c) As regards, assets/works claimed under Regulation 26(1)(c) read with Regulation 3(25)(a) of the 2014 Tariff Regulations, during monsoon season, heavy rainfall and landslide (near the vicinity of DAM) damaged the only



connecting main road for transportation of man & machine. As such, in order to safeguard the main structure of DAM, Spillways & stilling basin, slope stabilization and restoration of roads was essentially required for efficient and successful plant operation.

(d) The proposed expenditure claimed under Regulation 26(1)(c) and Regulation 3(25) read with Regulation 76 and 77 of the 2019 Tariff Regulations is for safety of generating station, based on CEA Regulation 2010 (Measures relating to safety and electric supply), recommendations of IIT-Roorkee and based on Joint Expert Committee recommendations etc.

(e) The items for slope stabilization and channelization of rainwater and rehabilitation, claimed under Regulation 26(1)(c) of the 2014 Tariff Regulations, may be read as claimed under Regulation 26(1)(d) of the 2019 Tariff Regulations.

(f) As the generating station is located in hilly terrain and in a remote area the additional capital expenditure claimed is on account of fulfillment of basic amenities, assets/works essentially required for successful and efficient plant operation, and assets/works essentially required for the safety of the Power plant and on the account of geological surprises.

12. Based on the submissions of the parties and documents available on record, we examine the additional capital expenditure claimed by the Petitioner, on prudence check, as stated in the subsequent paragraphs.

**2019-20**

<i>(Rs. in lakh)</i>				
Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
<b>Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
1	Construction of Civil Structure of hoist way of glass lifts in transformer hall.	19.89	Considering the fact that the expenditures claimed is in the nature of O&M expenses, the same is <b>not allowed</b> .	0.00
2	Installation of lift in transformer hall.	19.60		0.00
3	Face lifting of Portal area of Adit-3 with construction of replica of Shri Badrinath Temple at HPP Tehri.	311.12	Considering the fact that the additional capital expenditure claimed is respect of assets which are not in the nature of Plant & Machinery, the same is <b>not allowed</b> .	0.00
4	Procurement,	14.07	The Petitioner has submitted that mini	14.07



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
	Fabrication & Supply of Water mist system based Mini Fire Tender mounted on TATA 207 Single cabin chassis at Tehri HPP, Bhagirathipuram, Tehri Garhwal.		<p>fire tender is being procured based on the requirement of CISF to safeguard the generating station from fire. Considering that the fact that the expenditure pertains to security and safety of the plant, the additional capital expenditure claimed is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p> <p>The Petitioner is however, directed to submit the actual expenditure along with supporting documents and recommendations of CISF, at the time of truing-up of tariff, failing which the claim may not be considered.</p>	
5	Procurement of Under Water Concrete abrasion Testing Equipment	2.50	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same is <b>not allowed</b> .	0.00
6	Electronic panel for Air Gap & Vibration Monitoring (AGVM) System. The AGVM System is installed at EL600m Unit wise. This system monitors relative position of rotor and stator (Air Gap), shaft displacement (vibration), and acceleration of bearing brackets. Air gap and vibration monitoring system is a condition monitoring tool for generating units of Tehri HPP (4x250MW).	21.78	<p>The Petitioner has submitted that the existing system was non-operational due to defects and deficiencies in panels along with its internal components. As such, new electronic panels were procured from OEM for rectification &amp; operationalization of AGVM (Air Gap Vibration Measurement) system.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the claim of the Petitioner is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner, has, however, not considered the de-capitalization of old asset/work and as such, the amount of Rs.11.55 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is also directed to furnish the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	21.78
7	Electromagnetic flow meters for Generator UGB (Upper Guide	5.58	The Petitioner has submitted that the pressure based mechanical flow meters were installed in the cooling water	5.58



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
	Bearing), LGB (Lower Guide Bearing) and stator cooling water pipelines, The flow meters are installed at EL.595m of Power House for monitoring cooling water flow through UGB, LGB and stator Air coolers.		<p>circuits of the units, which due to ageing, used to display faulty readings and indicate in-correct and unreliable values of cooling water flow. Since the cooling water is for heat exchangers which are provided for guide and thrust bearings and stator cooling, its correct monitoring becomes crucial. The Petitioner has therefore submitted that technologically advance, precise and accurate electromagnetic flow meters have been installed in the respective cooling water circuits, which has helped in minimizing the signaling errors and curtailed chances of maloperation.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however, not considered the de-capitalization of old asset/work and as such, the amount of Rs.2.96 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	
8	SS (Stainless Steel) Gate valves for LGB (Lower Guide Bearing) cooling water circuit of the Generating Units of Tehri HPP (4x250MW)	6.38	The Petitioner has submitted that the cooling water loop of LGB oil bath were made of MS pipelines and were provided with gate valves for isolation and sectionalization in case of emergency/ maintenance. However, with time, the previously installed valves had developed scaling and rusting which resulted in failure in valve operation. The Petitioner has further submitted that the purpose of providing these gate valves was getting defeated and in event of maintenance/ emergency, whole cooling water pipeline has to be drained. These degraded valves were replaced with SS (Stainless Steel) gate valves.	6.38



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
			<p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however, not considered the de-capitalization of old asset/work and as such, the amount of Rs.3.38 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	
9	Dewatering Pump Station for flood prevention Scheme for Tehri HEP. The submersible dewatering pumps (capacity 2x432 cu.M/ Hr) are installed at EL 570.00 (near DPS-1 Sump) and control Panel at El 618 EL of Powerhouse. The discharge pipeline goes through 4D, 4A and 4B gallery to the River near TRT.	203.98	<p>The Petitioner has submitted that as per CEA Regulation 2010 and Central Board of Irrigation &amp; Power Regulations 2010, every Hydro Power plant should have a separate flood prevention dewatering pumping scheme. Therefore, dewatering pump system for flood prevention scheme has been installed in Tehri Powerhouse.</p> <p>Considering the fact that the claim of the Petitioner is for compliance with the existing law, the additional capitalization is <b>allowed</b> under Regulation 26(1)(b) of the 2019 Tariff Regulations. The Petitioner is directed to furnish reasons for such belated compliance to the CEA and CBIP Regulations which were notified in 2010.</p> <p>The Petitioner is also directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	203.98
10	Supply, Erection, Testing and Commissioning of Dynamic Braking Assembly of Unit 1, Tehri HEP	102.49	<p>The Petitioner has submitted that the asset/work has been claimed as replacement for the damaged Dynamic Braking Assembly of Unit 1.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement</p>	102.49



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
			<p>of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however, not considered the de-capitalization of old asset/work and as such, the amount of Rs.54.35 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	
11	SF6 Gas leakage detector for 420 KV GIS (Gas Insulated Switchyard)	0.57	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same is <b>not allowed</b>	0.00
12	Vibration measurement and analysis instrument	10.00	<p>The Petitioner has submitted that the expenditure claimed is as per the recommendations of IIT Roorkee on the report of Vibration Data Analysis of Rotary Machines and Auxiliaries for the generating station and Koteshwar HEP.</p> <p>Considering the submissions of the Petitioner and since the expenditure claimed is based on the recommendations of IIT, which is for the safety of the generating station, the additional capitalization claimed is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p> <p>The Petitioner is however, directed to submit the actual claim along with the recommendations/report of IIT Roorkee, at the time of truing-up of tariff, failing which the claim may not be considered.</p>	10.00
13	Winch system (3rd) along with inspection trolley complete in all respect for inspection of Runner, Runner pit and Draft Tube of Tehri HPP	16.00	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same is <b>not allowed</b>	0.00
14	To channelize the rainwater of Lower Bhagirathipuram	150.00	The Petitioner has submitted that to channelize the rainwater of whole Bhagirathi Puram colony and	0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed	
	colony (simplex quarters, duplex quarters, Shopping complex, Russian field hostel, All saint convent school, Hospital Building, Type – I, II, III & IV Quarters and Guest house etc. (Part-I)		surrounding area into Bhaitoginala, the work is required.  It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b> .		
15	To channelize the rainwater of road (approximate 2 Km length) above powerhouse and surrounding area (approximate catchment area - 500000 sq mt)	200.00	The Petitioner may claim the same with relevant details at the time of truing-up of tariff which would be dealt with in accordance with the relevant Regulations.	0.00	
16	Procurement of Hydraulic Lifter with vehicle TATA 407.	17.16	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same are <b>not allowed</b> .	0.00	
17	Supply installation, testing & commissioning of 16-meter-High Mast Tower with LED flood light fitting at Bhagirathipuram.	22.56		0.00	
18	Electrification work of Museum building for Tehri Complex near Tehri Dam site.	12.26		0.00	
19	Internal Electrification work of Project Head residence at B' Puram.	4.95		0.00	
20	Construction of Project Head house at Bhagirathi Puram	170.00		0.00	
21	Hospital Building	498.00		The Petitioner has submitted that the new hospital building is required in Bhagirathi Puram as the existing hospital is functioning from a temporary building. A permanent hospital is needed to cater the medical needs of the staff posted in the project.	498.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
			<p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however, not considered the de-capitalization of old asset/work and as such, the amount of Rs.264.10 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	
22	Installation of 2T capacity inspection device at ILO	30.86	<p>The Petitioner has submitted that as the Intermediate level outlet (ILO) tunnel is Provided to release water in river during any emergency. ILO being an important part of Project, it requires regular inspection and accordingly it was decided to install inspection device to facilitate inspection of ILO gates (Radial &amp; stoplog emergency gate) and its repair works.</p> <p>Considering the fact that the expenditure claimed is in respect of assets which are in the nature of O&amp;M expenses, the same is <b>not allowed</b>.</p>	0.00
23	Installation of 10T capacity penstock inspection device at PAC	39.71	<p>Considering the fact that the expenditure claimed is in respect of assets which are in the nature of O&amp;M expenses, the same is <b>not allowed</b>.</p>	0.00
24	Purchase of Submersible pump set 75 HP with starter	5.00	<p>The Petitioner has submitted that the pumps are required for strengthening the water supply scheme, which is essentially required to function properly. In our view, the expenditure claimed is for assets which are not related to Plant &amp; Machinery and the same may be met from the normative O&amp;M expenses allowed to the generating station. Hence, the claim of the Petitioner is <b>not allowed</b>.</p>	0.00
25	Purchase of starter 150 HP (03 Numbers)	6.00	<p>Considering the fact that the expenditure claimed is in the nature of O&amp;M expenses, the same is <b>not allowed</b></p>	0.00





Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
26	Purchase of Tata-407 Truck (02 Numbers)	21.00	<p>The Petitioner has submitted that the provision has been kept for purchase of New heavy vehicle against the BER (Beyond Economic Repair) vehicle in use of transportation of goods.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has also claimed decapitalization of the old assets and the gross value of de-capitalized assets claimed, has been considered under 'De-capitalization' in paragraph 22 below. The Petitioner is however, directed to submit the actual claim and supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	21.00
27	Purchase of Tata-407 Truck with Hydraulic lifter	17.20	<p>The Petitioner has submitted that provision has been kept for purchase of new heavy vehicle against the BER vehicle in use of transportation of goods. Considering the above submission of the Petitioner and that the claim pertains to replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has also claimed decapitalization of the old assets and the gross value of de-capitalized assets claimed, has been considered under 'De-capitalization' in paragraph 22 below. The Petitioner is however, directed to submit the actual claim and supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	17.20
28	Slope Stabilization work at Chinyalisour Priority-II up to 3rd RA Bill.	325.42	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same are <b>not allowed</b> .	0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
29	Design manufacture, supply, transportation, insurance, storage & preservation installation, testing and commissioning of equipment's for seismological station network around Tehri region.	369.60	<p>The Petitioner has submitted that the expenditure has been incurred for the purpose of research and development. Considering the fact that the expenditure claimed is in respect of assets which relate to the security and safety of the plant, the claim of the Petitioner is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p> <p>The Petitioner is however, directed to clarify, as to whether the asset claimed is to be capitalized specifically for the generating station. The Petitioner is also directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	369.60
30	Photocopier, Duplicating machine	2.00	<p>In our view, the expenditure claimed in respect of assets which are not related to Plant &amp; Machinery and are minor in nature, may be met through the normative O&amp;M expenses allowed to the generating station. Hence, the claims are <b>not allowed</b>.</p>	0.00
31	Guest House/ Club Fittings	4.75		0.00
32	office other equipment	6.00		0.00
33	TV, Projectors etc.,	9.70		0.00
34	Office Furniture	120.00		0.00
35	Guest House Furniture	15.00		0.00
36	Small Value Furniture	9.00		0.00
37	Procurement of 193 numbers of Desktop with UPS & 74 nos. Printers.	150.00		0.00
38	Scanner (53 Numbers)	2.00		0.00
39	Domain controller Servers, Antivirus, Biometric Server & reconfiguration of LAN.	34.00		0.00
40	Installation of LAN and Telephone Connection in Administration Building (Electrical wing)	2.31		0.00
41	Installation of LAN and Telephone	20.83		0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
	Connection in Administration Building (Dam wing & Finance wing, IT wing, P&A)			
42	Installation of Wi-Fi equipment and LAN work at Powerhouse	15.00		0.00
43	Internet connectivity for New Hospital building and CSR (old P&A).	15.00		0.00
44	Laptop Procured under Policy	30.00		0.00
45	Communication Equipment	20.00	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same is <b>not allowed</b>	0.00
<b>Regulation 26(1)(c) of the 2019 Tariff Regulations</b>				
46	Treatment of slope from EL-750m Road to EL-810m near old police station (Zone-III), Priority-I (Bhaitoginala area on R/B of Chute Spillway)	301.77	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same are <b>not allowed</b> .	0.00
47	Treatment of slope from EL 758m to EL 800m near old police station (Zone-II) (Bhaitoginala area on R/B of Chute Spillway)	343.97		0.00
48	Immediate slope protection measures on slope above T-4 outlet (From EL 680M to 770M) at Right Bank of Stilling Basin (Part A).	648.31		0.00
49	Immediate slope protection measures on slope above T-4 outlet (From EL 680M to 770M), towards DOWNSTREAM at Right Bank of Stilling Basin (Part B).	300.00		0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
50	Treatment of slope Above EL-840m Road near old police station (Bhaitoginala area on R/B of Chute Spillway)	200.00		0.00
51	Slope Stabilization work at Chinyalisour reservoir rim area Priority-III, above EL-807 m.	422.11	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same is <b>not allowed</b> .	0.00
52	Slope Stabilization work adjacent to U/S end of Priority-I, work at Chinyalisour reservoir rim area.	81.54	Considering the fact that the expenditures are in the nature of O&M expenses, the same is <b>not allowed</b> .	0.00
<b>Regulation 26(1)(C) read with Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
53	Establishment Charges & Miscellaneous work of Rehabilitation	15.00	<p>The Petitioner has submitted that the asset/work has been claimed as per decision of Ministry of Power, Gol from time to time.</p> <p>Though the Petitioner has claimed the asset/work due to force majeure events under Regulation 26(1)(c) of the 2019 Tariff Regulations, it has in its rejoinder to the reply of Respondent BRPL, submitted that the asset has been claimed under Regulation 26(1)(d) of the 2019 Tariff Regulations. It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority/MOP, GOI, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the actual expenditure along with supporting documents at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	0.00
54	Establishment for real time flood forecasting system for Tehri.	20.20	<p>The Petitioner has submitted that the expenditure has been incurred for the purpose of research and development.</p> <p>Considering the fact that the expenditure claimed is in respect of assets which</p>	20.20



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Amount allowed
			<p>relate to the safety of the plant, the claim of the Petitioner is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p> <p>The Petitioner is however, directed to clarify, as to whether the asset claimed is to be capitalized specifically for the generating station. The Petitioner is also directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	
<b>Regulation 26(1)(d) of the 2019 Tariff Regulations</b>				
55	Installation of CCTV at Boat Entry	7.00	<p>The Petitioner has submitted that the expenditure has been incurred as per requirement of CISF for Security. Considering the fact that the expenditure claimed is in respect of assets which relate to the security of the plant, the claim of the Petitioner is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p> <p>The Petitioner is directed to submit the actual expenditure along with supporting documents including the recommendations of CISF at the time of truing-up of tariff, failing which the claim may not be considered.</p>	7.00
56	NAS for CCTV system	23.00	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same is <b>not allowed</b>	0.00
	<b>Total amount claimed</b>	<b>5442.17</b>		
	<b>Total amount allowed</b>			<b>1297.28</b>

13. Accordingly, the total projected additional capital expenditure of Rs.1297.28 lakh is allowed in 2019-20.

### 2020-21



(Rs. in lakh)

Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
<b>Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
1	Procurement of Automatic Weather Station	4.50	<p>The Petitioner has submitted that the expenditure has been incurred to acquire Weather Data near reservoir.</p> <p>Considering the fact that the expenditure claimed is in respect of assets which relate to the safety of the plant, the claim of the Petitioner is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p> <p>The Petitioner is however, directed to submit the actual claim along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	4.50
2	Procurement of Control panels of Butterfly valve in all 04 units	3.00	<p>The Petitioner has submitted that the currently installed panels are exposed to humid condition and have started to develop rust.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however, not considered the de-capitalization of old asset/work and as such, the amount of Rs.1.52 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	3.00
3	Replacement of MS(Mild Steel) pipeline of Header for LGB (Lower Guide Bearing) Cooling water circuit in 01 unit	4.00	<p>The Petitioner has submitted that the asset is claimed, since current MS pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p>	4.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
			The Petitioner has, however, not considered the de-capitalization of old asset/work and as such, the amount of Rs.2.02 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.	
4	Replacement of MS (Mild Steel) pipeline of Header for Stator Cooling water circuit in 01 unit	5.00	<p>The Petitioner has submitted that the current MS (Mild Steel) pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.2.53 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	5.00
5	Replacement of MS (Mild Steel) pipeline of UGB (Upper Guide Bearing) Cooling water circuit in 01 unit	3.00	<p>The Petitioner has submitted that the current MS (Mild Steel) pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.1.52 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with</p>	3.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
			supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.	
6	To channelize the rainwater of Lower Bhagirathipuram colony (simplex quarters, duplex quarters, Shopping complex, Russian field hostel, All saint convent school, Hospital Building, Type - I, II, III & IV Quarters and Guest house etc. (Part-I)	150.00	<p>The Petitioner has submitted that to channelize the rainwater of whole Bhagirathi Puram colony and surrounding area into Bhaitoginala, the work is required.</p> <p>It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same along with relevant details at the time of truing-up of tariff which would be dealt with in accordance with the relevant Regulations.</p>	0.00
7	To channelize the rainwater of Upper Bhagirathi puram colony (Type – C & D Quarters, office complex and surrounding area etc. (Part-II)	150.00	<p>The Petitioner has submitted that to channelize the rain water of whole Bhagirathi Puram colony and surrounding area. This work is required to channelize water into Bhaitoginala and afterwards. It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same by furnishing relevant details at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	0.00
8	To channelize the rainwater in whole New Tehri Town and surrounding villages (approximate 08 km length) and to protect the villages adjacent to bhaitoginala (i.e Bhaitogi Sera,	500.00	<p>The Petitioner has submitted that to channelize the rainwater of new Tehri Town and surrounding villages, this work is required to channelize water collected into Bhaitoginala and further towards Downstream of the river. Bhaitoginala is just above Spillway structures. Hence, work is necessary for safety of Downstream structures of dam and Spillway.</p>	0.00





Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
	Sukulpur, Bhilod, Chavadhant, khamda, dibnoo, Pangharkhal, Khutta etc) (Scheme-1st)		<p>It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same by furnishing relevant details at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	
9	To channelize the rainwater of road (approximate 2 Km length) above powerhouse and surrounding area (approximate catchment area - 500000 sq mt)	200.00	<p>The Petitioner has submitted that to channelize the rainwater, towards downstream of the dam, of road above powerhouse and surrounding area, this work is required. Hence, this work is necessary for safety of downstream portion of dam and slope above the powerhouse.</p> <p>It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same by furnishing relevant details at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	0.00
10	Type II QRTS at Koti Colony	450.00	<p>The Petitioner has submitted that this expenditure is essential to provide accommodation to employees, as useful life of most of the houses in Bhagirathi Puram &amp; Koti, have been completed and it is necessary to construct new houses in lieu of old and damaged residences.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p>	450.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
			The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.206.15 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered	
11	Construction of Officers Club	403.00	In our view, the expenditure claimed is for assets/works which are not related to Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence, the claim is <b>not allowed</b> .	0.00
12	Laying of Sewer Lines of left out area of Bhagirathi Puram Colony	450.00		0.00
13	Laying of sewer lines at Koti Colony	420.00		0.00
14	Construction of Museum Building	490.00		0.00
15	Purchased of Jeep (08 Numbers)	64.00	<p>The Petitioner has submitted that provision has been kept for purchase of new vehicle that will replace the old vehicles in use for transportation of staff.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however, not considered the de-capitalisation of old asset/work and as such the amount of Rs.32.32 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure with book value of assets de-capitalized along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	64.00
16	Purchase of 01 Number Wheel Dozer	100.00	<p>The Petitioner has submitted that the provision has been kept for purchase of new wheel dozer, as per the requirement of the project.</p> <p>Considering the nature of the claim, additional capitalization is <b>allowed</b> under</p>	100.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
			Regulation 25(2)(c) of the 2019 Tariff Regulations.  The Petitioner is however, directed to submit the actual claim and supporting documents at the time of truing-up of tariff, failing which the asset will not be allowed. At the time of put to use of new asset, replaced asset would be decapitalised.	
17	Purchase of Submersible pump with starter 60 HP (04 Numbers)	14.00	The Petitioner has submitted that the pumps are required for strengthening the water supply scheme, which is essentially required to function properly.  In our view, the expenditure claimed is for assets/works which are not related to Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence, the claim is <b>not allowed</b> .	0.00
18	Photocopier, Duplicating machine	3.00	In our view, the expenditure claimed is for assets/works which are not related to Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence, the claim is <b>not allowed</b> .	0.00
19	Guest House/ Club Fittings	3.90		0.00
20	Office other equipment	7.00		0.00
21	TV, Projectors, etc	8.75		0.00
22	Office Furniture	5.00		0.00
23	Guest House Furniture	6.00		0.00
24	Small Value Furniture	8.70		0.00
25	Communication Equipment	10.00		0.00
26	Enterprise Antivirus for 3 years.	3.00		0.00
27	Laptop Procured under policy	10.00		0.00
28	Expenditure against E-office.	2.00		0.00
29	Expenditure against office equipment/ Biometric devices etc.	2.50	0.00	
<b>Regulation 26(1)(c) of the 2019 Tariff Regulations</b>				
30	Immediate slope protection measures on slope above T-4	150.00	Considering the fact that the expenditure claimed are in the nature of O&M expenses, the same are <b>not allowed</b> .	0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
	outlet (From EL 680M to 770M), towards DOWNSTREAM at Right Bank of Stilling Basin (Part B).			
31	Treatment of slope Above EL-840m Road near old police station (Bhaitoginala area on R/B of Chute Spillway)	100.00		0.00
<b>Regulation 26(1)(c) read with Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
32	Establishment Charges & Miscellaneous work of Rehabilitation	8.00	<p>The Petitioner has submitted that the asset/work has been claimed as per decisions of Ministry of Power, Gol from time to time.</p> <p>Though the Petitioner has claimed the asset/work due to force majeure events under Regulation 26(1)(c) of the 2019 Tariff Regulations, it has in its rejoinder to the reply of Respondent BRPL, submitted that the asset has been claimed under Regulation 26(1)(d) of the 2019 Tariff Regulations. It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority/MOP, GOI, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same with actual expenditure along with supporting documents at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	0.00
	<b>Total amount claimed</b>	<b>3738.35</b>		
	<b>Total amount allowed</b>			<b>633.50</b>

14. As such, the total projected additional capital expenditure of Rs.633.50 lakh is allowed in 2020-21.



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
<b>Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
1	Replacement of MS (Mild Steel) pipeline of Header for LGB (Lower Guide Bearing) Cooling water circuit in 2nd unit	5.00	<p>The Petitioner has submitted that the asset is claimed, since current MS pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.2.41 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	5.00
2	Replacement of MS(Mild Steel) pipeline of Header for Stator Cooling water circuit in 2nd unit	7.00	<p>The Petitioner has submitted that the current MS (Mild Steel) pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.3.37 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	7.00
3	Replacement of	4.00	The Petitioner has submitted that the	4.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
	MS (Mild Steel) pipeline of UGB (Upper Guide Bearing) Cooling water circuit in 2nd unit		<p>current MS (Mild Steel) pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.1.92 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	
4	HP(High Pressure) Air Compressor for Generating Units and their auxiliaries	210.00	<p>The Petitioner has submitted that the expenditure is incurred due to unavailability of spares of existing compressors from OEM, and the servicing/ overhauling of these compressors could not be taken up properly, leading to decreasing efficiency of compressors. Hence, one additional HP (High Pressure) compressor (Elgi-Sauer make) was procured as standby to old Russian compressors. One new HP air compressor is envisaged to be procured to further strengthen HP compressed air system of tehri Powerhouse to reduce any generation loss for the want of compressed air.</p> <p>Considering the fact that the expenditure claimed is for asset pertaining to safety of the plant, additional capitalization is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p> <p>The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	210.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
5	Winch system (4th) along with inspection trolley complete in all respect for inspection of Runner, Runner pit and Draft Tube of Tehri HPP	16.80	Considering the fact that the expenditure incurred is for assets which are in the nature of O&M expenses, the claim is <b>not allowed</b> .	0.00
6	Communication Equipment.	10.00	In our view, the expenditure claimed is for assets/works which are not related to Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence, the claim is <b>not allowed</b> .	0.00
7	Expenditure against E-office.	2.00		0.00
8	Expenditure against office equipment/Biometric devices etc.	2.50		0.00
9	To channelize the rainwater of Lower Bhagirathi puram colony (simplex quarters, duplex quarters, Shopping complex, Russian field hostel, All saint convent school, Hospital Building, Type – I, II, III, IV Quarters and Guest house etc. (Part-I)	50.00	<p>The Petitioner has submitted that to channelize the rainwater of whole Bhagirathi Puram colony and surrounding area. Further it has submitted that this work is required to channelize water into Bhaitoginala and afterwards.</p> <p>It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same by furnishing relevant details at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	0.00
10	To channelize the rainwater in whole New Tehri Town and surrounding villages (approximate 08 km length) and to protect the villages adjacent to Bhaitoginala (i.e Bhaitogi Sera, Sukulpur, Bhilod,	50.00	<p>The Petitioner has submitted that to channelize the rainwater of whole New Tehri Town and surrounding villages. This work is required to channelize water collected into Bhaitoginala and further towards Downstream of the river. Bhaitoginala is just above Spillway structures. Hence, work is necessary for safety of Downstream structures of dam and Spillway.</p> <p>It is noticed that the claim of the</p>	0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
	Chavadhant, khamda, dibnoo, Pangharkhal, Khutta etc) (Scheme-1st)		<p>Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same by furnishing relevant details at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	
11	Canteen Building in Administrative Block at Bhagirathi Puram	120.00	Considering the fact that the expenditure claimed is in the nature of O&M expenses, the same is <b>not allowed</b>	0.00
12	Purchased of Jeep (05 Numbers)	40.00	<p>The Petitioner has submitted that the expenditure is incurred as Provision has been kept for purchase of new vehicle that will replace the old vehicle in use of transportation of staff.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.19.24 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	40.00
13	Purchase of 125 HP pump sets (02 Numbers)	27.00	The Petitioner has submitted that the pump is required for strengthening the water supply scheme, which is essentially required to function properly.	0.00
14	Purchase of 150 HP pump 01 Number	12.00	In our view, the expenditure claimed is for assets/works which are not related to Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence,	0.00





Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
			the claim is <b>not allowed</b> .	
15	Photocopier, Duplicating machine	10.00	In our view, the expenditure claimed are for assets/works which are not related to Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence, the claims are <b>not allowed</b> .	0.00
16	Guest House/ Club Fittings	3.80		0.00
17	Office other equipment	8.00		0.00
18	TV, Projectors, etc.	7.80		0.00
19	Office Furniture	5.20		0.00
20	Guest House Furniture	5.20		0.00
21	Small Value Furniture	8.50		0.00
22	Laptop Procured under policy	10.00		0.00
<b>Regulation 26(1)(c) read with Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
23	To channelize the rainwater of Upper Bhagirathi puram colony (Type – C & D Quarters, office complex and surrounding area etc. (Part-II)	150.00	<p>The Petitioner has submitted that to channelize the rainwater of whole Bhagirathi Puram colony and surrounding area. Further it has submitted that this work is required to channelize water into Bhaitoginala and afterwards.</p> <p>Though the Petitioner has claimed the asset/work due to force majeure events under Regulation 26(1)(c) of the 2019 Tariff Regulations, it has, in its rejoinder to the reply of Respondent BRPL, submitted that the asset has been claimed under Regulation 26(1)(d) of the 2019 Tariff Regulations. It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority/MOP, GOI, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the actual expenditure along with supporting documents at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	0.00
24	Establishment	5.00	The Petitioner has submitted that the	0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
	Charges & Miscellaneous work of Rehabilitation		<p>asset/work has been claimed as per decisions of Ministry of Power, GOI from time to time.</p> <p>Though the Petitioner has claimed the asset/work due to force majeure events under Regulation 26(1)(c) of the 2019 Tariff Regulations, it has in its rejoinder to the reply of Respondent BRPL, submitted that the asset has been claimed under Regulation 26(1)(d) of the 2019 Tariff Regulations. It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority/MOP, GOI, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the actual expenditure along with supporting documents at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	
25	Purchase of 01 Number fire Tender for CISF	20.00	<p>The Petitioner has submitted that the provision has been kept for purchase of new fire tender. Considering the fact that the claim pertains to security of the plant, the additional capitalization claimed is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p> <p>The Petitioner is however, directed to submit the actual expenditure along with supporting documents, including the recommendations of CISF, at the time of truing-up of tariff, failing which the claim may not be considered.</p>	20.00
<b>Regulation 26(1)(d) of the 2019 Tariff Regulations</b>				
26	Installation of CCTV at DAM Enter, Exit.	2.00	<p>The Petitioner has submitted that the expenditure has been incurred as per requirement of CISF, for Security. Considering the fact that the claim pertains to security of the plant, the additional capitalization claimed is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.</p>	2.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
			The Petitioner is however, directed to submit the actual expenditure along with supporting documents, including the recommendations of CISF, at the time of truing-up of tariff, failing which the claim may not be considered.	
	<b>Total amount claimed</b>	<b>791.80</b>		
	<b>Total amount allowed</b>			<b>288.00</b>

15. Accordingly, the total projected additional capital expenditure of Rs.288.00 lakh is allowed in 2021-22.

### 2022-23

<i>(Rs. in lakh)</i>				
Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
<b>Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
1	Replacement of MS(Mild Steel) pipeline of Header for LGB(Lower Guide Bearing) Cooling water circuit in 3rd unit	5.00	<p>The Petitioner has submitted that the asset is claimed, since current MS pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.2.29 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	5.00
2	Replacement of MS (Mild Steel) pipeline of Header for Stator Cooling water circuit in 3rd unit	7.00	<p>The Petitioner has submitted that the current MS (Mild Steel) pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement</p>	7.00



			<p>of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.3.21 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered</p>	
3	Replacement of MS(Mild Steel) pipeline of UGB(Upper Guide Bearing) Cooling water circuit in 3rd unit	4.00	<p>The Petitioner has submitted that the current MS (Mild Steel) pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.1.83 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	4.00
4	To channelize the rainwater of Upper Bhagirathi puram colony (Type – C & D Quarters, office complex and surrounding area etc. (Part-II)	50.00	<p>The Petitioner has submitted that to channelize the rainwater of whole Bhagirathi Puram colony and surrounding area. Further, the work is required to channelize water into Bhaitoginala and afterwards.</p> <p>It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p>	0.00



			The Petitioner is, however, directed to furnish relevant details at the time of truing-up of tariff, failing which the claim may not be considered.	
5	To channelize the rainwater in whole New Tehri Town and surrounding villages (approximate 08 km length) and to protect the villages adjacent to bhaitoginala (i.eBhaitogi Sera, Sukulpur, Bhilod, Chavadhant, khamda, dibnoo, Pangharkhal, Khutta etc) (Scheme-1st)	500.00	<p>The Petitioner has submitted that to channelize the rainwater of Tehri town and surrounding villages into Bhaitoginala and further towards Downstream of the river this work is required to channelize the water collected. Bhaitoginala is just above Spillway structures and hence the work is necessary for safety of downstream structures of dam and Spillway.</p> <p>It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same by furnishing relevant details at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	0.00
6	Type III quarters at Koti Colony	450.00	<p>The Petitioner has submitted that this expenditure is essential to provide accommodation to employees. As the useful lives of most of the houses in Bhagirathi Puram &amp; Koti have been completed and it is necessary to construct new houses in lieu of old and damaged residences.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.206.15 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of</p>	450.00



			truing-up of tariff, failing which the claim may not be considered.	
7	Purchase of 04 Number Buses	80.00	<p>The Petitioner has submitted that the expenditure is incurred for purchase of new buses to be replaced with old Buses in use of transportation of student and staff after completing the life as per RTO norms.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.36.65 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	80.00
8	Purchased of Jeeps (06 Numbers)	48.00	<p>The Petitioner has submitted that the expenditure is incurred as provision has been kept for purchase of new vehicle, that will replace the old vehicle in use of transportation of staff.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.21.99 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	48.00
9	Photocopier, Duplicating	15.00	In our view, the expenditure claimed are for assets/works which are not related to	0.00



	machine		Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence, the claims are <b>not allowed</b> .	
10	Guest House/ Club Fittings	4.90		0.00
11	office other equipment	9.00		0.00
12	TV, Projectors, etc	6.90		0.00
13	Office Furniture	5.50		0.00
14	Guest House Furniture	4.70		0.00
15	Small Value Furniture	8.30		0.00
16	Laptop Procured under policy	75.00	0.00	
17	Communication Equipment's.	10.00	In our view, the expenditure claimed are for assets/works which are not related to Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence, the claims are <b>not allowed</b> .	0.00
18	Expenditure against E-office.	2.00		0.00
19	Expenditure against office equipment/ Biometric devices etc.	3.50		0.00
<b>Regulation 26(1)(c) read with Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
20	NAS for CCTV system	5.00	Considering the fact that the expenditure incurred is for assets which are in the nature of O&M expenses, the claim is <b>not allowed</b> .	0.00
21	Establishment Charges & Miscellaneous work of Rehabilitation	4.00	<p>The Petitioner has submitted that the asset/work has been claimed as per decisions of Ministry of Power, Gol from time to time.</p> <p>Though the Petitioner has claimed the asset/work due to force majeure events under Regulation 26(1)(c) of the 2019 Tariff Regulations, it has in its rejoinder to the reply of Respondent BRPL, submitted that the asset has been claimed under Regulation 26(1)(d) of the 2019 Tariff Regulations. It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority/MOP, GOI, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the actual expenditure along with supporting documents at the time of truing-up of</p>	0.00



			tariff, which would be dealt with in accordance with the relevant Regulations.	
	<b>Total amount claimed</b>	<b>1297.80</b>		
	<b>Total amount allowed</b>			<b>594.00</b>

16. Accordingly, the total projected additional capital expenditure of Rs.594.00 lakh is allowed in 2022-23.

**2023-24**

<i>(Rs. in lakh)</i>				
Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
<b>Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
1	Replacement of MS(Mild Steel) pipeline of Header for LGB(Lower Guide Bearing) Cooling water circuit in 4th unit	5.00	<p>The Petitioner has submitted that the asset is claimed, since current MS pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.2.18 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered</p>	5.00
2	Replacement of MS (Mild Steel) pipeline of Header for Stator Cooling water circuit in 4th unit	7.00	<p>The Petitioner has submitted that the asset is claimed since the current MS (Mild Steel) pipeline has eroded and prone to fatal failure.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under</p>	7.00





Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
			<p>Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.3.05 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered</p>	
3	Replacement of MS (Mild Steel) pipeline of UGB (Upper Guide Bearing) Cooling water circuit in 4th unit	4.00	<p>The Petitioner has submitted that the asset is claimed since the current MS (Mild Steel) pipeline has eroded and prone to fatal failure. Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.1.75 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	4.00
4	To channelize the rainwater in whole New Tehri Town and surrounding villages (approximate 08 km length) and to protect the villages adjacent to bhaitoginala (i.e Bhaitogi Sera, Sukulpur, Bhilod, Chavadhant, khamda, dibnoo, Pangharkhal,	400.00	<p>The Petitioner has submitted that the expenditure has been incurred to channelize the rainwater of new Tehri town and surrounding villages into Bhaitoginala and further towards Downstream of the river. Further it has submitted that Bhaitoginala is just above dam and Spillway structures and hence the work is necessary for safety of downstream structures of dam and Spillway.</p> <p>It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority, mandating the need for the</p>	0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
	Khutta etc) (Scheme-1st)		<p>expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed</b>.</p> <p>The Petitioner may claim the same by furnishing relevant details at the time of truing-up of tariff, which would be dealt with in accordance with the relevant Regulations.</p>	
5	Purchased of Jeeps (06 Numbers)	48.00	<p>The Petitioner has submitted that the expenditure is incurred as provision has been kept for purchase of new vehicles that will replace the old vehicle in use of transportation of staff.</p> <p>Considering the submissions of the Petitioner and keeping in view that the expenditure is on account of replacement of asset/work due to obsolescence of technology, the same is <b>allowed</b> under Regulation 25(2)(c) of the 2019 Tariff Regulations.</p> <p>The Petitioner has, however not considered the de-capitalisation of old asset/work and as such the amount of Rs.20.94 lakh has been considered under 'Assumed Deletions', in paragraph 22 below. The Petitioner is directed to submit the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which the claim may not be considered.</p>	48.00
6	photocopier, Duplicating machine	5.00	<p>In our view, the expenditure claimed are for assets/works which are not related to Plant &amp; Machinery and may be met through the normative O&amp;M expenses allowed to the generating station. Hence, the claims are <b>not allowed</b>.</p>	0.00
7	Guest House/ Club Fittings	3.60		0.00
8	office other equipment	10.00		0.00
9	TV, Projectors, etc.	5.80		0.00
10	Office Furniture	6.00		0.00
11	Guest House Furniture	3.20		0.00
12	Small Value Furniture	8.00		0.00
13	Laptop Procured under policy	30.00		0.00
14	NAS for CCTV	5.00	Considering the fact that the expenditure	0.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
	system.		incurred is for asset which is in the nature of O&M expenses, the claim is <b>not allowed.</b>	
15	Communication Equipment.	10.00	In our view, the expenditure claimed are for assets/works which are not related to Plant & Machinery and may be met through the normative O&M expenses allowed to the generating station. Hence, the claims are <b>not allowed.</b>	0.00
16	Expenditure against E-office.	2.00		0.00
17	Expenditure against office equipment/Biometric devices etc.	3.50		0.00
18	Enterprise Antivirus for 3 years.	3.50		0.00
<b>Regulation 26(1)(c) read with Regulation 76 &amp; 77 of the 2019 Tariff Regulations</b>				
19	Establishment Charges & Miscellaneous work of Rehabilitation	3.00	<p>The Petitioner has submitted that the asset/work has been claimed as per decisions of Ministry of Power, Gol from time to time.</p> <p>Though the Petitioner has claimed the asset/work due to force majeure events under Regulation 26(1)(c) of the 2019 Tariff Regulations, it has in its rejoinder to the reply of Respondent BRPL, submitted that the asset has been claimed under Regulation 26(1)(d) of the 2019 Tariff Regulations. It is noticed that the claim of the Petitioner is not supported by any document/report or recommendations of any authority/MOP, GOI, mandating the need for the expenditure claimed under this head. In view of this, the additional capital expenditure claimed is <b>not allowed.</b></p> <p>The Petitioner may claim the actual expenditure along with supporting documents at the time of truing-up of tariff, failing which, which would be dealt with in accordance with the relevant Regulations.</p>	0.00
<b>Regulation 26(1)(d) of the 2019 Tariff Regulations</b>				
20	Installation of CCTV at DAM Entry, Exit.	2.00	<p>The Petitioner has submitted that the expenditure has been incurred as per requirement of CISF for security.</p> <p>Considering the fact that the expenditure claimed is for asset which pertains to security of the plant, the additional</p>	2.00



Sl. No.	Head of Work/ Equipment	Claimed	Justification and Reasons for admissibility	Allowed
			capitalization is <b>allowed</b> under Regulation 26(1)(d) of the 2019 Tariff Regulations.  The Petitioner is however, directed to submit the actual expenditure along with supporting documents including the recommendations of CISF at the time of truing-up of tariff, failing which the claim may not be considered.	
	<b>Total amount claimed</b>	<b>564.60</b>		
	<b>Total amount allowed</b>			<b>66.00</b>

17. Accordingly, the total projected additional capital expenditure of Rs.66.00 lakh is allowed in 2023-24.

18. Based on the above, the additional capital expenditure allowed for the 2019-24 tariff period is summarized as under:

	<i>(Rs. in lakh)</i>					
	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Additional capital expenditure allowed within the original scope of work of project <b>(a)</b>	876.41	629.00	56.00	594.00	64.00	<b>2219.41</b>
Additional capital expenditure allowed other than the original scope of work of project <b>(b)</b>	420.87	4.50	232.00	0.00	2.00	<b>659.37</b>
<b>Total Additional capital Expenditure allowed (c)=(a)+(b)</b>	<b>1297.28</b>	<b>633.50</b>	<b>288.00</b>	<b>594.00</b>	<b>66.00</b>	<b>2878.78</b>

### **Decapitalization**

19. As regards to De-capitalization, Regulation 26(2) of 2019 Tariff Regulations, states as follows:

*“In case of de-capitalization of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of de-capitalization shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalization takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalized..”*



20. The Petitioner has not claimed any decapitalization of assets/works on projection basis during the 2019-24 tariff period. However, the Petitioner is directed to submit the details of decapitalization, at the time of truing-up of tariff exercise.

### **Assumed Deletions**

21. As per consistent methodology adopted by the Commission, expenditure on replacement of assets, if found justified, is allowed for the purpose of tariff provided that the capitalization of the said asset is followed by the de-capitalization of the original value of the old asset. However, in certain cases where de-capitalization is affected in books during the following years, to the year of capitalization of new asset, the de-capitalization of the old asset for the purpose of tariff is shifted to the very same year in which the capitalization of the new asset is allowed. Such de-capitalization which is not a book entry in the year of capitalization is termed as "Assumed deletion". Further, in absence of the gross value of the asset being de-capitalized, the same is calculated by de-escalating the gross value of new asset @ 5% per annum till the year of capitalization of the old asset.

22. It is observed that the Petitioner, while claiming the additional capital expenditure has not provided de-capitalization value of old assets which are being replaced. Accordingly, based on above methodology the following assumed deletions is considered as under:



(Rs. in lakh)

Year of Claim	Asset/work	Assumed Deletion
2019-20	Electronic panel for Air Gap & Vibration Monitoring (AGVM) System. The AGVM System is installed at EL600m Unit wise. This system monitors relative position of rotor and stator (Air Gap), shaft displacement (vibration), and acceleration of bearing brackets. Air gap and vibration monitoring system is a condition monitoring tool for generating units of Tehri HPP (4x250MW).	12.13
2019-20	Electromagnetic flow meters for Generator UGB (Upper Guide Bearing), LGB (Lower Guide Bearing) and stator cooling water pipelines, the flow meters are installed at EL.595m of Power House for monitoring cooling water flow through UGB, LGB and stator Air coolers.	3.11
2019-20	SS (Stainless Steel) Gate valves for LGB (Lower Guide Bearing) cooling water circuit of the Generating Units of Tehri HPP (4x250MW)	3.55
2019-20	Supply, Erection, Testing and Commissioning of Dynamic Braking Assembly of Unit 1, Tehri HEP	57.07
2019-20	Hospital Building	277.31
	<b>Total</b>	<b>353.16</b>
2020-21	Procurement of Control panels of Butterfly valve in all 04 units	1.59
2020-21	Replacement of MS (Mild Steel) pipeline of Header for LGB (Lower Guide Bearing) Cooling water circuit in 01 unit	2.12
2020-21	Replacement of MS (Mild Steel) pipeline of Header for Stator Cooling water circuit in 01 unit	2.65
2020-21	Replacement of MS (Mild Steel) pipeline of UGB (Upper Guide Bearing) Cooling water circuit in 01 unit	1.59
2020-21	Type II QRTS at Koti Colony	238.64
2020-21	Purchased of Jeep (08 Numbers)	33.94
	<b>Total</b>	<b>280.54</b>
2021-22	Replacement of MS (Mild Steel) pipeline of Header for LGB (Lower Guide Bearing) Cooling water circuit in 2nd unit	2.53
2021-22	Replacement of MS (Mild Steel) pipeline of Header for Stator Cooling water circuit in 2nd unit	3.54
2021-22	Replacement of MS (Mild Steel) pipeline of UGB (Upper Guide Bearing) Cooling water circuit in 2nd unit	2.02
2021-22	Purchased of Jeep (05 Numbers)	20.20
	<b>Total</b>	<b>28.28</b>
2022-23	Replacement of MS (Mild Steel) pipeline of Header for LGB (Lower Guide Bearing) Cooling water circuit in 3rd unit	2.41
2022-23	Replacement of MS (Mild Steel) pipeline of Header for Stator Cooling water circuit in 3rd unit	3.37
2022-23	Replacement of MS (Mild Steel) pipeline of UGB (Upper Guide Bearing) Cooling water circuit in 3rd unit	1.92
2022-23	Type II QRTS at Koti Colony	216.46
2022-23	Purchase of 04 Numbers Buses	38.48
2022-23	Purchased of Jeeps (06 Numbers)	23.09
	<b>Total</b>	<b>285.72</b>
2023-24	Replacement of MS (Mild Steel) pipeline of Header for LGB	2.29



Year of Claim	Asset/work	Assumed Deletion
	(Lower Guide Bearing) Cooling water circuit in 4th unit	
2023-24	Replacement of MS (Mild Steel) pipeline of Header for Stator Cooling water circuit in 4th unit	3.21
2023-24	Replacement of MS (Mild Steel) pipeline of UGB (Upper Guide Bearing) Cooling water circuit in 4th unit	1.83
2023-24	Purchased of Jeeps (06 Numbers)	21.99
	<b>Total</b>	<b>29.32</b>

### **Capital Cost allowed for 2019-24 tariff period**

23. As stated, the closing capital cost as on 31.3.2019 is Rs.721977.82 lakh as allowed during truing up exercise for the 2014-19 tariff period. The same has been considered as the opening capital cost as on 1.4.2019. Accordingly, the capital cost considered for the purpose of tariff for the 2019-24 tariff period is as follows:

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital cost	721977.82	722921.94	723274.90	723534.62	723842.89
Add: Addition during the year / period	1297.28	633.50	288.00	594.00	66.00
Less: Assumed Deletions	353.16	280.54	28.28	285.72	29.32
<b>Closing Capital cost</b>	<b>722921.94</b>	<b>723274.90</b>	<b>723534.62</b>	<b>723842.89</b>	<b>723879.57</b>
Average capital cost	722449.88	723098.42	723404.76	723688.75	723861.23

### **Debt-Equity Ratio**

24. Regulation 18 of the 2019 Tariff Regulations provides as follows:

**“18. Debt-Equity Ratio:** (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. 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 of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- 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: equity ratio.”

25. The debt equity ratio of 60.70:39.30 was frozen as on the COD of the generating station by the Commission in its order dated 5.6.2014 (in Petition No. 7/RP/2013) based on substantial amount of higher equity invested by the participating



governments. The Commission has however been considering all additional capitalization after the COD as funded by debt so long as the debt equity ratio does not reach 70:30 in terms of Regulation 12 of the 2009 Tariff Regulations. As such, after consideration of all additional capitalization, after COD, as funded by debt, the current debt equity ratio works out as 64.60: 35.40 and the same is considered. The opening and closing debt and equity for the 2019-24 tariff period is as under:

*(Rs. in lakh)*

Asset	As on 1.4.2019		Net Additional Capitalization during 2019-24		As on 31.3.2024	
	Amount	%	Amount	%	Amount	%
Debt	466392.82	64.60%	1901.75	100.00%	468294.57	64.69%
Equity	255585.00	35.40%	0.00	0.00%	255585.00	35.31%
<b>Total</b>	<b>721977.82</b>	<b>100.00%</b>	<b>1901.75</b>	<b>100.00%</b>	<b>723879.57</b>	<b>100.00%</b>

### Return on Equity

26. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as under:

*“30. Return on Equity:(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.*

*(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of 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 return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;*

*Provided further that:*

*i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without Commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*





ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute.

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

### 31. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(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.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity =  $15.50 / (1 - 0.2155) = 19.758\%$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs.1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs.240 crore;

(c) Effective Tax Rate for the year 2019-20 =  $Rs.240 \text{ Crore} / Rs.1000 \text{ Crore} = 24\%$ ; (d)



*Rate of return on equity = 15.50 / (1-0.24) = 20.395%.*

*(3) The generating company or the transmission licensee, as the case may be, shall true up the grosse up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be, on year-to-year basis.”*

27. The Commission in its order dated 20.3.2017 had allowed Return on Equity (ROE) in terms of Regulation 15(3) of the 2009 Tariff Regulations, as the equity position as on COD (9.7.2007) was frozen at Rs.255585.00 lakh. The same was considered by the Commission in its order dated 2.5.2022 in Petition No. 98/GT/2020 also. Further, any subsequent additional capitalization is required to be treated as loan, so as to bring the overall debt equity ratio to 70:30. For grossing up of ROE, during the 2019-24 tariff period, the Petitioner has applied the MAT rate of 17.472% for 2019-20, and the same has been allowed, subject to truing-up. Accordingly, ROE has been worked out and allowed as under:

*(Rs. in lakh)*

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity(A)	255585.00	255585.00	255585.00	255585.00	255585.00
Addition due to additional capitalization(B)	0.00	0.00	0.00	0.00	0.00
Closing Equity (C) = (A + B)	255585.00	255585.00	255585.00	255585.00	255585.00
Average Equity(D) = [(A+C)/2]	255585.00	255585.00	255585.00	255585.00	255585.00
Return on Equity (Base Rate) (E)	16.500%	16.500%	16.500%	16.500%	16.500%
Tax rate for the year(F)	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity(G)	19.993%	19.993%	19.993%	19.993%	19.993%
<b>Return on Equity (H) = (D x G)</b>	<b>51099.11</b>	<b>51099.11</b>	<b>51099.11</b>	<b>51099.11</b>	<b>51099.11</b>

28. As regards ROE for the 2019-24 tariff period, in respect of additional capitalization after cut-off date and beyond the original scope, excluding the additional



capitalization due to change in law, shall be computed at the weighted average rate of interest on loan portfolio of the generating station. This is however not applicable in the present case, as any subsequent additional capitalization has been treated as through loan funding only.

### **Interest on loan**

29. Regulation 32 of the 2019 Tariff Regulations provides as under:

*“32. Interest on loan capital:*

*(1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

*(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*

*(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such asset.*

*(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

*(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.*

*(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”*

30. The salient features of computation of interest on loan are summarized as follows:

a) The gross normative loan amounting to Rs.466392.82 lakh has been



considered as on 1.4.2019.

b) Cumulative repayment amounting to Rs.420260.85 lakh as on 31.3.2019 is as considered by the Commission vide corrigendum order dated 10.5.2022 in Petition No. 98/GT/2020.

c) The repayment during the year has been considered equal to the depreciation allowed for that year.

d) Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest on actual loan as claimed by the Petitioner. This is subject to true-up.

31. Accordingly, Interest on loan has been worked out as follows:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross opening loan (A)	466392.82	467336.94	467689.90	467949.62	468257.89
Cumulative repayment of loan upto previous year (B)	420260.85	457678.96	465475.64	467949.62	468257.89
Net Loan Opening (C)=[(A)-(B)]	46131.97	9657.98	2214.26	0.00	0.00
Repayment during the year (D)	37622.67	7823.13	2492.11	353.77	55.40
Cumulative repayment adjustment on a/c of de-capitalization (E)	204.56	26.44	18.13	45.50	18.72
Net Repayment (F)=[(D)-(E)]	37418.11	7796.68	2473.98	308.28	36.68
Addition due to additional capital expenditure (G)	944.12	352.96	259.72	308.28	36.68
Net Loan Closing (H)= (C+G-F)	9657.98	2214.26	0.00	0.00	0.00
Average Loan(I)=[(C+H)/2]	27894.98	5936.12	1107.13	0.00	0.00
Weighted Average Rate of Interest of loan (J)	9.290%	9.285%	9.271%	9.250%	9.250%
Interest on Loan (K)=(I*J)	2591.37	551.14	102.64	0.00	0.00

### **Depreciation**

32. Regulation 33 of the 2019 tariff Regulations provides as under:

*“33. Depreciation:*

*(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*



*Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.*

*(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 a 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.*

*(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:*

*Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;*

*Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:*

*Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:*

*Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.*

*(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*

*(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I 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 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the assets.*

*(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.*

*(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.”*



33. Cumulative depreciation amounting to Rs.398832.92 lakh as on 31.3.2019, as allowed while truing up tariff for the 2014-19 tariff period, has been considered for the purpose of tariff. In terms of the 2014 Tariff Regulations, the useful life of the hydro generating station is 35 years. The, expired life of the generating station till 31.3.2019 is 11.73 years and the balance useful life of the generating station, as on 31.3.2019, is 23.27 years. However, the 2019 Tariff Regulations stipulates the useful life of the hydro generating station as 40 years. Accordingly, the balance useful life of the generating station as on 1.4.2019 has been considered at 28.27 years, in line with the 2019 Tariff Regulations. It is to be noted that the COD of the generating station is 9.7.2007. Since the generating station has completed 12 years of commercial operation during the year 2019-20. As such, to calculate depreciation in the 2019-24 tariff period, the depreciable value has been spread over the balance useful life of the generating station. Accordingly, depreciation has been worked out and allowed as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross block <b>(A)</b>	721977.82	722921.94	723274.90	723534.62	723842.89
Net Additional capital expenditure during 2019-24 <b>(B)</b>	944.12	352.96	259.72	308.28	36.68
Closing gross block <b>(C)=(A+B)</b>	722921.94	723274.90	723534.62	723842.89	723879.57
Average gross block <b>(D)=[(A+C)/2]</b>	722449.88	723098.42	723404.76	723688.75	723861.23
Value of Freehold land	1315.04	1315.04	1315.04	1315.04	1315.04
Depreciable Value <b>(E)= [(D-value of freehold land)*90%]</b>	649021.36	649605.05	649880.75	650136.35	650291.58
Remaining Depreciable Value at the beginning of the year <b>(F)=(E-Cumulative Depreciation at 'L' at the end of previous year)</b>	250188.44	213354.02	205833.04	198272.14	190627.41
Rate of Depreciation <b>(G)*</b>	5.208%	Spread Over			
Balance useful Life <b>(H)</b>	28.27	27.27	26.27	25.27	24.27
<b>Depreciation (I)= (D*G) (2019-20) and (F/H) (2020-24)</b>	37622.67	7823.13	7834.63	7845.46	7853.73
Cumulative Depreciation at the end of the year <b>(J)=(I+</b>	436455.58	444074.15	451882.34	459709.66	467517.89



	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Cumulative Depreciation at 'L' at the end of previous year)</b>					
Less: Depreciation adjustment on account of de-capitalization (K)	204.56	26.44	18.13	45.50	18.72
<b>Cumulative Depreciation at the end of the year** (L)=(J-K)</b>	<b>436251.03</b>	<b>444047.71</b>	<b>451864.20</b>	<b>459664.16</b>	<b>467499.17</b>

*\*After completion of life of 12 years in 2019-20, the remaining depreciation value has been spread over the balance useful life of the assets from the year 2020-21 onwards.*

*\*\*Cumulative Depreciation as on 31.3.2019 is Rs.398832.92 lakh*

## **O&M Expenses**

34. Regulation 35(2)(a) of the 2019 Tariff Regulations provides for O&M expenses

for this generating station as under:

*"34(3) Following operations and maintenance expense norms shall be applicable for hydro generating stations which have been operational for three or more years as on 1.4.2019:*

	(Rs. in Lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
THDC Stage I	27788.87	29113.44	30501.14	31955.00	33478.15

*Note: The impact in respect of revision of minimum wage and GST, if any, will be considered at the time of determination of tariff."*

35. The Petitioner has claimed total O&M expenses as under:

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Normative O&M expenses Regulation 35(2)(a) of the 2019 Tariff Regulations (a)	27788.87	29113.44	30501.14	31955	33478.15
Impact of pay revision of THDC staff (b)	4637.00	5008.00	5409.00	5842.00	6309.00
Security Expenses	2527.31	2729.49	2947.85	3183.68	3438.37
<b>Total O&amp;M Expenses claimed (a+b)</b>	<b>34953.18</b>	<b>36850.93</b>	<b>38857.99</b>	<b>40980.68</b>	<b>43225.52</b>

36. The Respondent TPDDL has submitted that the Petitioner has claimed O&M expenses in excess of the normative O&M expenses specified by the Commission as per the 2019 Tariff Regulations and the same may not be allowed. The Respondent BRPL has submitted that the Commission may take into consideration the excess margin allowed to hydro generating stations, while allowing any recovery of additional



charges, in excess of allowed annual fixed charges. It has further submitted that the Petitioners claim for recovery on account of pay revision in O&M expenses, is in excess of allowed O&M norms and may not be allowed on the basis of projections.

37. In response to the above, the Petitioner has clarified the following:

- a) The legitimate expenditures incurred by the Petitioner on account of wage revision of employees and Security expenses (CISF) have to be serviced as the same have not been factored in the norms.
- b) Pay revision and allowances, Security expenses, GST etc. are mandatory expenditures and are necessary input to determine the cost of electricity, in terms of Section 61(d) of the Electricity Act, 2003. As such, these expenses may be allowed, as otherwise, it would result in under recovery of cost of electricity. As regards Security expenses, the same belongs to salary of CISF personnel which is permissible under the 2019 Tariff Regulations.

38. We have considered the matter. The Petitioner has claimed normative O&M expenses in accordance with Regulation 35(2)(a) of the 2019 Tariff Regulations. In view of this, the claim of the Petitioner is allowed. However, the additional O&M expenses claimed due to impact of pay revision and security expenses, are dealt with in the following paragraphs.

### **Additional O&M expenses**

#### ***Impact of pay revision of THDC staff***

39. The Petitioner has claimed additional O&M expenses on account of the impact of pay revision of THDC staff as under:

<i>(Rs. in lakh)</i>				
<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
4637.00	5008.00	5409.00	5842.00	6309.00

40. The Petitioner has claimed amount of Rs.4637.00 lakh in 2019-20 as additional O&M expenses based on the impact of pay revision of THDC staff in 2018-19. The





Petitioner has submitted that the actuarial assumption, for future salary increases @8% has been considered to the Pay revision impact in 2018-19 in order to arrive at projected impact of Pay revision for the 2019-24 tariff period. It is pertinent to mention that the Commission vide its order dated 23.11.2021 in Petition No.347/MP/2020 (filed by the Petitioner seeking recovery of impact of wage/pay revision for the 2017-19 tariff period for the generating station) had allowed an amount of Rs.4077.00 lakh (Rs.1579.00 lakh + Rs.228.00 lakh+ Rs.2270.00 lakh) on account of impact of pay revision of Executives, supervisors and workmen of THDC respectively during 2018-19. As such, the impact of wage revision in 2019-20 (after escalating @4.77% of the Rs.4077.00 lakh allowed during 2018-19 in order dated 23.11.2021) works out to Rs.4271.47 lakh, which is lower than the claim of the Petitioner for 2019-20 and the same is allowed. The amount of Rs.4271.47 lakh allowed in 2019-20 is thereafter escalated @4.77% per annum for the period 2020-24 and the same is allowed as additional O&M expenses due to impact of pay revision of THDC staff as under:

<i>(Rs. in lakh)</i>				
<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
4271.47	4475.22	4688.69	4912.34	5146.66

### **Security Expenses**

41. Regulation 35(2) (d) of the 2019 Tariff Regulations provides as under:

*“The Security Expenses and Capital Spares for hydro generating stations shall be allowed separately after prudence check:*

*Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses, the details of year-wise actual capital spares consumed at the time of truing-up of tariff with appropriate justification.”*

42. The Petitioner has claimed Security expenses as part of O&M expenses in terms of Regulation 35(2)(d) of the 2019 Tariff Regulations as under:



<i>(Rs. in lakh)</i>				
<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
2527.31	2729.49	2947.85	3183.68	3438.37

43. The Petitioner has claimed Security expenses (on projected basis) for the 2019-24 tariff period, considering an assumption of 8% to the impact of the actual security expenses incurred in 2018-19. It is pertinent to mention that the Commission vide its order dated 23.11.2021 in Petition No. 347/MP/2020 had submitted that an amount of Rs.2340.10 lakh was allowed as actual security expenses for 2018-19. Accordingly, the security expenses for 2019-20 (after escalating @4.77% of Rs. 2340.10 lakh for 2018-19 allowed in order dated 23.11.2021) works out to Rs.2451.72 lakh, which is lower than the claim of the Petitioner for 2019-20 and the same is allowed. Thereafter, the amount of Rs.2451.72 lakh as allowed in 2019-20 is escalated @4.77% per annum for the period 2020-24 and is allowed on projection basis as additional O&M expenses towards Security expenses as under:

<i>(Rs. in lakh)</i>				
<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
2451.72	2568.67	2691.19	2819.56	2954.06

44. It is noticed that the Petitioner has filed Review Petition No. 28/RP/2021 challenging the Commission's order dated 23.11.2021 in Petition No. 347/MP/2020, on the ground of non-consideration of the impact of wage revision of employee, GST and Minimum wages and Security expenses (CISF) for the period from 1.1.2016 to 31.3.2019. The said review petition is pending for final disposal. In view of this, the security expenses allowed as above is subject to the final decision of the Commission in Review Petition No. 28/RP/2021.



### **Capital Spares, impact due to Minimum Wages and GST**

45. As regard Capital spares, additional impact on account of Minimum Wages and GST, the Petitioner has submitted that the actual amount will be submitted at the time of truing-up of tariff of tariff. In view of this, the allowable capital spares, impact on account of revision of minimum wage and GST shall be considered at the time of truing-up of tariff.

46. Based on the above, the O&M expenses allowed for the generating station for the 2019-24 tariff period is summarized below:

	<i>(Rs. in lakh)</i>				
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Normative O&M expenses Regulation 35(2)(a) of the 2019 Tariff Regulations (a)	27788.87	29113.44	30501.14	31955.00	33478.15
Impact of pay revision of THDC staff (b)	4271.47	4475.22	4688.69	4912.34	5146.66
<b>Total O&amp;M Expenses allowed (a+b)</b>	<b>32060.34</b>	<b>33588.66</b>	<b>35189.83</b>	<b>36867.34</b>	<b>38624.81</b>
Security Expenses allowed separately	2451.72	2568.67	2691.19	2819.56	2954.06

### **Interest on working capital**

47. Sub-section (c) of clause (1) of Regulation 34 of the 2019 Tariff Regulations provides as follows:

*“34. Interest on Working Capital: (1) The working capital shall cover:  
(c) For Hydro generating station (Including Pumped Storage Hydro Generating Station) and transmission system:  
(i) Receivables equivalent to 45 days of annual fixed cost;  
(ii) Maintenance spares @ 15% of operation and maintenance expense including security expenses; and  
(iii) Operation and maintenance expenses including security expenses for one month”*

48. As regards the rate of interest on working capital, Clause (3) of Regulation 34 of the 2019 Tariff Regulations provides as follows:

*“34(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 2019-24 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.”

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.”

### **Working capital for Maintenance Spares**

49. Maintenance spares have been worked out on the basis of 15% of O&M

Expenses as follows:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
5176.81	5423.60	5682.15	5953.04	6236.83

### **Working capital for Receivables**

50. Receivable component of the working capital has been worked out on the basis of 45 days of fixed cost as follows:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
15824.06	12074.58	12221.35	12440.97	12649.00

### **Working capital for O&M Expenses**

51. O&M expenses including security expenses for one (1) month, for the purpose of working capital is as follows:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2876.01	3013.11	3156.75	3307.24	3464.91

### **Interest on working Capital**

52. In accordance with Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital considered on projection basis, for the 2019-24 tariff period is 12.05% (i.e. 1-year SBI MCLR of 8.55% as on 1.4.2019 + 350 basis points). As the tariff of the generating station for 2019-24 tariff period is being determined during the



year 2021-22, the SBI MCLR as on 1.4.2020 (7.75%) and as on 1.4.2021(7.00%) is also available which is lower in comparison of the same as on 1.4.2019 (8.55%). Since the rate of interest on working capital is subject to revision at the time of truing-up of tariff of tariff based on the bank rate as on 1st April of each financial year, we find it prudent to allow the rate of interest as on 1.4.2020 and 1.4.2021, for the subsequent financial years. Accordingly, the rate of interest for the year 2019-20 is 12.05%, 2020-21 is 11.25% and for the subsequent years the rate of interest of 10.50% has been considered (i.e. 1year SBI MCLR of 7.75% as on 1.4.2020 + 350 basis points and 1year SBI MCLR of 7.00% as on 1.4.2021 + 350 basis points).

53. Accordingly, Interest on working capital is allowed as follows:

*(Rs. in lakh)*

	2019-20	2020-21	2021-22	2022-23	2023-24
O & M expenses	2876.01	3013.11	3156.75	3307.24	3464.91
Maintenance Spares	5176.81	5423.60	5682.15	5953.04	6236.83
Receivables	15824.06	12074.58	12221.35	12440.97	12649.00
Total Working Capital	<b>23876.88</b>	<b>20511.29</b>	<b>21060.25</b>	<b>21701.25</b>	<b>22350.73</b>
Rate of Interest	12.05%	11.25%	10.50%	10.50%	10.50%
<b>Total Interest on Working capital</b>	<b>2877.16</b>	<b>2307.52</b>	<b>2211.33</b>	<b>2278.63</b>	<b>2346.83</b>

### Annual Fixed Charges

54. Based on the above, the annual fixed charges approved for the generating station for the 2019-24 tariff period are summarized below:

*(Rs. in lakh)*

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	37622.67	7823.13	7834.63	7845.46	7853.73
Interest on Loan	2591.37	551.14	102.64	0.00	0.00
Return on Equity	51099.11	51099.11	51099.11	51099.11	51099.11
Interest on Working Capital	2877.16	2307.52	2211.33	2278.63	2346.83
O&M Expenses	32060.34	33588.66	35189.83	36867.34	38624.81
Security Expenses	2451.72	2568.67	2691.19	2819.56	2954.06
<b>Total</b>	<b>128702.37</b>	<b>97938.22</b>	<b>99128.73</b>	<b>100910.10</b>	<b>102878.53</b>



### **Normative Annual Plant Availability Factor (NAPAF)**

55. Clause (4) of Regulation 50(A) of the 2019 Tariff Regulations provides for the Normative Annual Plant Availability Factor (NAPAF) for hydro generating stations already in operation. The Petitioner has claimed the NAPAF of 76.55% in 2019-20 and thereafter at 77% each for the period 2020-24. The Respondent UPPCL, Respondent, MPPMCL and Respondent, TPDDL have submitted that the Petitioner's claim for NAPAF is not as per Regulation 50(A) of the 2019 Tariff Regulations. In response, the Petitioner has submitted that a typographical error had occurred in Form-II and the NAPAF of the generating station for the 2019-24 tariff period may be read as 80% in terms of Regulation-50(A) of the 2019 Tariff Regulations. In view of this, the NAPAF of 80% has been considered for the generating station, as per Regulation 50(A) of the 2019 Tariff Regulations.

### **Design Energy**

56. The Commission vide corrigendum order dated 10.5.2022 in Petition No. 98/GT/2020 had approved the annual Design Energy (DE) of 2797 Million units (MU) for the 2014-19 tariff period for the generating station. The same has been claimed by the Petitioner for the 2019-24 tariff period. Accordingly, the DE of 2797 Mus have been considered for this generating station for 2019-24 tariff period as per month-wise details below:

<b>Month</b>		<b>Design Energy (MU)</b>
April	I	64.77
	II	65.54
	III	73.71
May	I	82.21
	II	72
	III	80.92
June	I	70.97



Month		Design Energy (MU)
	II	70.07
	III	21.86
July	I	23.95
	II	25.23
	III	40.35
August	I	123.83
	II	129.50
	III	186.18
September	I	89.51
	II	94.82
	III	56.25
October	I	65.48
	II	54.79
	III	42.68
November	I	54.87
	II	55.91
	III	57.70
December	I	92.75
	II	94.6
	III	103.11
January	I	96.33
	II	99.08
	III	108.97
February	I	102.54
	II	81.36
	III	68.12
March	I	84.04
	II	82.31
	III	80.26
Total		<b>2797</b>

### **Application Fee and Publication Expenses**

57. The Petitioner has sought the reimbursement of tariff filing fees and the expenses incurred towards publication of notices for application of tariff for the 2019-24 tariff period. The Petitioner has, submitted that reimbursement towards filing fees and publication expenses are in accordance in terms of the Regulation 70(1) of the 2019 Tariff Regulations. In view of the above, 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



Regulation 70(1) of the 2019 Tariff Regulations.

### **Summary**

58. The summary of the annual fixed charges claimed by the Petitioner and the annual fixed charges allowed in this order (on projection basis) for the 2019-24 tariff period, for the generating station is summarized below:

	<i>(Rs. in lakh)</i>				
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Annual fixed charges claimed	130040.79	99629.02	101295.40	102963.99	105090.57
Annual fixed charges allowed	<b>128702.37</b>	<b>97938.22</b>	<b>99128.73</b>	<b>100910.10</b>	<b>102878.53</b>

59. Annexure-I given hereunder form part of this order

60. Petition No.97/GT/2020 is disposed of in terms of the above.

**Sd/-**  
**(Pravas Kumar Singh)**  
**Member**

**Sd/-**  
**(I. S. Jha)**  
**Member**

**Sd/-**  
**(P. K. Pujari)**  
**Chairperson**





**Annexure I**

**Weighted Average Rate of Depreciation for the 2019-24 tariff period**

Sl. No.	Name of assets	Depreciation Rate	2019-20	
			Gross Block as on 01.04.2019	Depreciation Amount
1	<b>LAND</b>	3.34%		-
(A)	Free Hold	0.00%	1315.04	-
(B)	Lease Hold	3.34%	-	-
2	<b>BUILDING</b>	3.34%		-
(A)	RESIDENTIAL BUILDING	3.34%	4997.19	166.91
(B)	NON RESIDENTIAL BUILDING	3.34%	4756.46	158.87
(C)	TEMPORARY BUILDING (other than temporary structure)	3.34%	600.20	20.05
3	ROAD & BRIDGES	3.34%	2123.48	70.92
4	CONSTRUCTION PLANT AND MACHINERY	5.28%	1027.10	54.23
5	GENERATING PLANT AND MACHINERY	5.28%		-
(A)	MAIN GENERATING PLANT AND MACHINERY	5.28%	171656.50	9063.46
(B)	SWITCH GEAR INCLUDING CABLE CONNECTIONS	5.28%	1747.90	92.29
6	HYDRAULIC WORKS	5.28%		-
(A)	DAM BARRAGE & SPILLWAYS	5.28%	392651.24	20731.99
(B)	UNCLASSIFIED LAND	3.34%	160554.40	5362.52
(C)	Less: - IRRIGATION COMPONENT	3.34%	-144133.80	-4814.07
(D)	TUNNELS, SURGE TANKS, PENSTOCKS & OTHER HYDRAULIC WORKS EXCL. PSP ESSENTIAL WORKS	5.28%	116975.06	6176.28
7	SELF PROPELLED VEHICLES	9.50%	1434.70	136.30
8	FURNITURE AND FIXTURE	6.33%	501.24	31.73
9	WATER SUPPLY, DRAINAGE AND SEWERAGE	5.28%	751.85	39.70
10	ASSETS NOT OWNED BY THE COMPANY	5.28%	2323.83	122.70
11	MISCELLANEOUS ASSETS / EQUIPMENTS	6.33%	3849.30	243.66
12	SUBSTATION EQUIPMENT	5.28%	654.99	34.58
13	INTERNAL DISTRIBUTION LINES	5.28%	242.70	12.81
	<b>Total</b>		<b>724029.40</b>	<b>37704.92</b>
	<b>Weighted Average Rate of Depreciation</b>			<b>5.208%</b>

