CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 255/GT/2020

Coram:

Shri I.S. Jha, Member Shri Arun Goyal, Member Shri Pravas Kumar Singh, Member

Date of Order: 28th July, 2023

IN THE MATTER OF

Petition for truing-up of tariff for the period 2014-19 and determination of tariff for the period 2019-24 in respect of Uri-I hydroelectric Project (480 MW).

AND

IN THE MATTER OF

NHPC Limited, NHPC Office Complex, Sector-33, Faridabad (Haryana)- 121003

....Petitioner

Vs

- Punjab State Power Corporation Limited, The Mall, Near Kali Badi Mandir, Patiala - 147 001 (Punjab)
- 2. Haryana Power Purchase Centre Shakti Bhawan, Sector 6 Panchkula-134 109 (Haryana).
- 3. BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place New Delhi-110 019.
- 4. BSES Yamuna Power Limited, Shakti Kiran Building, Karkardooma, Delhi- 110 072
- Tata Power Delhi Distribution Limited,
 33 kV Sub-Station Building,
 Hudson Lane, Kingsway Camp,
 New Delhi-110 009.
- 6. Power Development Department, New Secretariat, Jammu- 180 001 (J&K)



- 7. Uttar Pradesh Power Corporation Limited, Shakti Bhavan, 14, Ashok Marg, Lucknow - 226 001 (Uttar Pradesh).
- Ajmer Vidyut Vitaran Nigam Limited
 Old Powerhouse, Hatthi Bhatta,
 Jaipur Road, Ajmer 305 001 (Rajasthan)
- Jaipur Vidyut Vitaran Nigam Limited, Vidyut Bhawan, Janpath, Jaipur - 302 005
- Jodhpur Vidyut Vitaran Nigam Limited New Power House, Industrial Area, Jodhpur - 342 003 (Rajasthan).
- Uttaranchal Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun – 248 001 (Uttarakhand).
- 12. Engineering Deptt., 1st Floor, UT Secretariat, Sector 9-D, Chandigarh – 160 009.
- 13. Himachal Pradesh State Electricity Board, Vidyut Bhawan, Kumar House, Shimla 171 004 (Himachal Pradesh).

.... Respondents

Parties Present:

Shri Rajiv Shankar Dwivedi, Advocate, NHPC

Shri S.P. Rathour, NHPC

Shri Piyush Kumar, NHPC

Shri Rajesh Joshi, NHPC

Shri R.B. Sharma, Advocate, BRPL

Ms. Megha Bajpeyi, BRPL

Shri Mohit Mudgal, Advocate, BYPL

Shri Sachin Dubey, Advocate, BYPL

Shri Abhishek Srivastava, BYPL

Shri Sameer Singh, BYPL

Shri Anand K. Ganesan, Advocate, PSPCL

Ms. Swapna Seshadri, Advocate, PSPCL

Shri Amal Nair, Advocate, PSPCL

Ms. Aditi Raghuvanshi, Advocate, PSPCL

Shri Mansoor Ali Shoket, Advocate, TPDDL

Shri Nitin Kala, Advocate, TPDDL

Shri Kunal Singh, Advocate, TPDDL

Ms. Shefali Sobti, TPDDL



ORDER

This Petition has been filed by the Petitioner, NHPC Limited for truing-up of tariff of Uri-I hydroelectric Project (480 MW) (in short 'the generating station') for the period 2014-19, in terms of Regulation 8(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (in short 'the 2014 Tariff Regulations') and for determination of tariff of the generating station for the period 2019-24, in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short' 'the 2019 Tariff Regulations'). This generating station has been constructed by the Petitioner NHPC with a total capacity of 480 MW comprising 4 units of 120 MW each. The date of commercial operation of the generating station is 1.6.1997.

2. Petition No. 238/GT/2014 was filed by the Petitioner for truing up of tariff for the period 2009-14 and for determination of annual fixed charges of the generating station for the period 2014-19 and the Commission vide its order dated 13.7.2016 had approved the capital cost and annual fixed charges as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	341750.70	342336.17	342903.22	344077.31	344087.51
Admitted additional capitalization	585.47	567.05	1174.09	10.20	0.00
Closing Capital Cost	342336.17	342903.22	344077.31	344087.51	344087.51

Annual Fixed Charges allowed

	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	21311.47	21345.37	21396.59	21431.43	21431.73
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	4691.42	4728.63	4777.34	4828.83	4829.16



	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working	1008.40	1037.27	1068.61	1101.57	1134.61
Capital					
O&M Expenses	7419.40	7912.34	8438.04	8998.66	9596.54
Total	34430.69	35023.61	35680.58	36360.49	36992.03

Present Petition

4. In terms of Regulation 8(1) of the 2014 Tariff Regulations, the Petitioner vide affidavit dated 23.10.2019 has filed the present Petition for truing up of tariff of the generating station for the period 2014-19 and has claimed the capital cost and annual fixed charges as under:

Capital Cost claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	341750.70	341758.54	342271.06	342441.84	342992.12
Add: Additional during	58.84	664.01	128.08	585.72	916.06
the year					
Less: De-capitalisation	57.15	151.49	0.91	35.44	349.42
during the year					
Add: Discharges during	6.15	0.00	43.61	0.00	0.00
the year					
Closing capital cost	341758.54	342271.06	342441.84	342992.12	343558.76
Average capital cost	341754.62	342014.80	342356.45	342716.98	343275.44

Annual Fixed Charges claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4677.11	4692.96	4718.33	4739.77	4777.01
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	21512.75	21580.37	21429.96	21594.99	21713.27
Interest on Working	1012.71	1041.86	1068.02	1103.28	1139.89
Capital					
O&M Expenses	7419.40	7912.34	8438.04	8998.66	9596.54
Total	34621.97	35227.53	35654.35	36436.70	37226.71

5. The Respondents UPPCL, PSPCL, TPDDL and BRPL have filed their replies vide affidavits dated 17.10.2020, 9.12.2020, 26.8.2021 and 27.10.2021, respectively. The Petitioner has filed its rejoinder to the aforesaid replies, vide affidavits on 29.6.2021, 29.6.2021, 1.10.2021 and 17.11.2021 respectively. The Petitioner has also submitted certain additional information vide affidavit dated 29.6.2021, after serving



copy to the Respondents. This Petition was heard through video conferencing on 25.1.2022, and the Commission, after directing the Petitioner to file certain additional information, reserved its order in the matter. In response, the Petitioner has filed the additional information vide affidavit dated 21.2.2022, with copy to the Respondents. Based on the submissions of the parties and documents available on record and after prudence check, we proceed for truing up the tariff of the generating station for the period 2014-19, in this Petition, as stated in the subsequent paragraphs.

Capital Cost

- 6. Regulation 9(3) of the 2014 Tariff Regulations provides as under:
 - "9. Capital Cost:
 - (3) The Capital cost of an existing project shall include the following:
 - (a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
 - (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
 - (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15."
- 7. The Commission vide its order dated 13.7.2016 in Petition No. 238/GT/2014 had approved the closing capital cost of Rs. 341750.70 lakh, as on 31.3.2014. The Petitioner, has claimed the opening capital cost of Rs. 341750.70 lakh, as on 1.4.2014. Accordingly, the capital cost of Rs. 341750.70 lakh as on 31.3.2014, has been considered as the opening capital cost as on 1.4.2014, for the purpose of determination of tariff for the period 2014-19.

Additional Capital Expenditure

- 8. Regulation 14 of the 2014 Tariff Regulations provides as under:
 - 14. Additional Capitalisation and De-capitalisation:
 - (1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by



the Commission, subject to prudence check:

- (i) Undischarged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law: and
- (v) Change in law or compliance of any existing law:

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

- (2) The capital expenditure incurred or projected to be incurred in respect of the new project on the following counts within the original scope of work after the cut-off date may be admitted by the Commission, subject to prudence check:
- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
- (ii) Change in law or compliance of any existing law;
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work; and
- (iv) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.
- (3) 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 after the cut-off date, may be admitted by the Commission, subject to prudence check:
- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law:
- (ii) Change in law or compliance of any existing law;
- (iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;
- (iv) Deferred works relating to ash pond or ash handling system in the original scope of work:
- (v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;
- (vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;
- (vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal / lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;
- (viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to



geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and

(x) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialisation of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:

Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014:

Provided further that any capital expenditure other than that of the nature specified above in (i) to (iv) in case of coal / lignite based station shall be met out of compensation allowance:

Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation.

- (4) In case of de-capitalisation 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 decapitalisation 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-capitalisation takes place, duly taking into consideration the year in which it was capitalised."
- 9. The projected additional capital expenditure allowed vide order dated 13.7.2016 in Petition No. 238/GT/2014 for the period 2014-19, is summarized below:

	2014-15	2015-16	2016-17	2017-18	2018-19
Total additional capital	755.00	573.00	1535.00	0.00	0.00
expenditure (A)					
De-capitalization (B)	181.02	5.95	360.91	0.00	0.00
Discharge of liabilities (C)	11.49	0.00	0.00	10.20	0.00
Total projected additional capital expenditure allowed (D=A-B+C)	585.47	567.05	1174.09	10.20	0.00



10. The year-wise claim of the Petitioner, for additional capital expenditure, under various heads, is as under:

(Rs. In lakh)

					(7107 117	14111/	
SI.	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
No.							
Α	Additions being claimed for purpos	se of tariff					
i	Capitalization claimed against admitted items						
	Claims under Regulation 14(3)(viii)	38.46	545.00	70.96	129.06	0.00	
ii	Capitalization claims against new items						
	Claims under Regulation 14(3)(iii)	2.82	63.55	57.12	339.49	10.39	
	Claims under Regulation 14(3)(viii)	17.55	55.46	0.00	117.16	905.67	
	Sub-total (A)	58.84	664.01	128.08	585.72	916.06	
В	Deletions						
i	Assumed Deletion	22.88	144.02	0.91	35.44	297.34	
ii	Decapitalization	34.27	7.46	0.95	0.00	54.83	
	Sub-total (B)	57.15	151.49	1.86	35.44	352.17	
С	Discharge of undischarged Liabilities (C)	6.15	0.00	43.61	0.00	0.00	
D	Reversal of undischarged Liabilities (D)	0.00	0.00	0.00	0.00	0.00	
E	Net additions claimed (E=A-B+C-D)	7.84	512.52	169.83	550.28	563.89	
В	Additional capitalization not to be	claimed		•	•	•	
	Additions claimed in Exclusions (F)	875.84	154.56	285.53	140.62	103.22	
	Deletions claimed in Exclusions (G)	161.26	108.18	150.07	62.48	91.24	
	Total (H= F-G)	714.58	46.38	135.46	78.14	11.98	

11. The Respondents UPPCL and TPDDL have submitted that the additional capitalization claimed by the Petitioner under Regulation 14(3)(viii) should be disallowed, since the Petitioner cannot claim any item under successful and efficient operation. The Respondents have also submitted that the Petitioner has not submitted certificates from OEM or technical committee, without which complete prudence for allowing additional capitalization cannot be undertaken by the Commission. The Petitioner vide its rejoinder has submitted that these expenditures had been claimed for efficient plant operation. The Petitioner has also submitted that in the justification mentioned against these items in the order dated 13.7.2016, it is clear that old assets after replacement cannot be used in future.



- 12. The Respondent PSPCL has submitted that prudence check is not meant to be limited to the prudence check of the cost but more importantly whether such additional costs were necessary. The Petitioner, in its rejoinder has submitted that the additional capital expenditure claimed under Regulation 14(3) of the 2014 Tariff Regulations are admitted and allowed only after prudence check.
- 13. We have considered the matter. The Petitioner, in compliance to ROP dated 25.01.2022 has submitted that the expenditure for assets / works claimed as additional capital expenditure for the period 2014-19 were executed/ procured as per the Policy and Procedure of the Petitioner's Company. It has also enclosed the certificate in this regard from the competent authority and the Auditor's certificate with respect to the liability flow statement shown in Form-16 for the period 2014-19. Further, it is observed that the Petitioner in compliance to the aforesaid ROP has submitted details of OEM of additional capital expenditure like vehicles, fire tender etc. The Petitioner has also submitted documentary evidence against additional capital expenditure claimed vide its additional affidavit. Accordingly, the additional capital expenditure has been examined and dealt in the subsequent paragraphs.

<u>2014-15</u>

14. The details of the additional capital expenditure claimed under the provisions of Regulation 14 of the 2014 Tariff Regulations are examined below:

SI. No.	Regulation		2014-15
(a)	14(3)(viii)	In case of hydro generating stations, any expenditure	56.02
		which has become necessary on account of damage	
		caused by natural calamities (but not due to flooding of	
		powerhouse attributable to the negligence of the	
		generating company) and due to geological reasons after	
		adjusting the proceeds from any insurance scheme, and	



SI. No.	Regulation		2014-15		
		expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;			
(b)	14(3)(iii)	Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security	2.82		
Total additional capital expenditure claimed					

S. No	Details of the claim	Amount claimed	Petitioner	_	Amount Allowed
	ulation 14(3)(viii) o 238/GT/2014	f the 2014	Tariff Regulations - Items allowed	d in order dated 13.7.2016 in	Petition
1	Retrofitting of relays / protection scheme in generating units	26.26	Numerical generator protection relay, ABB REG 670 amounting to Rs. 26.26 lakh procured through open tender basis. The items have already been purchased for two units as per the approved Additional capitalization in the year 2010-11 and 2011-12. The same for remaining two units are proposed to be purchased.	It is noticed that the additional capital expenditure claimed for these assets / works were allowed in 2014-15, vide Commission's order dated 13.7.2016 in Petition No. 238/GT/2014. Accordingly, the additional capital expenditure claimed is allowed. The original value of old asset has been considered under 'Assumed Deletions'.	26.26
2	TATA 407, 3.0 MT	12.20	The Commission has allowed replacement of two Nos. Tata - 407 amounting Rs 15.00 lakh against replacement of old buses amounting to Rs. 8.44 lakh.	It is noticed that the additional capital expenditure claimed for these assets / works were allowed in 2014-15, vide Commission's order dated 13.7.2016 in Petition No. 238/GT/2014. Accordingly, the additional capital expenditure claimed, is allowed. The Petitioner has submitted that old asset has been actually deleted from books, during 2017-18 and considered under "Assumed Deletions" during 2014-15 for the purpose of tariff. The same is in order.	12.20



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
				Accordingly, the original value of old asset has been considered under "Assumed Deletions".	
	Sub-total (A)	38.46			38.46
	ılation 14(3)(viii)	of the 20	014 Tariff Regulations - Items	additionally claimed as p	er actual
3	requirement Air compressor	9.51	Portable air compressor	As the work is required	9.51
3	(indigenous) stationary, screw air compressor	9.51	Portable air compressor available at barrage was procured during April 2002. This Air Compressor is 14-year-old and many times it is under breakdown condition. Replacement was done to avoid frequent breakdown and expenditure on repair and maintenance. The Petitioner has claimed "Assumed deletions" for this asset.	As the work is required for the successful and efficient operation of plant, the claim is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The decapitalisation of old asset / work is considered under "Assumed Deletions".	9.51
4	Submersible pump 2 hp, 3 phase, 415 V	2.66	Due to continuous running of units, wear and tear takes place in shaft seal as well as rotating dynamic seal. To avoid tripping of the machine due to flooding of turbine pit from water leakage from shaft seal, the same have been purchased and placed in turbine pit.	As the work is required for the successful and efficient operation of plant, the claim is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	2.66
5	UPS 10 KVA	5.39	10 KVA UPS is installed to cater the load of all IT equipment like servers/ exchange/ emergency lighting etc. installed at various locations of Uri Power Station. The UPS installed provides back-up during power failure so that the official work does not get effected. Exiting UPS installed is creating problem hence replaced with new. Decapitalisation for replacement of old UPS is claimed by the Petitioner. CISF also recommended to replace existing communication equipment in its Special Security report.	In terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the expenditure claimed is in the nature of minor assets and hence, the same is not allowed . The corresponding decapitalization is also not allowed .	0.00
	Sub-total (B)	17.55	,		12.17



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed			
Regulation 14(3)(iii) of the 2014 Tariff Regulations- Items additionally claimed as per ac requirement								
6	Construction of morcha near main gate access tunnel at Rajarwani, powerhouse	0.87	As power station is situated in J&K region, keeping view the security threats and as per recommendation of CISF to strengthen the security of power station., Morcha near main gate access tunnel near Rajarwani, powerhouse was constructed for effective view of entire area. The Petitioner has submitted supporting document.	The Petitioner has furnished letter dated 19.12.2014 along with special security report, where recommendations on safety and security was made in consultation with CISF. In view of this, and since the asset / work is required for the safety and security of the generating station, the expenditure claimed is allowed.	0.87			
7	Inmarset - satellite phone terminal	1.95	Claimed against replacement of old set. Actual decapitalisation claimed in year 2018-19.	In terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the expenditure claimed is in the nature of minor assets and hence, the same is not allowed . The corresponding decapitalization is also not allowed .	0.00			
	Sub-Total (C)	2.82			0.87			
	Total (A+B+C)	58.84			51.50			

15. Based on the above, the total additional capital expenditure of Rs. 51.50 lakh (38.46+ 12.17 +0.87) is allowed in 2014-15.

<u>2015-16</u>

16. The details of the additional capital expenditure claimed under the provisions of Regulation 14 of the 2014 Tariff Regulations are examined below:

SI.	Regulation		Amount
No.			
(a)	14(3)(iii)	Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security	63.55
(b)	14(3)(viii)	In case of hydro generating stations, any expenditure	600.46
		which has become necessary on account of damage	



SI. No.	Regulation		Amount	
		caused by natural calamities (but not due to flooding of powerhouse attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;		
Total additional capital expenditure claimed				

S.	Details of the	Amount	Justification submitted by the	Remarks on `	Amount
No	claim	claimed	Petitioner	admissibility	Allowed
	. , , ,		wed in order dated 13.7.2016 i		
1	Disaster	60.87	The Petitioner submitted that		0.00
	management		keeping in view the mis	•	
	plan for powerhouse		happening in one of the		
	powernouse		NHPC Power Station, the		
			implementation of Disaster	•	
			management plan at Uri		
			Power Station is being	16, vide	
			proposed in phased manner.		
			The tentative scheme has		
			been prepared and		
			accordingly, the price has		
			been considered based on		
			estimation.	that Pumps for the	
			The Petitioner has submitted	said works have	
			that, the Commission has	been installed in	
			allowed Rs.100 lakh and		
			Rs.200 lakh in 2014-15 and	arrangements have	
			2015-16 respectively, Total		
			approved amount was		
			Rs.300 lakh. Total estimated		
			cost of work is Rs. 488.87		
			lakh (Rs. 60.87 + Rs 8 +Rs.		
			310+ Rs. 110) includes cost	1	
			of piping Rs.110 lakh,	and poor	
			electrical installation Rs.300		
			lakh and cost of pumps.	bidders' the item	
			During 2015-16, 3 nos. of		
			dewatering pump amounting	capitalized during the	
			Rs.60.87 had been	l •	
			purchased and in 2017-18		
			piping work amounting to		
			Rs.106.34 lakh is completed.	dewatering pump	
			Work of Rs.200 lakh is	has been advised by	
			proposed in 2020-21. The	CEA vide its	
			delay in execution is due to	notification dated	
			the frequent disruption of law-	20.8.2010. It is also	
				observed that the	



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			and-order situation in the Kashmir Valley. The Respondent UPPCL has submitted that, this item of Rs. 60.87 lakh should be disallowed since the plan is yet to put into operation and no benefit could be derived by the power plant from such capitalization. In response the Petitioner submitted that, power station has purchased 3 nos of dewatering pump of Rs.60.87 Lakh during 2015-16 and completed the piping work amounting to Rs.106.34 during 2017-18. Work regarding electrical installation estimating to Rs.200 lakh is proposed in 2020-21.	final capitalization for the work has been claimed in 2021-22 (@sl no. (d). In view of the above, the additional capitalization claimed in 2014-19 has been shifted and allowed in 2021-22 for the purpose of tariff.	
2	Bus fabricated on TATA 1512/ 52 TC chassis	14.36	The Commission allowed Rs. 25.00 lakh for purchase of one No. bus and allowed (Rs 10.00 lakh during 2014-15 for chassis (Rs.15.00 lakh for fabrication during 2015-16) against replacement value of old bus- (10.68 lakh). Supply order for purchase of complete bus with chassis and fabrication bus was placed on 31.12.2014, supply was made during 2015-16. Projected amount was based on budgetary offer and split into chassis and fabrication. However, complete bus is purchased hence there is price difference, further, to mention actual amount is based on price discovered through tendering & hence justified. Decapitalisation value of old bus is indicated in assumed deletion.	13.7.2016 in Petition No. 238/GT/2014. Accordingly, the	14.36



S.	Details of the	Amount	Justification submitted by the	Remarks on	Amount
No	claim	claimed	Petitioner	admissibility "Assumed	Allowed
				Deletions".	
3	Modification / upgradation of existing turbine governor and excitation system of Uri power station	388.42	Work for "Modification/ Upgradation of existing Turbine governor" was awarded during 2014-15 and material was received at site in Feb' 2015 and 90% payment for supply was also released in 2014-15 itself. But erection and commissioning could not be carried out in lean season during the annual maintenance shutdown, and it resulted in delay, however actual work was completed and capitalised in 2015-16. The budgeted expenditure claimed with the Commission to complete this work was Rs.450 lakh. However, the Commission allowed Rs.330 lakh only after deducting the estimated value of old governor Rs.120 lakh. Against the estimated cost of Rs.450 lakh the work had been completed in 432.02 lakh (accrual basis). Decapitalisation value of old asset is indicated.	It is noticed that the additional capital expenditure claimed for these assets / works were allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations, on cash basis, in 2014-15 and 2016-17 vide order dated 13.7.2016 in Petition No. 238/GT/2014, on the ground that the expenditure incurred is for compliance to IEGC, 2010. Accordingly, the additional capital expenditure claimed by the Petitioner, is allowed. The decapitalization of old asset has been considered under "Assumed Deletions".	388.42
4	Mobile Crane, escort	81.36	The Petitioner submitted that replacement of crane was allowed by the Commission in 2014-15. The supply order for purchase of hydro mobile crane was during 2014-15 in the month of March' 2015 with delivery within 90 days or earlier. Supplier delivered the Crane in 2015-16. The delay is caused due to tendering process. Decapitalization value of old asset is indicated.	It is noticed that the additional capital expenditure claimed for these assets / works were allowed in 2014-15 vide order dated 13.7.2016 in Petition No. 238/GT/2014. Accordingly, the additional capital expenditure claimed by the Petitioner, is allowed. The Petitioner has submitted that old asset has been actually deleted from books, during 2018-	81.36



S.	Details of the	Amount	Justification submitted by the	Remarks on	Amount
No	claim	claimed	Petitioner	admissibility	Allowed
	Sub-total (A)	545.00		19 and considered under "Assumed Deletions" during 2015-16 for the purpose of tariff. The same is in order. Accordingly, the original value of old asset has been considered under "Assumed Deletions".	484.13
	ulation 14(3)(viii) requirement	of the 201	4 Tariff Regulations- Items ad	iditionally claimed as	per actual
5	Extension of school building at Gingle	11.45	Extension of Kendriya Vidyalaya building was required as the class of school was upgraded from 10 th standard to 10+2 standard. This school is situated in the residential campus of the Power Station and to accommodate/facilitate student of Class 12th classroom/ Lab is constructed. Supporting document attached at page no. S-7 to S8.	The additional capital expenditure claimed for these assets is not allowed , as the same is not directly related to the operation of the plant.	0.00
6	Tube bundle for heat exchanger type	30.25	The old heat exchanger was not functioning properly due to leakage/ damage in cooling tubes due to which cooling temperature and oil temperature could not be controlled. For this new tube bundle heat exchanger replaced the old one for maintaining oil and water temperature. For healthy operation of generating unit this Tube Bundle for Heat Exchanger is essentially required. Actual decapitalisation in year 2014-15.	Since capitalization of capital spares are not allowed after the cut-off date of the generating station, in terms of the 2014 Tariff Regulations, the claim is not allowed. However, the same is considered as additional O&M expenses on consumption basis. (as dealt with in paras 49 &50 of this order)	0.00
7	Vertical centrifugal pump set, 1450 RPM, motor rating	13.77	Two nos. of vertical centrifugal pump set procured used in primary cooling water system of unit, is essentially required for	The Petitioner has submitted the 'NHPC manual for disposal of construction plant, equipment and	13.77



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			proper cooling of bearings of generating unit. The existing vertical pump has completed its life and is beyond repair. New pump is purchased for replacement in Unit 1. Decapitalised in the year 2014-15	spares' which specify the life of the pump and repair provision as per policy, as documentary evidence for the claim of the said asset. As the work is required for the successful and efficient operation of plant, the claim is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The actual decapitalisation of old asset / work has been considered in	
	Cub Total (D)	EE 40		2014-15.	42.77
Reg	Sub-Total (B)	55.46 of the 2014	│ · Tariff Regulations- Items ad	ditionally claimed as I	13.77 per actual
	requirement	or and 2011	raim Regulations nome au	antionally olamiou ao	por aotaar
8	Construction of watch tower near main gate at Gingle colony	2.88	Construction of watch tower has been done based on recommendation of CISF/Security agencies to strengthen security of power station to deal with the present threat perception within the valley and across the border. The Petitioner has submitted supporting document on the same.	furnished letter dated 19.12.2014 along with special security report, where recommendations on safety and security was made in consultation with CISF. In view of this, and since the assets / work is required for the safety and	2.88
9	Digisol bullet outdoor CCTV camera	0.77	Recommended by CISF/Security Agencies,	security of the generating station,	0.77
10	Kenwood VHF handheld sets tk-2000, day and night vision binocular	13.63	relevant pages of report are attached to strengthen security of power station to deal with the present threat perception within the valley	the expenditures claimed are allowed.	13.63
11	Construction of boundary wall along to NH1A near switchyard area at Rajarwani power- house	46.27	and across the border. All expenditure made as per recommendation of Security Agency.		46.27



S.	Details of the	Amount	Justification submitted by the	Remarks on	Amount
No	claim	claimed	Petitioner	admissibility	Allowed
			The Petitioner has submitted supporting document on the same.		
	Sub-Total (C)	63.55			63.55
	Total (A+B)	664.01			561.45

17. Based on the above, the total additional capital expenditure of Rs. 561.45 lakh (484.13+ 13.77+63.55) is allowed in 2015-16.

2016-17

18. The details of the additional capital expenditure claimed under the provisions of Regulation 14 of the 2014 Tariff Regulations are examined below:

(Rs. in lakh)

SI. No.	Regulation		2016-17
(a)	14(3)(iii)	Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security	57.12
(b)	14(3)(viii)	In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of powerhouse attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;	70.96
	Total additi	onal capital expenditure claimed	128.08

S. No	Details of the claim	Amount claimed	1	Remarks on admissibility	Amount Allowed
_	` ' '	,	2014 Tariff Regulations - I	tems allowed in or	der dated
13.7	.2016 in Petition	No. 238/G	ST/2014		
1	Fire tender fabricated on TATA LPT Chassis.	70.96	The Commission allowed purchase of one no. Fire Tender amounting Rs.35.00 lakh, gross value of old asset is considered as Rs. 0.91 lakh. Two nos. of fire tender have been procured in year 2016-17 for Rs.70.96	additional capital expenditure claimed for these assets / works were allowed, in 2016-17 vide order dated	35.00



S.	Details of the	Amount	Justification submitted by	Remarks on	Amount
No	claim	claimed	the Petitioner	admissibility	Allowed
			lakh admitted cost was	Petition No. 238/	
			Rs.34.09 lakh (35.00-0.91)	GT/2014 for one	
			only for one fire tender.	fire tender only. The other has been	
			Kooping in view the sefety		
			Keeping in view the safety requirement, law and order	purchased as spare. Since the	
			condition of the valley 2 nd	item is in the nature	
			Fire -Tender was procured.	of spares, we allow	
			Now power station has only	only 1 fire tender in	
			two Fire Tender to provide	line with our order	
			immediate service to	dated 13.7.2016.	
			powerhouse, Barrage and	Accordingly, the	
			Residential Colony.	additional capital	
			Residential Colony.	expenditure of Rs.	
			The Respondent UPPCL	35.00 lakh for one	
			submitted that, capitalization	fire tender is	
			should be allowed for only 1	allowed.	
			fire tender. In response the	The Petitioner has	
			Petitioner submitted that,	submitted that old	
			one fire tender had been	asset has been	
			allowed by the Commission	actually deleted	
			in order dated 13.7.2016,	from books, during	
			however the power station	2017-18 and	
			has purchased two fire	considered under	
			tenders, one against	"Assumed	
			replacement of old fire	Deletions" in 2016-	
			tender and second is as	17 for the purpose	
			additional	of tariff. The same	
			additional	is in order.	
				Accordingly, the	
				original value of old	
				asset has been	
				considered under	
				"Assumed	
				Deletions".	
	Sub-total (A)	70.96			35.00
Regi		of the 20	014 Tariff Regulations- Item	s additionally claime	ed as per
	al site requireme	ent			_
2	New CGI	24.91	To strengthen the security of	The Petitioner has	24.91
	sheet wall		Power station as	furnished letter	
	parallel to		recommended by CISF -	dated 19.12.2014	
	existing chain		Ministry of Home Affairs	along with special	
	link fencing al		power station has to deal	security report,	
	river Jhelum		with the present threat	where	
	near power		perception within the valley	recommendations	
	house,		and across the border.	on safety and	
	Rajarwani		Several works like purchase	security was made	
3	Rain shelter at	4.35	of BP Jacket Level - IV and	in consultation with	4.35
	Barrage Intake		other security gadgets.	CISF. In view of	
4	New CGI wall	21.87		this, and since the	21.87
1	with angle iron			assets / works are	



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			Construction of boundary wall increasing the height of existing wall and construction of watch tower also recommended by CISF/security agencies. The Petitioner has submitted supporting document on the same.	required for the safety and security of the generating station, the expenditures claimed are	
5	Door frame and metal detector	5.99	To strengthen the security of Power station, recommended by CISF/ security agencies, relevant pages of report are attached to deal with the present threat perception within the valley and across the border. All expenditure made as per recommendation of Security Agency.		5.99
	Sub-Total (B)	57.12	, , ,		57.12
	Total (A+B)	128.08			92.12

19. Based on the above, the total additional capital expenditure of Rs. 92.12 lakh (35.00+ 57.12) is allowed in 2016-17.

2017-18

20. The details of the additional capital expenditure claimed under the provisions of Regulation 14 of the 2014 Tariff Regulations are examined below:

SI. No.	Regulation		2017-18
(a)	14(3)(iii)	Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security	339.49
(b)	14(3)(viii)	In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of powerhouse attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;	246.22



SI. No.	Regulation		2017-18
	Total additi	onal capital expenditure claimed	585.72

	D 4 11 4 41		1 10 1 1 10 1		KS. III Iakii)
S.	Details of the	Amount		Remarks on	Amount
No	claim	claimed	by the Petitioner	admissibility	Allowed
Regu	ılation 14(3)(viii) o	f the 2014	Tariff Regulations - Items a	llowed in order dated 13	3.7.2016 in
	ion No. 238/GT/20 ⁻		G		
1	Disaster	106.34	The Petitioner	It is noticed that the	0.00
•	management	100.01			0.00
	plan for		submitted that keeping	•	
	•		in view the	expenditure claimed	
	powerhouse -		mishappening in one of	for these assets /	
	supplying fixing,		the NHPC Power	works were allowed	
	laying and		Station, the	in 2014-15 and 2015-	
	commissioning		implementation of		
	of water pipe			I	
	under disaster				
	management		plan at Uri Power		
			Station is being	However, the	
			proposed in phased	Petitioner has stated	
			manner. The tentative	that the Pumps for	
			scheme has been	the said works have	
			prepared and	been installed in	
			-		
			accordingly, the price	2015-16 and piping	
			has been considered	arrangements have	
			based on estimation.	been completed in	
			The Commission has	2017-18. It has also	
			allowed Rs.100 lakh	stated that due to	
			and 200 lakh in 2014-15		
			and 2015-16		
			respectively, Total	valley in recent year	
			approved amount was	and poor	
			Rs.300 lakh. Total	participation from	
			estimated cost of work	bidders' the item	
			is Rs. 488.87 lakh (Rs.	could not be	
			60.87 + Rs 8 +Rs. 310+	capitalized during the	
			Rs. 110) includes cost	period 2014-19. It is	
			of piping Rs.110 lakh,	observed that the	
			electrical installation	installation of flood	
			Rs.300 lakh and cost of	dewatering pump	
			pumps.	has been advised by	
			During 2015-16, 3 nos.	CEA vide its	
			of dewatering pump	notification dated	
			amounting Rs.60.87	20.8.2010. It is also	
			had been purchased	observed that the	
			and in 2017-18 piping	final capitalization for	
			work amounting to	the work has been	
			Rs.106.34 lakh is	claimed in 2021-22	
			completed. Work of	(sl no. (d). In view of	
			I		
			Rs.200 lakh is proposed		
			in 2020-21. The delay in	additional	
			execution is due to the	capitalization	



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			frequent disruption of law-and-order situation in the Kashmir Valley. This affects wider participation of competitive / prospective bidders in the tendering process. The poor communication facilities at this remote location further aggravates non-participation of prospective bidders.	claimed has been shifted and allowed in 2021-22 for the purpose of tariff.	
2	TATA 207 DI, pickup 2 nos.	12.91	Allowed in FY 2015-16 for purchase of two Nos. of TATA 207.	It is noticed that the additional capital expenditure claimed for these assets / works were allowed, in 2015-16 vide order dated 13.7.2016 in Petition No. 238/GT/2014. Accordingly, the additional capital expenditure claimed by the Petitioner, is allowed. The actual de-capitalisation of old asset / work has been considered in 2016-17.	12.91
3	AC ambulance fully equipped single stretcher	9.82	The Commission allowed Rs.12.00 lakh for the procurement of one no. TATA 407 Ambulance. The technical specification of the vehicle as per DGS&D rate contract was of BSIII grade, hence did not meet the tech spec of NIT(BSIV). Purchase of BSIV grade vehicle is proposed as the registration of BSIII grade vehicle has been stopped in the J&K. Further the rate of BSIV grade vehicle was not available with DGS&D.	It is noticed that the additional capital expenditure claimed for these assets / works were allowed, in 2015-16 vide order dated 13.7.2016 in Petition No. 238/GT/2014. Accordingly, the additional capital expenditure claimed by the Petitioner, is allowed.	9.82



S.	Details of the	Amount	Justification submitted	Remarks on	Amount
No	claim	claimed	by the Petitioner So, the procurement process could not be executed in 2015-16. Hence, procurement of new ambulance has been completed during current year. As mentioned in the order for 2009-14 in 2015-16, old Ambulance has been deleted in 2010-11.	admissibility	Allowed
Regi	Sub-total (A)	129.06 of the 20	 14 Tariff Regulations - It	ems additionally claim	22.73 ned as per
	al site requireme			ss additionary ordin	ao poi
4	Construction of lab at KV school Gingle	35.00	Extension of Kendriya Vidyalaya building was required as the class of school was upgraded from 10th standard to 10+2 standard. This school is situated in the residential campus of the Power Station and to accommodate/facilitate student of Class 12th classroom/lab is constructed. Supporting document attached.	The additional capital expenditure claimed for these assets is not allowed , as the same is not directly related to the operation of the plant.	0.00
5	HP air compressor, make-Bauer, model-mariner	30.22 (15.11+ 15.11)	The existing HP air compressors were installed by OEM since commissioning. These HP compressors had completed their useful life and during last year they failed and found beyond repair. For running of generating unit, new HP compressors was purchased. These are essential components for operation of governing systems, guide vane servomotor operation and essentially required for running of plant (common for all 4 units)	required for the successful and	30.22



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			Assumed deletion has been considered.	j	
7	630 KVA, 13.8/ 0.260 KV, dry type (vacuum cast coil) excitation transformer	13.50	Keeping in view the failure of Dry type transformers in the past, new dry type excitation was purchased for replacement in unit no. 3. This is essential component of Generator excitation system and essentially required for running of unit. Assumed deletion has been considered.	The Petitioner has furnished documentary evidence dated 7.6.2014, in support of the additional capitalization claimed for the asset. From the documentary evidence, it is observed that the asset is in the nature of spares. Hence, the claim is not allowed .	0.00
8	Vertical centrifugal pump set, 1450 RPM, motor rating	18.86 (6.48+6. 48+5.90)	The vertical centrifugal pump set used in primary cooling water system of unit, is essentially required for proper cooling of bearings of generating unit. The existing vertical pump has completed its life and is beyond repair. New pump is purchased for replacement in Unit 1. For healthy operation of generating unit this pump is essentially required. There are 3 pumps amounting to Rs. 6.48 lakh, Rs. 6.48 lakh and Rs. 5.90 lakh. Actual decapitalisation in 2015-16 ref SI. No.9	The Petitioner has submitted the 'NHPC manual for disposal of construction plant, equipment and spares' that specify the life of the pump and repair provision as per policy, as documentary evidence for the said asset. Since the assets / works are required for successful and efficient plant operation, the expenditures claimed are allowed under 14(3)(viii) of the 2014 Tariff Regulations. The actual	18.86
11	Potable cooling water pump	3.47 (1.74+1. 74)	The potable cooling water pump used in secondary Cooling water system of unit, is essentially required for proper cooling of bearings of generating unit. The existing potable water pump has completed its life and is beyond repair. New	capitalisation of old asset / work has been considered in 2015-16.	3.47



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed	
No	Ciaiiii	Claimed	pump is purchased for replacement in Unit 3. For healthy operation of generating unit this pump is essentially required. 2 pumps of Rs. 1.74 lakh each.	aumissibility	Allowed	
13	Submersible pump set 5 HP	0.51 (0.26+0. 26)	Due to prolonged operation and wear out of shaft seal, there are chances of water logging in turbine pit area. To meet such eventualities and to pump out the water of turbine pit area small rating submersible pump has been purchased. For healthy operation of generating unit theses submersible pump are essentially required. There are 2 submersible pumps each amounting to Rs. 0.26 lakh. Actual decapitalisation has been considered.		0.51	
15	Pick and carry crane	15.60	Pick and carry crane has been procured to facilitate material movement and management in Store. Further this crane is light weighted with high travel speed and can perform horizontal movement, can reach in tough terrain, easy to operate and fuel efficient.	The Petitioner has submitted an email dated 26.7.2016 as documentary evidence for the said asset. Since the asset / work is required for the efficient operation of the generating station, the additional capital expenditure claimed is allowed.	15.60	
	Sub-Total (B)	117.16	44 Tariff Danielations 16		68.65	
_	Regulation 14(3)(iii) of the 2014 Tariff Regulations- Items additionally claimed as per actual site requirement					
16	Extension of Height of Boundary Wall around NHPC	49.64	The works are proposed for strengthening of the security of the power station as per	The additional capital expenditure claimed for these assets are not allowed , as the	0.00	
	Colony, Gingle			same are not directly		



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			recommendation of CISF. The Petitioner has	related to the operation of the plant.	
17	Renovation of control room and construction of main entrance gate at Gingle colony	17.81	submitted supporting document for the same.	The Petitioner has furnished letter dated 19.12.2014 along with the special security report,	17.81
18	Raising of outer peripheral boundary wall from barrage main gate to morcha No-03 at Barrage, Boniyar	31.40		where in, recommendations on safety and security was made in consultation with CISF. Since the asset / work is required for the	31.40
19	Raising of outer peripheral boundary wall from barrage intake gate to downstream of barrage SC 918	40.01		safety and security of the generating station, the additional capital expenditure claimed is allowed .	40.01
20	Construction of watch tower near main gate and pringle post at barrage	8.24			8.24
21	Raising of outer peripheral boundary wall of Uranbua colony	51.05			51.05
22	Raising of outer peripheral boundary wall from pringle to downstream of barrage, Boniyar	19.20			19.20
23	Extension of boundary wall at right side of spillway near mazar at barrage	16.21			16.21
24	Construction of watch tower in place of morcha no.1,2,4 & 6 at Gingle colony	19.01			19.01
25	Construction of 3 No. Watch tower and repairing of Existing	29.94			29.94



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
110	Morchas at	Claimica	by the retuoner	aumissibility	Allowed
	Barrage Boniyar				
26	Construction of toilet / bathrooms for CISF	9.02		The additional capital expenditure claimed for these assets is not allowed , as the	0.00
27	Construction of 1 No. toilet near Morcha No 1 and 1 No. toilet near Morcha No2 at NHPC Colony	4.13		same is not directly related to the operation of the plant.	0.00
28	Providing 35M View Cutter between CP Gate to Control Room on Existing RR Wall, Rajarwani	2.18		The Petitioner has furnished letter dated 19.12.2014 along with the special security report, where	2.18
29	Watch Tower at CP Gate & Bank of Jhelum River near Park, Powerhouse, Rajarwani	12.65		recommendations on safety and security was made in consultation with CISF. It is noticed that the Petitioner	12.65
30	Control Room for CISF near CP Gate at Powerhouse Rajarwani	9.46		has claimed additional capital expenditure on account of Control Room for CISF near CP Gate at Powerhouse Rajarwani (S. No. 30) under Regulation 14(3)(viii). However, considering the fact that the asset is related to higher security and safety of the Plant, the same is considered and allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.	9.46
31	Digital business communication system IP PBX- minimum system capacity 512 ports	11.03	The Petitioner submitted that, the works are proposed for strengthening of the security of the power	The Petitioner has furnished letter dated 19.12.2014 along with the special security report,	11.03



S.	Details of the	Amount	Justification submitted	Remarks on	Amount
32	Details of the claim Digital PBX system - 80 ports - coral telecom, IRIS-IVDX 4 Nos. @213150 each	8.53	station as per recommendation of CISF. The Petitioner has submitted supporting document for the same. Decapitalisation has been considered. The Respondent UPPCL submitted that, this claim should be disallowed as it is minor	admissibility where recommendations on safety and security was made in consultation with CISF. Since the assets / works are required for the safety and security of the generating station, the additional capital expenditures	8.53
			in nature. In response the Petitioner submitted that, as per accounting standard expenditure amounting to Rs 2000 or less falls under the category of minor expenditures.	claimed are allowed. The Petitioner has submitted that old asset has been actually deleted from books, in 2018-19 and considered under "Assumed Deletions" in 2017-18 for the purpose of tariff. The same is in order. Accordingly, the original value of old asset has been considered under "Assumed Deletions".	
	Sub-Total (C)	339.49			276.71
	Total (A+B+C)	585.72			368.09

21. Based on the above, the total additional capital expenditure of Rs. 368.09 lakh (22.73 + 68.65 +276.71) is allowed in 2017-18.

2018-19

22. The details of the additional capital expenditure claimed under the provisions of Regulation 14 of the 2014 Tariff Regulations are examined below:

SI. No.	Regulation		2018-19
(a)	14(3)(iii)	Any expenses to be incurred on account of need for higher security and safety of the plant as advised or	10.39
		directed by appropriate Government Agencies of	



SI. No.	Regulation		2018-19
		statutory authorities responsible for national security/internal security	
(b)	14(3)(viii)	In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of powerhouse attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;	905.67
	Total additi	onal capital expenditure claimed	916.06

S.	Details of the	Amount	Justification submitted by the	Remarks on	Amount
No	claim	claimed	Petitioner	admissibility	Allowed
			014 Tariff Regulations - Items	additionally claim	ed as per
	HP air compressor, make-Bauer, model		There is provision for two nos HP air compressors for the OPU system for all four Units. The HP air compressor system is required for operation of Governing systems, Guide vane servomotor operation and essentially required for running of plant. Depending on the pressure level in the air receiver tank, one or both HP compressors operate till the desired pressure maintained. As such two nos. HP air compressor are required to be functional at all point of time. The HP compressors are critical part of the generating Units and failure in one compressor will lead to generation loss. Keeping in view of the above one spare compressor was purchased for the HP air compressor system so that it can be used in case of failure in any of the existing two compressors to avoid sudden break down and	Since capitalization of spares after the cut-off date is not permissible in terms of the 2014 Tariff Regulations, the additional capital expenditure claimed is not allowed.	0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
2	Replacement of 400 kVA XLPE cable	866.02	Replaced XLPE Cable was received with Mother Plant. There is provision of two no 400 KV lines for power evacuation at power station equipped with oil filled cables since last 22 years of project commissioning. Outage of evacuation line may result in tripping of units and subsequent generation loss. We were facing oil leakage in 400 KV oil filled cables in both lines. We have replaced these cables with 400 KV XLPE cable in line II in 2018 -19, to avoid outage of line on breakdown of oil filled cable. These cables have been commissioned in December 2018 and working satisfactorily, critically required for reliable working of power station. The XLPE cable replaced the oil filled cable received along with mother plant. Decapitalisation value of old XPLE cable is claimed under assumed deletion.	As the work is required for the successful and efficient operation of plant, the claim is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalisation of old asset / work is considered	866.02



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
3	Vertical pump, discharge	14.50	There is provision of one no. common standby pump in cooling water system for all units of URI power station. This pump was working since last 22 years of project commissioning and eroded severely due to working in silty water. Its breakdown was causing outage of units & generation loss. Accordingly, it was replaced in 2018-19 to fulfil the cooling requirement common to all units. Decapitalisation of the asset is considered.	The Petitioner has submitted the 'NHPC manual for disposal of construction plant, equipment and spares' that specify the life of the pump and repair provision as per policy, as documentary evidence for the said asset. Since the assets / works are required for successful and efficient plant operation, the expenditures claimed are allowed under 14(3)(viii) of the 2014 Tariff Regulations. The actual decapitalisation of old asset / work of Rs. 2.75 is allowed in 2018-19.	14.50
4	Lenovo server think	6.66	The server has been purchased to replace old and obsolete server. The Power station did not have any dedicated Domain Server, Antivirus Server, DHCP Server. As a result, the Local Area Network addressing was 5manual. This resulted in tremendous difficulties for the IT staff to manually keep track of the Addressing in absence of any DHCP Server. Furthermore, the absence of antivirus server and DNS server also affected the day to day availability of the systems. All this made the purchase of a Server a dire requirement for smooth	In terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the assets are minor in nature. In view of this, the expenditures claimed are not allowed.	0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			working of computers and LAN system in the Power Station. The Petitioner has claimed decapitalisation for the same.		
5	3 Nos. online UPS 2 KVA make EATON model	1.97	3 Nos. of 2 kVA online UPS systems were purchased to support the backbone of the communications and data network of the Power Station. The Power failure at Barrage complex, Boniyar and at some locations in powerhouse and Gingle often resulted in non-availability of the Optical fiber backbone which is the only link of communication for both voice and computing/digital systems. At times this resulted in vacuum of communication between barrage control room and powerhouse control room. Further the non-availability of voice communication was a serious concern for security of the power station as the CISF personnel depend heavily on the Internal EPABX system of the power station.		0.00
6	GPS based time synchronisation	1.98	GPS based time synchronization clock is installed for time synchronization of all relays, DCS and metering system of powerhouse. Existing clock suffered short circuit and became non-functional in 2018. Due to statutory requirement for time synchronization of metering system and also system requirement, this device was replaced in September 2018. The GPS system replaced the faulty one received along with mother plant. The Petitioner has claimed decapitalisation for the same.		0.00
7	Digital rainfall recorder	0.96	Previously manual type rain gauge was installed at power station near powerhouse for measuring rainfall. The old manual type of rain gauge was dilapidated and was damaged. Accordingly, a new digital data logger type Automatic rainfall recorder was purchased and		0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
Reg	Sub-Total (A) ulation 14(3)(iii) d	905.67 of the 201	installed in the Powerhouse premises. Since Upgraded instruments with more precise values has been developed installed for more reliable and digital data which being used as measuring instrument for rainfall recording. The Petitioner has claimed decapitalisation for the same. 4 Tariff Regulations- Items add		880.52 s per
	al site requireme			· · · ·	
8	Upgradation of main entrance of barrage Boniyar	2.49	As power station is situated in J&K in valley region where law and order situation is volatile due to militancy & cross border terror activities, keeping view the security threats and as per recommendation of CISF security audit to strengthen the security of Barrage, Double Gate is required to be erected. The same has also been pointed out by security audit team. Accordingly, for effective safeguard of the structure & Installations of the Barrage Premises, main entrance of the Barrage was strengthened. The Petitioner has submitted the supporting documents.	The Petitioner has furnished letter dated 19.12.2014 along with the special security report, wherein recommendations for safety and security were made in consultation with CISF. As these assets / works are necessary for safety and security of the plant, the claims of the Petitioner are allowed.	2.49
9	Boundary wall at Transformer area of sub- station in Barrage, Boniyar	5.49	External Fire Safety Audit has recommended for permanent fencing of the transformer area of sub-station at barrage. Various oil filled transformers are stationed at substation area. power supply to the installations of barrage premises is being fed up with this substation area. Proper permanent fencing was recommended by the external fire safety audit team to ensure additional safeguard to the substation area. Accordingly, Permanent boundary has been erected around substation at Barrage.		5.49



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			The Petitioner has submitted the supporting documents.		
10	Extension of morcha no.3 at Gingle colony	2.41	The works are proposed for strengthening of the security of the power station as per recommendation of CISF. The Petitioner has submitted the supporting documents.		2.41
	Sub-Total (B)	10.39			10.39
	Total (A+B)	916.06			890.92

23. Based on the above, the total additional capital expenditure of Rs. 890.92 lakh (880.52+ 10.39) is allowed in 2018-19.

Discharge of liabilities

24. The Petitioner has claimed the following discharge of liabilities during the period 2014–19:

(Rs. in lakh)

		2014-15	2015-16	2016-17	2017-18	2018-19
Α	Opening Liability	21.69	12.87	56.48	10.60	10.60
В	Add: Liabilities corresponding to additional capital expenditure allowed	0.00	43.61	0.00	0.00	193.89
С	Discharge of Liabilities	6.15	0.00	43.61	0.00	0.00
D	Reversal of Liabilities	2.67	0.00	2.27	0.00	0.00
Ε	Closing Liability	12.87	56.48	10.60	10.60	204.49

25. The Petitioner has submitted the additional capital expenditure as per finalized accounts for the period 2014-19. The liabilities claimed correspond to the additional capitalization allowed in this order. Accordingly, the summary of discharge of liabilities as allowed is as under:

		2014-15	2015-16	2016-17	2017-18	2018-19
Α	Opening undischarged	21.69	12.87	56.48	10.60	10.60
	liabilities					
В	Liabilities corresponding to additional capital expenditure allowed during the year	0.00	43.61	0.00	0.00	193.89



		2014-15	2015-16	2016-17	2017-18	2018-19
С	Discharges of liabilities	6.15	0.00	43.61	0.00	0.00
	during the year					
D	Reversal of liabilities	2.67	0.00	2.27	0.00	0.00
Е	Closing undischarged	12.87	56.48	10.60	10.60	204.49
	liabilities (A+B-C-D)					

Exclusions (additions/deletions incurred, capitalized in books of accounts but not to be claimed for tariff purpose) as per reconciliation with books of account

26. The year-wise expenditure on 'exclusions' as claimed by the Petitioner, is as under:

					(Rs. in	lakh)
SI.		2014-15	2015-16	2016-17	2017-18	2018-19
No.						
Α	Exclusions in additions	875.84	154.56	285.53	140.62	103.22
В	Exclusions in Deletions	161.26	108.18	150.07	62.48	91.24

Exclusions in Additions (capitalized in books but not to be considered for tariff purpose) 27. The Petitioner has submitted that the expenditure, as stated in the table above, is incurred on procurement/ replacement of minor assets and capital spares, which are not allowed for the purpose of tariff, after the cut-off date of the generating station, in terms of the 2014 Tariff Regulations. The Petitioner has, accordingly, put these additions under exclusion category. As such, the exclusion of such positive entries is allowed and has no impact on tariff. Hence, the same is in order and allowed as under:

_					(Rs. in lakh)
	2014-15	2015-16	2016-17	2017-18	2018-19
	875.84	154.56	285.53	140.62	103.22

Exclusions in deletions (de-capitalized in books but not to be considered for tariff purpose)

28. The Petitioner has de-capitalized amounts in books of accounts pertaining to minor assets such as computers, office equipment, furniture, ladders, pumps, fixed assets of minor value less than Rs. 5000 etc., as these are not in use on account of their becoming unserviceable/obsolete and also deletion on account of inter-unit transfer of minor assets. It is noticed that for exclusion of pumps, the Petitioner has



not submitted reason/linkage for keeping these decapitalizations under exclusion category. Further, it is also observed that capitalization for these assets/works have been allowed by the Commission beyond the cut-off date also. Accordingly, we disallow the exclusions of de-capitalisation for an amount of Rs. 2.02 lakh in 2014-15 and Rs. 0.87 lakh in 2015-16 for these pumps. As such, the exclusions in deletions allowed and disallowed are as under:

(Rs. in lakh)

(rtor in raidi)					
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed	(-)159.24	(-)107.31	(-)150.07	(-)62.48	(-)91.24
Disallowed	(-)2.02	(-)0.87	(-)0.00	(-)0.00	(-)0.00

29. Accordingly, the decapitalization of exclusion (claimed and allowed) is as under:

(Rs. in lakh)

					(113. III Idilii)
	2014-15	2015-16	2016-17	2017-18	2018-19
Claimed	(-)161.26	(-)108.18	(-)150.07	(-)62.48	(-)91.24
Allowed	(-)159.24	(-)107.31	(-)150.07	(-)62.48	(-)91.24

De-capitalization

30. As regards de-capitalization, Regulation 14(4) of the 2014 Tariff Regulations, provides as under:

"In case of de-capitalisation 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 decapitalisation 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-capitalisation takes place, duly taking into consideration the year in which it was capitalised."

31. The Petitioner has claimed de-capitalization against assets such as centrifugal pump, tube bundle for heat exchanger, vehicles, dewatering pumps, submersible pumps, air compressors etc. The de-capitalization claimed are as under:

	2014-15	2015-16	2016-17	2017-18	2018-19
Decapitalization as per books	34.27	7.46	0.95	0.00	54.83
Assumed Deletions	22.88	144.02	0.91	35.44	297.34
Total	57.15	151.49	1.86	35.44	352.17



32. Based on the submissions of the Petitioner, the decapitalization of certain items allowed as replacement of additional capital expenditure during the period 2014-19 has been allowed. These include items like Tube bundle for Heat Exchanger type AEW, Centrifugal pump, Submersible pump, sewage water pump, Tata truck 207, EPBAX system, DG sets, control panel, etc. The Petitioner has claimed the decapitalizations against the replacement of new assets/works and for assets/works which are not in use. The de-capitalization as per books, claimed by the Petitioner, has been dealt with in the relevant paragraphs relating to the claims for additional capital expenditure, which have been considered and allowed for the respective years of the period 2014-19, in terms of the provisions of Regulation 14(3) of the 2014 Tariff Regulations. As discussed above, the Commission has disallowed additional capital expenditure on account of UPS 10 KVA and Tube bundle for heat exchanger type which is in the nature of spares and the corresponding de-capitalization is also not allowed during 2014-15. Accordingly, the decapitalization claimed by the Petitioner, has been allowed as the old assets deleted from books of accounts do not render any useful service in the operation of the generating station as under:

				(Rs. in lakh)
2014-15	2015-16	2016-17	2017-18	2018-19
(-)0.62	(-)7.46	(-)0.95	(-)0.00	(-)54.83

Assumed Deletion

33. As per consistent methodology adopted by the Commission, the expenditure on replacement of assets, if found justified, is to be 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 decapitalization 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 decapitalization which is not a book entry in the year of capitalization is termed as "Assumed Deletion". In absence of the gross value of the asset being decapitalized, 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. Further, if the Petitioner has claimed decapitalization value of old asset under assumed deletions and stated that the amount indicated is not a book value and is a calculated value, in this case also, the gross value of old asset is calculated and arrived under assumed deletions as per above methodology. Accordingly, based on above methodology, the decapitalization value of old asset has been considered under 'Assumed Deletions' as given below:

		Assumed Deletions for old	Assumed Deletions for old
	2014	asset claimed	asset allowed
	2014		40.04
1	Retrofitting of relays / protection scheme in generating units	8.49	10.91
2	Air Compressor Stationary air compressor	4.15	5.04
3	Tata Model SFC 407 Truck Chasis Cab & Load body fitted with 497 SP, JK 02L 2708	4.22	4.22
4	Tata Model SFC 407 Truck Chasis Cab & Load body fitted with 497 SP, JK 02L 2712	4.22	4.22
	Total	21.08	24.40
	2015	-16	
1	Modification / Upgradation of existing Turbine Governor and Excitation System of Uri Power Station	132.28	153.71
2	18 Ton Escorts Crane	1.06	1.06
3	TELCO, TATA LP 1512 TL/5L BUS, JK 05 5663	10.68	10.68
	Total	144.02	165.45



	2016-	-17	
1	Fire Tender Chassis JK05C 3488	0.91	0.91
	Total	0.91	0.91
	2017·	-18	
1	EPABX System Model Aria1000 with	22.95	22.95
, I	accessories		
2	HP Air Compressor, Make-Bauer,	4.32	5.42
	Model-Mariner 250-E-I	4.52	5.42
3	HP Air Compressor, Make-Bauer,	4.32	5.42
3	Model-Mariner 250-E-I	4.52	5.42
	Total	31.59	33.80
	2018-	-19	
	Replacement of 400 KVA XLPE	294.07	296.05
1	Cable -M/S SUDKABEL GmBH		
	Germany, Supervision ABB		
	Total	294.07	296.05

34. Based on the above, the net additional capital expenditure allowed for the period 2014-19 is as under:

(Rs. in lakh)

					(. <i></i>
		2014-15	2015-16	2016-17	2017-18	2018-19
Α	Additions allowed	51.50	561.45	92.12	368.09	890.92
В	Decapitalization allowed	(-)25.02	(-)172.91	(-)1.86	(-)33.80	(-)350.88
С	Discharge of Liabilities	6.15	0.00	43.61	0.00	0.00
D	Exclusions not allowed	(-)2.02	(-)0.87	0.00	0.00	0.00
E	Net Additional Capitalization allowed (E=A+B+C+D)	30.61	387.67	133.86	334.30	540.04

Capital cost allowed for the period 2014-19

35. Accordingly, the capital cost allowed for the period 2014-19 is as under:

(Rs. in lakh)

					(· · · · · · · · · · · · · · · · · · ·
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost (a)	341750.70	341781.31	342168.98	342302.84	342637.14
Net additional capital	30.61	387.67	133.86	334.30	540.04
expenditure allowed					
during the year/ period (b)					
Closing Capital Cost	341781.31	342168.98	342302.84	342637.14	343177.18
(a)+(b)					

Debt Equity Ratio

36. Regulation 19 of the 2014 Tariff Regulations provides as under:

"19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the



equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that: i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination 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.

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

- (2) The generating company or the transmission licensee shall submit the resolution of the Board of the company or approval from Cabinet Committee on Economic Affairs (CCEA) regarding infusion of fund from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
- (3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, debt; equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.
- (4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014, the Commission shall approve the debt: equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be.
- (5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."
- 37. Gross normative loan and equity amounting to Rs. 233161.96 lakh and Rs. 108588.74 lakh, respectively, as on 31.3.2014, as considered in order dated 13.7.2016 in Petition No.238/GT/2014, has been considered as the normative loan and equity as on 1.4.2014. The debt: equity ratio considered is 70:30, in terms of Regulation 19 of the 2014 Tariff Regulations, for the purpose of additional capitalization. Decapitalization of assets has been deducted from the corresponding loan as well as



equity, taking into consideration the debt equity ratio, applied in the year in which it was capitalized, as per Regulation 19 (4) of 2014 Tariff Regulations. The opening and closing debt and equity is as under:

(Rs in lakh)

	As on 31.3.2014		Additional Capitalization		De-capitalization		As on 31.	3.2019
	Amount		Amount		Amount		Amount	
	(Rs. in lakh)	(in %)	(Rs. in lakh)	(in %)	(Rs. in lakh)	(in %)	(Rs. in lakh)	(in %)
Debt	233161.96	68.23%	1409.69	70.00%	406.25	69.16%	234165.40	68.23%
Equity	108588.74	31.77%	604.15	30.00%	181.11	30.84%	109011.78	31.77%
Total	341750.70	100.00%	2013.84	100.00%	587.36	100.00%	343177.18	100.00%

Return on Equity

- 38. Regulation 24 of the 2014 Tariff Regulations provides as under:
 - "24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
 - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

- i. in case of projects commissioned on or after 1st April 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:
- ii. the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
- iii. additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
- iv. the rate of return of a new project shall be reduced by 1% 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)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:
- v. as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:
- vi. additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."



39. Regulation 25 of the 2014 Tariff Regulations provides as under:

"Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 24 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 the 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 income on other income stream (i.e., income of non-generation or non-transmission business, as the case may be) shall not be considered 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

- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed 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 2014-15 to 2018-19 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 transmission customers/DICs as the case may be on year to year basis."
- 40. Accordingly, the base rate of Return on Equity (ROE) has been grossed up, based on the MAT rate of the Petitioner, for the period 2014-19. Hence, in terms of the above regulations, ROE has been computed as under:

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (A)	108588.74	108597.49	108710.73	108750.85	108850.54
Addition of Equity due to additional capital expenditure (B)	8.75	113.24	40.13	99.69	161.24
Normative Equity- Closing (C) =(A) + (B)	108597.49	108710.73	108750.85	108850.54	109011.78



	2014-15	2015-16	2016-17	2017-18	2018-19
Average Equity (D)=(A+B)/2	108593.12	108654.11	108730.79	108800.70	108931.16
Base Rate (%) (E)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate (%) (F)	20.961%	21.342%	21.342%	21.342%	21.549%
Effective ROE Rate (%) (G)	19.610%	19.705%	19.705%	19.705%	19.758%
Return on Equity (H)= (D)*(G)	21295.11	21410.29	21425.40	21439.18	21522.62

Interest on Loan

- 41. Regulation 26 of the 2014 Tariff Regulations provides as under:
 - "26. Interest on loan capital: (1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.
 - (3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of Decapitalization 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 generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such refinancing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.
 - (8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
 - (9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999,



as amended from time to time, including statutory re-enactment thereof for settlement of the dispute: Provided that the beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

42. The actual loan of the project has already been repaid. The normative loan on account of admitted additional capital expenditure during the respective year of the entire period have also been considered as paid fully, as the admitted depreciation is more than the amount of normative loan in these years. As such Interest on Loan during the period 2014-19 is 'Nil'.

Depreciation

- 43. Regulation 27 of the 2014 Tariff Regulations provides as under:
 - "27. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. 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 or elements thereof.

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 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 in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further 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 generating unit or transmission system as the case may be, shall



not be allowed to be recovered at a later stage during the useful life and 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-II to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.
- (7) The generating company or the transmission license, as the case may be, shall submit the details of proposed capital expenditure during the fag end of the project (five years before the useful life) along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.
- (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 decapitalized asset during its useful services."
- 44. The COD of the generating station is 1.6.1997. As the generating station has completed more than 12 years of operation as on 1.4.2014, the remaining depreciable value has been spread over the balance useful life of the project. Accordingly, depreciation has been computed as under:

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block (A)	341750.70	341781.31	342168.98	342302.84	342637.14
Closing gross block (B)	341781.31	342168.98	342302.84	342637.14	343177.18
Average gross block (C)=(A+B)/2	341766.00	341975.14	342235.91	342469.99	342907.16
Depreciable Value (D=(C*90%)	307589.40	307777.63	308012.32	308222.99	308616.44
Remaining Depreciable Value at the beginning of the year (E=D- Cumulative Depreciation at 'J' at the end of previous year)	84977.73	80506.08	76167.75	71668.29	67359.94
Balance useful Life (F)	18.17	17.17	16.17	15.17	14.17
Depreciation (G=E/F)	4677.67	4689.67	4711.41	4725.38	4754.82
Cumulative Depreciation at the end of the year (H=G+ Cum Dep at 'J' at the end of previous year)	227289.34	231961.22	236555.97	241280.08	246011.32



	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Depreciation adjustment on account of de-capitalization (I)	17.80	116.65	1.28	23.58	249.17
Cumulative Depreciation at the end of the year (J)	227271.55	231844.57	236554.70	241256.50	245762.15

^{*}Cumulative Depreciation as on 31.3.2014 is Rs.222611.67 lakh

Operation & Maintenance Expenses

- 45. The generating station is in operation for three or more years as on 1.4.2014. As regards O&M expenses, Regulation 29(3)(a) of the 2014 Tariff Regulations, provides as under:
 - "29. Operation and Maintenance Expenses: (a) Following operations and maintenance expense norms shall be applicable for hydro generating stations which have been operational for three or more years as on 01.04.2014:

(Rs. in lakh) SI. No. Name of 2014-15 2015-16 2016-17 2017-18 2018-19 **Station** A. NHPC 7419.40 7912.34 6 Uri 8438.04 8998.66 9596.54

The above O&M expenses was allowed vide order dated 13.7.2016 in Petition No. 238/GT/2014.

46. The Petitioner has claimed O&M expenses for the period 2014-19 in terms of Regulation 29(3)(a) of the 2014 Tariff Regulations and as allowed vide order dated 13.7.2016 in Petition no. 238/GT/2014. Accordingly, the claim for O&M expenses is allowed as under:

 2014-15
 2015-16
 2016-17
 2017-18
 2018-19

 7419.40
 7912.34
 8438.04
 8998.66
 9596.54

Additional O&M expenses

Capital Spares

47. The last proviso to Regulation 29(2) of the 2014 Tariff Regulations provides as under:



"Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a part of additional capitalization or consumption of stores and spares and renovation and modernization".

48. In terms of the said proviso, capital spares consumed are admissible separately, at the time of truing up of tariff, based on the details furnished by the Petitioner. The capital spares claimed by the Petitioner are as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Capital spares (not part of capital cost)	133.54	78.63	132.12	71.75	42.47
Capital spares (part of capital cost)	0.00	0.00	0.00	0.00	0.00

49. The Respondent, BRPL and TPDDL have submitted that there is no provision to capitalize the capital spares in respect of hydro power stations in the 2014 Tariff Regulations, and accordingly the claim of the Petitioner is without any basis. In response the Petitioner submitted that, capital spares which have been purchased but have not been put to use are kept under Form 9(D) which is addition under exclusion category, and thus the cost of purchase of capital spares does not form the part of capital cost for computation of tariff, as these capital spares are claimed as separate reimbursement, when these spares are being put to use. The Petitioner has also submitted that Regulation 9(6)(a) is not applicable as these spares never formed part of capital cost for tariff, with the adoption of 'New Accounting Standard' w.e.f. 2016-17 and capital spares which have been purchased but have not been put to use are still kept under form 9(D) but when these assets are being put to use these assets are migrated to main head and are claimed under form 9(A) under replacement.

50. We have considered the matter. Based on the submissions made by both the parties, we have examined the list of spares furnished by the Petitioner. It is pertinent

to mention that the term 'capital spares' has not been defined in the 2014 Tariff Regulations. The term capital spares, in our view, is a piece of equipment, or a spare part, of significant cost that is maintained in inventory for use in the event that a similar piece of critical equipment fails or must be rebuilt. Keeping in view the principle of materiality and to ensure standardized practices in respect of earmarking and treatment of capital spares, the value of capital spares exceeding Rs.1.00 lakh, on prudence check of the details furnished by the Petitioner in Form-17 of the Petition, has been considered for the purpose of tariff. Based on this, the details of capital spares consumption allowed for the 2014-19 tariff period before adjusting the salvage value of old spare is summarized as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Total capital spares consumed	133.54	78.63	132.12	71.75	42.47
claimed					
Less: Value of capital spares	0.00	0.00	0.00	6.94	0.00
below Rs.1.00 lakh disallowed					
on individual basis					
Net total value of capital	133.54	78.63	132.12	64.81	42.47
spares considered					

51. Further, we are of the view that spares do have salvage value. Accordingly, in line with the practice of considering salvage value, presumed to be recovered by the Petitioner on sale of other capital assets, on becoming unserviceable, the salvage value of 10% has been deducted from the cost of capital spares considered above for 2014-19 tariff period. Therefore, on prudence check of the information furnished by the Petitioner in Form-17 and on applying the said ceiling limit along with deduction of the salvage value @10%, the net capital spares allowed in terms of Regulation 29(2) of 2014 Tariff Regulations is as under:

	2014-15	2015-16	2016-17	2017-18	2017-18
Net total value of capital	133.54	78.63	132.12	64.81	42.47
spares considered					
Less: Salvage value @ 10%	13.35	7.86	13.21	6.48	4.25
Net capital spares allowed	120.19	70.77	118.91	58.33	38.22

Wage Revision impact

52. The Petitioner has submitted that it has filed Petition No. 224/MP/2019 claiming the recovery of impact of wage revision of its employees, deputed employees of KV staff/ DAV and Central Industrial Security Force (CISF) in respect of this generating station for the period from 1.1.2016 to 31.3.2019. It is noticed that the additional O&M expenses claimed by the Petitioner, on these aforesaid counts, had already been considered and disposed of by the Commission vide common order dated 10.11.2022 in Petition Nos.234/MP/2019 & batch cases. In view of this, the claim of the Petitioner, under this head, has not been considered in this order.

Goods & Services Tax

53. The Petitioner has also claimed reimbursement of additional tax paid due to implementation of GST in respect of generating station as additional O&M expenses and for this purpose, it has requested for relaxation of the provisions of Regulation 29(3) in exercise of the powers vested under Regulation 54 and Regulation 55 of the 2014 Tariff Regulations. The Petitioner has further submitted that the implementation of GST is a "Change in law" event and the impact of the same should be passed through in tariff. As such, the tax paid in O&M expenditure of plants (service portion) is claimed over and above the O&M expenses of the respective power stations. The Petitioner has submitted that it had filed Petition No. 133/MP/2019, which was disposed of by the Commission vide its order dated 22.8.2019, granting liberty to the Petitioner to raise the claim for reimbursement of additional tax on O&M expenses due



to implementation of GST Act, 2017 along with the truing up petition for the period 2014-19. The additional impact of GST in 2017-18 (1.7.2017 to 31.3.2018) and 2018-19 as submitted by the Petitioner, duly certified by statutory auditors, are as under:

Additional Impact of GST on O&M Expenses (in Rs.)					
2017-18	2018-19	2018-19	Total		
	(1.4.2018 to	(1.1.2019 to			
	31.12.2018)	31.3.2019)			
4,18,81,260	4,10,32,533	1,63,42,050	9,92,55,843		

54. We have examined the matter. It is evident from the submissions of the Petitioner and the documents on record, that in terms of the provisions of J&K General Sales Tax Act, 1962 and the Rules framed thereunder, Security Services were not falling in the definition of 'goods' or 'services', as defined in Section 2(h) of the said Act and therefore, the same were not eligible to any tax i.e. WCT under J&K General Sales Tax Act, 1962 or Service Tax in the State of J&K in pre-GST Regime. However, with the introduction of GST in J&K w.e.f. 8.7.2017, Security services are being subjected to GST @18%. It can, therefore, be concluded that due to the implementation of GST on Security services, the Petitioner has been obligated to pay GST on Security services for this generating station. In this background, the details of GST, duly certified by the Auditor and claimed by the Petitioner is allowed as under:

Additional Impact of GST on O&M Expenses (Rs. in lakh)								
2017-18		2018-19	2018-19					
		(1.4.2018 to 31.12.2018)	(1.1.2019 to 31.3.2019)					
Total Impact of GST	418.81	410.33	163.42	992.56				
Impact of GST	354.74	347.23	141.88	843.85				
allowed on Security								
Services-CISF in								
above								

Interest on Working Capital

55. Sub-section (c) of Clause (1) of Regulation 28 of the 2014 Tariff Regulations provides as under:



- "28. Interest on Working Capital: (1) The working capital shall cover
- (c) Hydro generating station including pumped storage Hydro Electric generating Station and transmission system including communication system:
- (i) Receivables equivalent to two months of fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expense specified in regulation 29; and
- (iii) Operation and maintenance expenses for one month."

Working Capital for Receivables

56. The Receivable component of working capital has been worked out based on two months of fixed cost as under:

	(Rs. in lakh)			
2014-15	2015-16	2016-17	2017-18	2018-19
5754.45	5854.14	5961.35	6116.41	6260.91

Working Capital for Maintenance Spares

57. Maintenance spares @15% of O&M expenses are worked out and allowed as under:

_		(Rs. in lakn)				
	2014-15	2015-16	2016-17	2017-18	2018-19	
	1130.94	1197.47	1283.54	1411.76	1518.58	

Working capital for O&M Expenses

58. O&M expenses for 1 month for the purpose of working capital are as under:

				(Rs. in lakh)
2014-15	2015-16	2016-17	2017-18	2018-19
628.30	665.26	713.08	784.31	843.66

Rate of Interest on Working Capital

59. Clause (3) of Regulation 28 of the 2014 Tariff Regulations provides as under:

"Interest on working Capital: (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later."

60. Accordingly, interest on working capital is worked out and allowed as under:



	2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for O&M	628.30	665.26	713.08	784.31	843.66
Expenses (one month of					
O&M Expenses)					
Working capital for	1130.94	1197.47	1283.54	1411.76	1518.58
Maintenance Spares (15% of					
operation and maintenance					
expense)					
Working capital for	5754.45	5854.14	5961.35	6116.41	6260.91
Receivables (two months of					
fixed cost)					
Total working capital	7513.69	7716.87	7957.97	8312.48	8623.14
Rate of Working Capital (%)	13.500%	13.500%	13.500%	13.500%	13.500%
Interest on Working	1014.35	1041.78	1074.33	1122.19	1164.12
Capital					

Annual Fixed Charges for the period 2014-19

61. Based on the above, the annual fixed charges approved for the generating station for the period 2014-19 is summarized below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4677.67	4689.67	4711.41	4725.38	4754.82
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	21295.11	21410.29	21425.40	21439.18	21522.62
O&M Expenses	7539.59	7983.11	8556.95	9411.73	10123.87
Interest on Working Capital	1014.35	1041.78	1074.33	1122.19	1164.12
Total including GST	34526.72	35124.85	35768.09	36698.48	37565.43

Note: (1) All figures are on annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such the sum of individual items may not be equal to the arithmetic total of the column.

Normative Annual Plant Availability Factor (NAPAF)

- 62. Clause (4) of Regulation 37 of the 2014 Tariff Regulations provides for the Normative Annual Plant Availability Factor (NAPAF) for hydro generating stations already in operation. NAPAF of 70% was allowed by Commission for the generating station vide order dated 13.7.2016 in Petition No. 238/GT/2014.
- 63. It is pertinent to mention that Commission vide its order dated 13.7.2016 in Petition No. 238/GT/2014 had allowed NAPAF of 70%, as the same is run of the river hydro



generating station. Since the Commission, based on the actual PAF data of the past period, had allowed NAPAF of 70% for the generating station for the period 2014-19 in terms of the said regulations, the same is allowed.

Auxiliary Energy Consumption

64. As per Regulation 8(6) of the 2014 Tariff Regulations and its subsequent amendment thereof, the financial gain on account of actual auxiliary energy consumption being less than the normative auxiliary energy consumption is to be shared in the ratio of 60:40 between generating station and the beneficiaries. The Petitioner submitted that in line with the first amendment to the 2014 Tariff Regulations, in 2015, the financial gain on account of Auxiliary Consumption has been shared with all the beneficiary Discoms. Accordingly, the same is in order and allowed.

Design Energy

65. The Commission in order dated 13.7.2016 in Petition No. 238/GT/2014 had approved the annual Design Energy (DE) of 2587.38 MU for the period 2014-19 in respect of this generating station. The same had also been considered in this order. Month-wise details of the same is as under:

Month		Design Energy (MU)
	I	109.44
April	II	109.44
	III	109.44
	I	109.44
May	II	109.44
	III	120.38
	I	109.44
June	II	109.44
	III	109.44
lada	I	109.44
July	II	109.44



Month		Design Energy (MU)
	III	120.38
		109.44
August	II	91.84
	III	101.35
	I	85.55
September	II	67.02
	III	56.67
	I	48.64
October	II	37.45
	III	31.60
	I	25.26
November	II	23.68
	III	23.28
	I	22.59
December	II	22.59
	III	26.21
	I	25.96
January	II	24.12
	III	31.00
	I	47.80
February	II	46.56
	III	38.73
	I	62.71
March	II	85.40
	III	116.77
	Total	2587.38

Summary

66. The annual fixed charges allowed vide order dated 13.7.2016 in Petition No. 238/GT/2014 and the annual fixed charges allowed in this order (after truing-up) for the period 2014-19 for the generating station are summarized below:

(Rs. in lakh)

					(1.10
	2014-15	2015-16	2016-17	2017-18	2018-19
Annual fixed charges allowed vide order dated 13.7.2016, in Petition No. 238/GT/2014	34430.69	35023.61	35680.58	36360.49	36992.03
Annual fixed charges allowed in this order	34526.72	35124.85	35768.09	36698.48	37565.43

67. The difference between the annual fixed charges recovered by the Petitioner



in terms of order dated 13.7.2016 in Petition No. 238/GT/2014 and the annual fixed charges determined by this order, shall be adjusted in terms of the provisions of Regulation 8(13) of the 2014 Tariff Regulations.

DETERMINATION OF TARIFF FOR THE 2019-24 TARIFF PERIOD

68. The Petitioner, in this petition, has also sought determination of tariff of the generating station for the 2019-24 tariff period, in terms of the provisions of the 2019 Tariff Regulations. The annual fixed charges claimed by the Petitioner for the 2019-24 tariff period are as under:

Annual Fixed Charges claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	3507.07	3554.93	3608.20	3641.45	3668.59
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	20515.53	20550.85	20585.68	20606.04	20627.07
Interest on Working Capital	982.51	1013.11	1045.18	1078.19	1112.65
O&M Expenses	11770.85	12331.98	12919.86	13535.75	14181.02
Total	36775.95	37450.87	38158.92	38861.43	39589.33

Capital Cost

69. 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 of 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 provides as under:

"The Capital cost of an existing project shall include the following:

- (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...."
- 70. The Petitioner vide Form-1i of the petition has claimed capital cost as follows:

		2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening Capital Cost	343558.76	344245.97	345063.66	345850.09	345933.09
В	Addition during the year / Period	682.19	1007.90	939.00	147.60	1007.00
С	De-capitalisation during the year/period	199.47	190.21	152.57	64.60	343.45
D	Discharges during the year	204.49	0.00	0.00	0.00	0.00
Ε	Closing Capital Cost (A+B-C+D)	344245.97	345063.66	345850.09	345933.09	346596.64

71. The Commission in this order has allowed the closing capital cost of Rs. 343177.18 lakh, as on 31.3.2019. Accordingly, in terms of Regulation 19 of the 2019 Tariff Regulations, the capital cost of Rs. 343177.18 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 tariff period.

Additional Capital Expenditure

72. Clause (2) of Regulation 9 of the 2019 Tariff Regulations provides that the application for determination of tariff shall be on admitted capital cost including additional capital expenditure already admitted and incurred up to 31.3.2019 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the 2019-24 tariff period along with the true up for the 2014-19 period in accordance with the 2014 Tariff Regulations.



- 73. Regulation 25(1) 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.
- 74. Regulation 26 of the 2014 Tariff Regulations provides as under:
 - 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 Modernization (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 decapitalization 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.
- 75. The Petitioner has submitted that the projected additional capital expenditure has been claimed under various provisions of Regulation 25 and Regulation 26 of the 2019 Tariff Regulations, wherein, some of the admitted capital works have spilled over from the period 2014-19. Further, the Petitioner vide affidavit dated 29.6.2021 has revised the claim of additional capital expenditure for the period 2019-24. Based on this, the details of additional capital expenditure claimed by the Petitioner vide affidavit dated 29.6.2021 are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
186.06	1256.03	1007.00	327.60	1007.00

2019-20

SI. No.	Regulation		2019-20
(a)	25(2)(a)	Additional capitalization within the original scope and after the cut-off date, in case of replacement of assets deployed. 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.	37.40
(b)	25(2)(d)	Additional capitalization within the original scope and after the cut-off date. The replacement of such asset or equipment has otherwise been allowed by the Commission	78.66
(c)	26(1)(b)	Additional capitalization beyond the original scope. Change in law or compliance of any existing law	46.00



SI.	Regulation		2019-20
No.			
(d)	26(1)(d)	Additional capitalization beyond the original scope. 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	24.00
	Total addition	onal capital expenditure claimed	186.06

S.	Details of the	Amount	Justification submitted by	Remarks on admissibility	Amount
No	claim	claimed	the Petitioner	Remarks on admissibility	Allowed
			19 Tariff Regulations		Allowed
1	Submersible	20.60	Existing drainage pumps are	It is noticed that the	20.60
'	Drainage Pump Set	20.00	installed in 2005 and 2006		20.00
	55 KW: 02 Nos			expenditure claimed is	
	00 1111 02 1100		and completed its life. Its	primarily towards the	
			repair is not economical and	replacement of old items,	
			found beyond repair due to	which form part of the	
			its ageing. Presently single	original scope of works.	
			pump is working in each	Accordingly, the same is	
			drainage pumps while it	allowed under Regulation	
			should be two as per	25(2)(a) of the 2019 Tariff	
			drainage requirement of	Regulations. This is	
			powerhouse.	however, subject to	
			It is planned to replace these	clarification that this item	
			pumps to avoid flooding of	does not form part of capital	
			the powerhouse and	spares, as indicated during	
			subsequent generation loss.	the period 2014-15, at the	
			Supply order has been	time of truing -up of tariff.	
			placed in 2018-19. The	The de-capitalized value of	
			Petitioner has claimed the	old asset has been	
			same under Regulation	determined under "Assumed	
			25(2)(a) of 2019 Tariff	Deletions".	
			Regulations.		
2	Potable Cooling	16.80	Potable cooling water	The Petitioner has submitted	16.80
	Water Pump 22 kw,		pumps are working since	the 'NHPC manual for	
	04 sets		last 22 years since	disposal of construction	
			commissioning of the power	plant, equipment and	
			station. Power station is	spares' that specify the life	
			facing frequent breakdown	of the pump and repair	
			resulting in generation loss.	provision as per policy, as	
			These pumps have	documentary evidence, for	
			completed their life and	the said asset. Considering	
			found beyond repair due to	the submissions, it is noticed	
			ageing and its repair is not	that the expenditure claimed	
			economical. Accordingly,	is primarily towards the	
			four nos. old pumps of	replacement of old items,	
			individual 4 units, are	which form part of the	
			needed to be phased out	original scope of works.	
			with new pumps for	Accordingly, the claim is	
			healthiness of cooling water	allowed under Regulation	
			system & also to avoid the	25(2)(a) of the 2019 Tariff	
			generation loss and forced	Regulations.	
			outage due to cooling water	. togalationo.	
			catage due to cooming water		



S.	Details of the	Amount	Justification submitted by	Remarks on admissibility	Amount
No	claim	claimed	the Petitioner		Allowed
			system. Supply order has	The de-capitalized value of	
			been placed in 18-19. The	old asset has been	
			Petitioner has claimed the	determined under "Assumed	
			same under Regulation	Deletions".	
			25(2)(a) of 2019 Tariff		
			Regulations.		
	Sub-total (A)	37.40			37.40
			9 Tariff Regulations		
3	Retrofitting of	78.66	This item was allowed in	It is noticed that the	78.66
	relays / protection		2015-16 for 30 lakhs against		
	scheme in		value of old item of Rs 5	26.26 lakh for this item in	
	generating units		lakh. Due to disturbed law	2014-15 and the same has	
			and order situation in valley	been allowed. It is	
			and poor participation from	understood that the claim is	
			bidders, item could not be	towards the balance	
			capitalized during the tariff	payment of the said works.	
			period 2014-19. These	Accordingly, the claim is	
			items are required due to	allowed. However, the	
			product obsolescence and	Petitioner is directed to	
			lack of spare support from	provide reason for higher	
			OEM. These relays will be	claim when the allowed	
			replaced in two units of	amount in order dated	
			power station. Supply order	13.7.2016 is Petition No.	
			has been placed in 2018-19	238/GT/2014.The de-	
			through tendering.	capitalization of old asset	
			The Petitioner has claimed	has been determined under	
			the same under Regulation	"Assumed Deletions".	
			25(2)(d) of 2019 Tariff		
	0.1.(.1.(0)	70.00	Regulations.		70.00
	Sub-total (B)	78.66			78.66
C.	Regulation 26(1)(b)	of the 20	19 Tariff Regulations		



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
5	Design, supply, construction, erection, testing and commissioning of sewage treatment plant at Gingle	46.00	Presently, power station has septic tank system since commissioning of the Project for the disposal of Sewage of whole colony. During the inspection by representative of SPCB, J&K for consent to operate Uri Power Station it has been pointed out that the existing digesting type i.e., septic tank system is not suitable as per the norms of pollution control board guidelines and accordingly directed to upgrade the existing sewerage system. Hence, it becomes necessary to install the Sewage Treatment Plant (STP) to meet the guidelines of Central Pollution Control Board (CPCB). To meet out the CPCB/SPCB guidelines as well as commitment towards environment, it is necessary to install sewerage treatment plant. The Petitioner has claimed the same under Regulation 26(1)(b) of 2019 Tariff	It is noticed that the Petitioner has also claimed projected expenditure of this asset for Rs. 35.00 lakh in 2020-21. However, the Petitioner has not submitted any documents in support of the same. As the proposed expenditure is for construction of sewerage treatment plant, in terms of the recommendations/guidelines of the CPCB/SPCB, the claim is allowed under Regulation 26(1)(b) of the 2019 Tariff Regulations. The Petitioner is however, directed to submit the relevant documentary evidence in support of the claim, at the time of truing up.	46.00
	Sub-total (C)	46.00	Regulations.		46.00
D. R			Tariff Regulations		40.00
6	Construction of parking cum fire building at powerhouse Rajarwani and Gingle	24.00	Uri Power station is having two nos. of fire tenders. However, there is no facility for Parking cum Fire Building for Fire Tender at powerhouse Rajarwani and Gingle. As such fire station is being constructed so that in case of any eventuality, fire tenders can be rushed from a centralised location. The Petitioner has claimed the same under Regulation 26(1)(d) of 2019 Tariff Regulations.	As the expenditure is related to the security and safety of the generating station, the claim is allowed under Regulation 26(1)(d) of the 2019 Tariff Regulations. The Petitioner is however, directed to furnish the documentary evidence in support of its claim at the time of truing-up of tariff.	24.00
	Sub-total (D)	24.00			24.00
	Total (A+B+C+D)	186.06			186.06



76. In view of the above, the total additional capital expenditure allowed under original scope, change in law and other than original scope of work is Rs.116.06 lakh, Rs.46.00 lakh and Rs. 24.00 lakh respectively.

2020-21

(Rs. in lakh)

SI. No.	Regulation		2020-21
(a)	25(2)(a)	Additional capitalization within the original scope and after the cut-off date, in case of replacement of assets deployed. 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.	111.50
(b)	25(2)(c)	Additional capitalization within the original scope and after the cut-off date, replacement of such asset or equipment is necessary on account of obsolescence of technology	25.00
(c)	25(2)(d)	Additional capitalization within the original scope and after the cut-off date. The replacement of such asset or equipment has otherwise been allowed by the Commission	532.33
(d)	26(1)(b)	Additional capitalization beyond the original scope. Change in law or compliance of any existing law	135.00
(e)	26(1)(d)	Additional capitalization beyond the original scope. 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	452.20
	Total additi	onal capital expenditure claimed	1256.03

S.	Details of the claim	Amount	Justification submitted by the	Remarks on admissibility	Amount		
No		claimed	Petitioner		Allowed		
A. Regulation 25(2)(a) of the 2019 Tariff Regulations							
1	Purchase of Boat	6.00	One number manually operated boat exists at Barrage which was purchased long time back and is in dilapidated condition. Continuous trash cleaning work is being done in the intake area using existing boat. There is always a risk to life of the workers involved due to the dilapidated condition of the existing boat. It has been repaired many times but some leakage in the boat is always there. In addition to this Pre-Monsoon and Post Monsoon reservoir survey is required as	expenditures claimed is primarily towards the replacement of old items, which form part of the original scope of works. Accordingly, the claims are allowed under Regulation 25(2)(a) of the 2019 Tariff Regulations. The de-capitalized value of old asset has been considered under	6.00		



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			per the guidelines of CWC. To avoid any untoward incident at project, a new boat is required at the Barrage Site. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		
2	Blowdown air compressor-02 set	10.00	These compressors are installed for safety of turbine / condenser mode operation to maintain required pressure of 15 bar and working since last 22 years of project commissioning. Due to wear and tear of the components, the blow down compressors are getting frequent breakdown resulting in unit outage and generation loss. Blow down compressors are planned for replacement in 2019-20 in unit 1&2 and two nos in 21-22. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		10.00
3	Shaft seal cooling pump: 02 Nos	7.00	There is provision of two nos shaft seal cooling pumps for cooling of shaft seal of all four units. All 04 Units cannot be run without healthiness of shaft seal cooling. Presently only single pump is working and it is also in eroded condition. Its breakdown will cause outage of unit & subsequent generation loss; accordingly, it is proposed to replace these two pumps with new pumps for healthy running of unit & avoid generation loss. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		7.00
4	AC & V Pump Motor Set - 1 Nos.	7.00	Two no's, AC and V-pumps are installed at pump floor of powerhouse for air conditioning and ventilation system. The existing installed AC and V pumps are in continuous operation since commissioning. Due to continuous running, impellers of pumps have been		7.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			eroded and efficiency of the system has been decreased. It is causing temperature rise in ambient temperature of powerhouse resulting in temperature rise of different components of unit & affecting equipment life and generation as whole. For healthiness of HVAC system at powerhouse and improvement in plant temperature, replacement of these pumps is urgently required. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations		
5	Shell and tube type, water to oil heat exchanger for thrust bearing - 4 nos.	40.00	of 2019 Tariff Regulations. There are 3 nos., shell and tube type heat exchangers working in parallel for cooling of thrust bearing in each unit. Due to continuous operation since commissioning and scaling of existing heat exchangers, the efficiency of system has been reduced. It is leading to temperature rise of oil and subsequent rise of thrust bearing temperature. For efficient cooling and enhancement of system efficiency and further to avoid generation loss It is proposed to replace one heat exchanger in each unit for better performance of cooling system of thrust bearing. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.	expenditures claimed is primarily towards the replacement of old items, which form part of the original scope of works. Accordingly, the claims are allowed under Regulation 25(2)(a) of the 2019 Tariff Regulations. The de-capitalized value of old asset has been determined under	40.00
6	Chiller compressor	9.50	The chiller plant is installed inside the underground powerhouse to maintain proper air ventilation and to maintain suitable temperature for working manpower and machineries. Proper functioning of the chiller plant is required throughout the year otherwise it will impact the different parameter of generating unit and its auxiliaries as well as the health of personnel. The		9.50



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			existing chillers are about 25 years old and are occurrence failures in compressors have increased. Two no compressors are not working in the existing system, and we have no spare		
			compressor to replace them. To ensure proper air conditioning of the plant it is planned to replace two nos. faulty compressors with new one. The Petitioner has claimed the same under		
7	Durchage of 220 IV/A	22.00	Regulation 25(2)(a) of 2019 Tariff Regulations.		22.00
7	Purchase of 320 KVA DG set	32.00	At present 01 no 312.5 kVA and 01 no 200 kVA DG set are installed at Barrage Control Room and being under continuous use to meet out the operational requirements during power failure. During tripping/failure of feeders from powerhouse, these DG sets are continuously in operation as there is no power supply available from state govt. These DG sets are mainly dedicated for operation of HM equipment, Spillway Gates, Silt Flushing Gates, Silt Excluder Gates and Compressors and Pinch Valves of Desilting Basins and other HM and E&M installations of the Barrage Premises. Over the time thre has been increased load demand to CISF barracks and other establishments. Due to continuous operation, the 200 KVA DG sets has been degraded and is unable to be operated under full capacity. The new purchase is proposed to be undertaken for Barrage Operations in place of 200 kVA DG Set which is insufficient to meet load demand. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		32.00
	Sub-total (A)	111.50	2010 Taliii Nogalations.		111.50
D D	egulation 25(2)(c) of t		iff Regulations		111.50



Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
Pilot operated directional valve for MIV service seal operation: 1 set (Includes 3 No Valves)	25.00	auto operation of service seal during stop of the unit and it is essentially required for healthiness of MIV. Any problem in pilot operated valve shall lead to non-operation of MIV service seal and spinning of the unit resulting into wearing of thrust pad and may lead to its failure resulting outage of unit and generation loss. Power station is facing mal operation of these valves in unit 2 and it needs replacement and accordingly it is essentially required. The Petitioner has claimed the same	submissions of the Petitioner and keeping in view that the expenditure claimed is towards the replacement of asset /work due to obsolescence of technology, the claim of the Petitioner is allowed under Regulation 25(2)(a) of the 2019 Tariff Regulations. The de-capitalization of old asset/work has been considered under "Assumed Deletions". The Petitioner is however, directed to	25.00
Sub-total (B)	25.00			25.00
		riff Regulations	It is noticed that the	36.20
hydraulic elevator of powerhouse	30.20	This item was allowed in 2014-15 for 14.16 lakh against old item of value of Rs 50 lakh. Due to disturbed law and order situation in valley in recent year items and poor participation from bidders' item could not be procured in tariff period 2014-19. Initially hydraulic type elevator was installed, and this model has been discontinued by the OEM and declared beyond repair. Elevator is essentially required for easy movement of manpower and materials. Supply order has been placed in 2018-19 through tendering. The Petitioner has claimed the same under Regulation 25(2)(d) of 2019 Tariff Regulations.	Commission vide order dated 13.7.2016 in Petition No. 238/GT/2014 had allowed total expenditure of Rs.14.16 lakh in 2014-15 towards upgradation of existing hydraulic elevator of powerhouse. Accordingly, the claim of the Petitioner has also been allowed for 2014-15 in this order. In view of the above, the claim of the Petitioner has been allowed, under this head. The Petitioner is directed to submit the reason for additional claim for this asset at the time of truing up of tariff.	30.20
i i		ļ.		
	Pilot operated directional valve for MIV service seal operation: 1 set (Includes 3 No Valves) Sub-total (B) Regulation 25(2)(d) of Upgradation of existing hydraulic elevator of	Pilot operated directional valve for MIV service seal operation: 1 set (Includes 3 No Valves) Sub-total (B) 25.00 Regulation 25(2)(d) of the 2019 Ta Upgradation of existing hydraulic elevator of	Pilot operated directional valve for MIV service seal operation: 1 set (Includes 3 No Valves) Sub-total (B) Sub-total (B) Regulation 25(2)(d) of the 2019 Tariff Regulations Upgradation of existing hydraulic elevator of powerhouse Sub-total (B) Regulation 25(2)(d) of the 2019 Tariff Regulations This item was allowed in 2014-15 for 14.16 lakh against old item of value of Rs 50 lakh. Due to disturbed law and order situation in valley in recent year items and poor participation from bidders' item could not be procured in tariff period 2014-19. Initially hydraulic type elevator was installed, and this model has been discontinued by the OEM and declared beyond repair. Elevator is essentially required for easy movement of manpower and materials. Supply order has been placed in 2018-19 through tendering. The Petitionen has claimed the same under reasy movement of manpower and materials. Supply order has been placed in 2018-19 through tendering. The Petitionen has claimed the same under Regulation 25(2)(d) of 2019	Petitioner Pilot operated directional valve for MIV service seal operation: 1 set (Includes 3 No Valves) Petitioner These valves are installed for auto operation of service seal during stop of the unit and it is essentially required for healthiness of MIV. Any problem in pilot operated valve shall lead to non-operation of MIV service seal and spinning of the unit resulting into wearing of thrust pad and may lead to its failure resulting outage of unit and generation loss. Power station is facing mal operation of these valves in unit 2 and it needs replacement and accordingly it is essentially required. The Petitioner has claimed the same under Regulations. Petitioner is allowed under Regulation 25(2)(d) of the 2019 Tariff Regulations. The de-capitalization of old asset/work has been considered has been considered has been considered supporting documents at the time of truing-up of tariff. Commission vide order dated 13.7.2016 in Petition novalley in recent year items and poor participation from bidders item could not be procured in tariff period 2014-19. Initially hydraulic type elevator and declared beyond repair. Elevator is essentially required for easy movement of manpower and materials. Supply order has been placed in 2018-19 through the delired has been allowed, under this head of powerhouse Accordingly, the claim of the Petitioner is allowed to the Petitioner is allowed under Petitioner is allowed to the Petitioner is allowed to technology, the claim of the powerhouse is allowed and order situation in valley in recent year items and poor participation from bidders; the could not be procured in tariff period 2014-19. Initially hydraulic elevator of powerhouse. Accordingly, the claim of the petitioner is allowed, under this head of powerhouse. Accordingly, the claim of the petitioner has also been allowed, under this head of powerhouse. Accordingly, the claim of the petitioner is directed to submit the resson for additional claim for this asset at the time of truing and period to the procured in the



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			poor participation from bidders' item could not be capitalized during the tariff period 2014-19. This is essentially required due to product obsolescence and to avoid unit outage /generation loss due to lack of spares / ageing of electronic components. The system in Unit#2 has been replaced in 2015-16 and replacement in Unit#1,3 & 4shall be taken up in 2019-24. Letter of award has been placed during 2019-20. The Petitioner has claimed the same under Regulation 25(2)(d) of 2019 Tariff Regulations.	14(3)(ii) of the 2014 Tariff Regulations, on cash basis in 2014-15 and 2016-17 vide order dated 13.7.2016 in Petition No. 238/GT/2014, considering the fact that the expenditure incurred is for compliance of IEGC, 2010. Accordingly, the additional capital expenditure claimed, is allowed. The de-capitalization of old asset has been determined under "Assumed Deletions".	
	Sub-total (C)	532.33			532.33
D. I	Regulation 26(1)(b) of Disaster Management	the 2019 Tar 100.00	iff Regulations This item is approved in 14-15 for	It is noticed that the	0.00
	Plan (Electrical Installation)	100.00	Inisitem is approved in 14-15 for 100 lakh and 2015-16 for 200 lakh. The present scheme for drainage and dewatering consists of four sumps, two dry pits for dewatering and two wet sumps for drainage. The dewatering pumps (one in each sump) are vertical centrifugal pumps, and the drainage pumps (two in each sump) are submersible type. The power supply to all the pumps is fed through panels located in pump floor (the lowest floor of PH) and in case of any eventuality the complete drainage and dewatering system will be nonfunctional. Hence an alternate arrangement for dewatering is proposed in which submersible pumps will be installed at pump floor and a separate piping arrangement will be made so that water can be directly discharged into the main river through MAT. The control and power supply panel shall be located in the GIS floor which shall be fed directly from the existing DG set installed near the	additional capital expenditure claimed for these assets / works were allowed in 2014-15 and 2015-16, vide order dated 13.7.2016 in Petition No. 238/GT/2014. However, the Petitioner has stated that the Pumps for the said works have been installed in 2015-16 and piping arrangements have been completed in 2017-18. It has also submitted that due to disturbed law and order situation in valley in recent year and poor participation from bidders'	0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			pothead yard. To protect the powerhouse against flooding, the scheme of disaster management plan has been proposed in phased manner. Pumps have been installed in 15-16 and piping arrangements have been completed in 17-18. Due to disturbed law and order situation in valley in recent year items and poor participation from bidders' item could not be capitalized during the tariff period 2014-19. Installation of flood dewatering pump has also been advised by Central Electricity Authority vide notification dated 20.8.2010. The Petitioner has claimed the same under Regulation 26(1)(b) of	capitalization claimed by the Petitioner during the period 2014-19 has been shifted and allowed in 2021-22 for the purpose of	
2	Installation of Sewage Treatment Plant at Barrage and Uranbua Colony	35.00	A Residential Colony of Uri Power Station is located at Uranbua downstream of Barramulla Town on bank of River Jhelum. As per the guidelines of Central Pollution Control Board (CPCB), all effluent/sewage come out from the whole colony must be treated before the final discharge and should meet all prescribed by CPCB/SPCB. Presently, Uranbua Residential Colony has septic tank system since commissioning of the Project for the disposal of Sewage of whole colony. During the inspection by representative of SPCB, J&K for consent to operate Uri Power Station it has been pointed out that the existing digesting type i.e. septic tank system is not suitable as per the norms of pollution control board guidelines and accordingly directed to upgrade the existing sewerage system. Hence, it becomes necessary to install the Sewage Treatment Plant (STP) to meet the guidelines of Central	Petitioner has also claimed projected expenditure of Rs. 46.00 lakh in 2019-20. However, the Petitioner has not submitted any documents in support of the same. It is noticed that that the proposed expenditure is for construction of sewerage treatment plant for the residential colony and is therefore not directly related to the generating station. In view of this, the claim of the Petitioner is	0.00



S.	Details of the claim	Amount	Justification submitted by the	Remarks on admissibility	Amount
No		claimed	Petitioner		Allowed
			To meet out the CPCB/ SPCB		
			guidelines as well as		
			commitment towards		
			environment, it is necessary to		
			install Sewerage Treatment		
			Plant at the residential colony of		
			Uranbua. The Petitioner has		
			claimed the same under		
			Regulation 26(1)(b) of 2019		
			Tariff Regulations.		
	Sub-total (D)	135.00	rami regulations.		0.00
E	Regulation 26(1)(d)		Tariff Regulations		0.00
1	Purchase of 3 Nos BR	155.20	Uri Power Station is situated in	As the expenditure is	155.20
	Vehicles		Kashmir Valley near to Line of		
			Control (LOC) of Pakistan.		
			Security agencies / Intelligence	, ,	
			officials have informed that		
			infiltration is being attempted in	,	
			Uri Sector resulting in risk of		
			terrorist attacks in NHPC		
			installations i.e., Barrage,		
			Powerhouse, NHPC township		
			etc. Keeping in view of the above		
			situations, various security	claim at the time of truing-	
			meetings and security survey	up of tariff, failing which the	
			was conducted to safeguard	expenditure may not be	
			NHPC installations, employees,	considered.	
			and their families.	considered.	
			Apart from deployment of CISF personnel, Coverage of BR		
			,		
			vehicle has been recommended		
			for additional security, in a		
			meeting held on 15.4. 2019		
			under the Chairmanship of Joint		
			Secretary and CVO, MOP		
			regarding review of security		
			measures at vital installations of		
			NHPC located in J&K. The		
			Petitioner has claimed the same		
			under Regulation 26(1)(d) of		
	_		2019 Tariff Regulations.		
2	Connectivity of Power	297.00	The power station is in Uri Tehsil,		297.00
	Station with CCTV		District Baramulla of Kashmir		
	camera with voice		Division. The area is not only a		
	connectivity		disturbed area but is also near		
			the LoC. In the recent years		
			keeping in view the terrorist		
			attacks in the vicinity of the		
			Power Station area, the security		
			requirements were reviewed and		
			the concerned security agencies		



S.	Details of the claim	Amount	Justification submitted by the	Remarks on admissibility	Amount
No		claimed	Petitioner		Allowed
			like CISF, IB have been strongly		
			advising for the installation of IP		
			based centralized surveillance		
			system. This system is a primary		
			security requirement for round		
			the clock vigil in and around the		
			areas of the power station. This		
			will not only enhance the safety		
			but will also aid the CISF in		
			maintaining a tight vigil with		
			lesser manpower. The regular		
			advisories from IB, MoP, MoH,		
			CISF strongly mandate that the		
			system be in place as early as		
			possible. The Petitioner has		
			claimed the same under		
			Regulation 26(1)(d) of 2019		
			Tariff Regulations.		
	Sub-total (E)	452.20			452.20
	Total (A+B+C+D+E)	1256.03			1121.03

77. In view of the above, the total additional capital expenditure allowed under original scope, change in law and other than original scope of work is Rs.668.83 lakh, Rs.0.00 and Rs. 452.20 lakh respectively.

<u>2021-22</u>

SI. No.	Regulation		2021-22
(a)	25(2)(a)	Additional capitalization within the original scope and after the cut-off date, in case of replacement of assets deployed. 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.	184.00
(b)	25(2)(c)	Additional capitalization within the original scope and after the cut-off date, replacement of such asset or equipment is necessary on account of obsolescence of technology	50.00
(c)	25(2)(d)	Additional capitalization within the original scope and after the cut-off date. The replacement of such asset or equipment has otherwise been allowed by the Commission	248.00
(d)	26(1)(b)	Additional capitalization beyond the original scope. Change in law or compliance of any existing law	225.00
(e)	26(1)(d)	Additional capitalization beyond the original scope. Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or	300.00



SI. No.	Regulation		2021-22			
		statutory authorities responsible for national or internal security				
	Total addit	Total additional capital expenditure claimed				

S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
Α.	Regulation 25(2)(a)	of the 2019 T	ariff Regulations		
1	11 KV switch gear panel for Powerhouse	25.00	There is provision of 11 KV panel having Bus A & B equipped with 08 Nos incomers and 09 outgoers to feed power supply to UAB of each unit, SSB etc. These are working since last 22 years of commissioning of plant. The Petitioner submitted that they are facing blast of PTs and also product obsolescence and it needs to be replaced. 11 KV bus failure may cause tripping of all units and failure of power supply to powerhouse & may result in generation loss & PH flooding. In view of this, it is proposed to replace two nos. 11 KV faulty panels for healthiness of 11 KV switchgear panels along with CT/PT for better system reliability and powerhouse safety. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.	Considering the fact that these assets/ works are claimed as replacement of assets/ works which are within the original scope of the existing project and after cut-off date, the additional capital expenditure are allowed under Regulation 25(2)(a) of the 2019 Tariff Regulations. The de-capitalisation of old assets has been considered under "Assumed deletions".	25.00
2	10 KVA inverter (Main and standby)	23.00	10 KVA inverter is working at powerhouse to feed 220 V AC supply to DCS server, workstation, switchgear control equipment, 11 KV panel, different sensors, fire protection system and emergency lighting system of powerhouse. Both inverters installed by OEM has failed and replaced by domestic one on emergency. It is prone to fail due to continuous loading & may lead to outage of units & generation loss. It is		23.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			proposed to replace it by industrial type inverter with higher specifications for reliability of the system. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		
3	Blowdown air compressor-02 set	10.00	These compressors are installed for safety of turbine / condenser mode operation to maintain required pressure of 15 bar and working since last 22 years of project commissioning. Due to wear and tear of the components, the blow down compressors is getting frequent breakdown resulting in unit outage and generation loss. Blow down compressors are planned for replacement in 2019-20 in unit 1 and 2 and two nos. in 21-22. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		10.00
4	220V DC battery Bank- 01 set	84.00	Two nos 220V DC battery banks are installed at powerhouse. The battery banks are used for power supply to generator field winding for voltage build up during starting. The battery banks are also used to supply uninterrupted power to panels, workstations and illumination system through inverter system. In case of Failure in both the battery bank, the Units cannot start, and control system cannot be in functional mode. This will cause heavy generation loss to the power station. The existing battery bank has been in operation since commissioning and become old, aged and completed their life period. To avoid such failures, it is proposed to		84.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			replace one of the two existing battery banks with new bank for reliable functioning of DC system of powerhouse. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		
5	48V DC battery Bank- 01 set	12.00	Two nos 48V DC battery banks are installed at powerhouse. The battery banks are used for power supply to various protection, excitation, governing system & computer system. The existing battery bank has been in operation since commissioning and completed its life. Its storage capacity has been reduced and cannot hold load for recommended time-period without charging. Its failure may lead to outage of all units. To avoid such failures, it is proposed to replace one of the two existing battery banks with new bank for reliability of 48 V DC system. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		12.00
6.	Raw cooling water pump (vertical inline pump), Qty: 02 Nos	30.00	One no raw water pump is working in primary cooling water circuit of each generating unit. These pumps get eroded due to working in silty water on continuous run facing frequent breakdown and need replacement. The failure of the pump is directly linked to generation loss. Accordingly, it is proposed to replace it by vertical inline pumps with mechanical seal for long durability, reliable functioning of cooling water system & avoid generation loss. The Petitioner has claimed the same under		30.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
	- Ciaiiii	- Grannea	Regulation 25(2)(a) of 2019		7 11101100
			Tariff Regulations.		
7	Firefighting pipe	30.00	Powerhouse is equipped with		30.00
	replacement		water fire-fighting system fed		
			from fire tank installed at the		
			height of 200 meter, above		
			the turbine floor and it is fed to		
			different locations of the		
			powerhouse through different		
			piping arrangement. The		
			firefighting pipeline in audit 4		
			tunnel has been installed		
			since commissioning. Due to		
			moisture and regular use, the		
			inner wall has been eroded		
			and leakage from the		
			pipelines have been observed		
			at several places. Temporary		
			arrangement has been made		
			to arrest the leakage, but it		
			has been assessed during the		
			checking that due to thinning		
			of pipeline wall, leakage at		
			other places is going to start.		
			As firefighting is essentially to		
			require keeping healthy as per		
			statutory requirement and		
			safety of power house from		
			intended fire, accordingly it is		
			proposed to replace these old		
			pipe lines in tunnel area with		
			new pipe MS seamless type		
			for reliability of firefighting		
			system. The Petitioner has		
			claimed the same under		
			Regulation 25(2)(a) of 2019		
	Sub-total (A)	214.00	Tariff Regulations.		214.00
B. R	egulation 25(2)(c) o		ı ariff Regulations		217.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
1	Purchase of Generator	20.00	The CT/PT are used in the electrical circuit for measuring and protection of power equipment. The CT/PT are in use since commissioning and the insulation has aged. Due to insulation aging the PTs are failing frequently and loss of generation occurred. Further, the upgraded CT/PT has higher accuracy than the old one. To match with the latest technology, new CT/PT having high accuracy are proposed to be purchased at the earliest to replace the old ones. The Petitioner has claimed the same under Regulation 25(2)(c) of 2019 Tariff Regulations.	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 allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations. The de-capitalization of old asset/work has been considered under "Assumed Deletions". The Petitioner is also directed to furnish the actual expenditure along with supporting documents at the time of truing-up of tariff.	20.00
C R	Sub-total (B) egulation 25(2)(d) o	20.00 of the 2019 T	ariff Regulations		20.00
1	Modification / upgradation of existing excitation / governor system 1 units	248.00	This item was allowed in16-17 for 1140 lakh against value of old item of Rs 1500 lakh. Due to disturbed law and order situation in valley in recent year items and poor participation from bidders' item could not be capitalized during the tariff period 2014-19. This is essentially required due to product obsolescence & to avoid unit outage /generation loss due to lack of spares / ageing of electronic components. The system in Unit#2 has been replaced in 2015-16 and replacement in Unit#1,3 & 4shall be taken up in 2019-24. Letter of award has been placed during 2019-20. The Petitioner has claimed the same under Regulation 25(2)(d) of 2019 Tariff Regulations.	It is noticed that the additional capital expenditure claimed for these assets / works were allowed under Regulation 14(3)(ii) of the 2014 Tariff Regulations on cash basis in 2014-15 and 2016-17 vide order dated 13.7.2016 in Petition No. 238/GT/ 2014. Considering the fact that the expenditure incurred is for compliance of IEGC, 2010, the same was allowed during the period 2014-19, in this order and the decapitalization of old asset has been determined under "Assumed Deletions". In view of the above, the additional capital	248.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
				expenditure claimed by the Petitioner, is allowed under Regulation 25(2)(d) of the 2019 Tarif Regulations. It is observed that the Petitioner has claimed the same amount in 2019-20. The Petitioner is directed to submit the segregated scope of works, amount claimed, allowed by the Commission and expenses envisaged in future along with the supporting documents at the time of truing up of	
	Sub-Total (c)	248.00		tariff.	248.00
D.	Regulation 26(1)(b)		Tariff Regulations		240.00
1	Disaster Management Plan (Electrical Installation)	200.00	This item is approved in 14-15 for 100 lacs and 15-16 for 200 lakh. The present scheme for drainage and dewatering consists of four sumps, two dry pits for dewatering and two wet sumps for drainage. The dewatering pumps (one in each sump) are vertical centrifugal pumps and the drainage pumps (two in each sump) are submersible type. The power supply to all the pumps are fed through panels located in pump floor (the lowest floor of PH) and in case of any eventuality the complete drainage and dewatering system will be non-functional. Hence an alternate arrangement for dewatering is proposed in which submersible pumps will be installed at pump floor and a separate piping arrangement will be made so that water can be directly discharged into the main river through MAT. The control and power supply panel shall be	the Petitioner has stated that the Pumps for the said works have been installed in 2015-16 piping arrangements have been completed in 2017-18 and electrification work completed in 2020-21. It has also submitted that due to disturbed law and order situation in valley in recent year and poor participation from bidders' the item could not be capitalized during the period 2014-19. It is observed that the installation of flood dewatering pump has also been advised by	467.20



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			located in the GIS floor which shall be fed directly from the existing DG set installed near the pothead yard. To protect the powerhouse against flooding, the scheme of disaster management plan has been proposed in phased manner. Pumps have been installed in 2015-16 and piping arrangements have been completed in 2017-18. Due to disturbed law and order situation in valley in recent year items and poor participation from bidders' item could not be capitalized during the tariff period 2014-19. Installation of flood dewatering pump has also been advised by Central Electricity Authority vide notification dated 20.08.2010. The Petitioner has claimed the same under Regulation 26(1)(b) of 2019 Tariff Regulations	dated 20.8.2010. It is also observed that the final capitalization for the work is claimed in 2021-22 (sl no. (D). Accordingly, the capitalization claimed by the Petitioner during the period 2014-19 has been shifted and allowed in 2021-22 for the purpose of tariff.	
2	Supply, installation, and commissioning of Bio-composter at barrage, Boniyar	25.00	Solid Waste disposal generated at the power station needs to be disposed as per the Solid Waste Management Rule 2016 as notified by the Union Ministry of Environment, Forests and Climate Change (MoEF&CC), Govt. of India. Uri Power Station experiencing heavy quantum of trash at Barrage which needs to be disposed off as per the guidelines. The Bio-Degradable waste collected as Barrage and domestic waste are being disposed by old technique i.e. by burying under the ground, this technique is very old one. Now, with the advancement of the technology, the bio- waste generated / collected can be converted into compost using	the supply, installation, and commissioning of Bio-composter at Barrage, under the Environmental Policy and	25.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			bio composter etc. The generated compost can be used in horticulture activities in the households and colony premises as well. As part of Environmental Policy and for Compliance of Solid Waste Management Rule 2016 as notified by the Union Ministry of Environment, Forests and Climate Change (MoEF&CC), Govt. of India, Bio-Composter needs to be installed at the Barrage premises of Power Station. The Petitioner has claimed the same under Regulation 26(1)(b) of 2019		
			Tariff Regulations.		
	Sub-total (D)	225.00	9 Tariff Regulations		492.20
1	Trash cleaning arrangement at Barrage	300.00	This item was approved in 2015-16 for Rs.300 lakhs. Uri power station faces an acute problem of trash at the intake of barrage specially during the high intake season. The trash comprises of the small thorny vegetation and municipal waste which is suspended in the water and chokes the trash rack at the head regulator. As a result, there occurs a head difference between the reservoir and intake levels. Presently, to tackle this issue, back flushing is resorted to, which leads to backing down of the generation resulting in generation loss to the power station. To avoid generation loss due to heavy trash accumulation at intake during high inflow season, trash cleaning arrangement is proposed to be installed at Barrage. This is essential for the power station and will lead to efficient and smooth operation of the power station by minimizing	additional capital expenditure claimed for the assets / works were allowed in 2015-16, vide order dated 13.7.2016 in Petition No. 238/GT/2014. Accordingly, the additional capital	300.00



S.	Details of the	Amount	Justification submitted by the	Remarks on admissibility	Amount
No	claim	claimed	Petitioner		Allowed
			the generation. The proposal		
			could not be materialised due		
			to disturbed law and order		
			situation in the valley and due		
			to poor participation of the		
			bidders. The Petitioner has		
			claimed the same under		
			Regulation 26(1)(d) of 2019		
			Tariff Regulations.		
	Sub-total (D)	300.00			300.00
	Total (A+B+C+D)	1007.00			1274.20

78. In view of the above, the total additional capital expenditure allowed under original scope, change in law and other than original scope of work is Rs.482.00 lakh, Rs.492.20 lakh and Rs. 300.00 lakh respectively.

2022-23

(Rs. in lakh)

SI. No.	Regulation		2022-23
(a)	25(2)(a)	Additional capitalization within the original scope and after the cut-off date, in case of replacement of assets deployed. 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.	237.60
(b)	25(2)(c)	Additional capitalization within the original scope and after the cut-off date, replacement of such asset or equipment is necessary on account of obsolescence of technology	90.00
	Total addit	ional capital expenditure claimed	327.60

Details of the	Amount	Justification submitted by the	Remarks on	Amount
claim	claimed	Petitioner	admissibility	Allowed
Regulation 25(2)	(a) of the	2019 Tariff Regulations		
AC&V Pump Motor Set- 1Nos.	7.00	Two nos, AC & V Pumps are installed at pump floor of powerhouse for air conditioning and ventilation system. The existing installed AC & V pumps are in continuous operation since commission. Due to continuous running, impellers of pumps have been eroded and efficiency of the system	claimed expenditure is primarily towards the replacement of old items, which form part of the original scope of works. Accordingly, the claims are allowed under	7.00
			• • • • • • • • • • • • • • • • • • • •	
	claim Regulation 25(2) AC&V Pump Motor Set-	claim claimed Regulation 25(2)(a) of the AC&V Pump 7.00 Motor Set-	claim claimed Petitioner Regulation 25(2)(a) of the 2019 Tariff Regulations AC&V Pump Motor Set- 1Nos. Two nos, AC & V Pumps are installed at pump floor of powerhouse for air conditioning and ventilation system. The existing installed AC & V pumps are in continuous operation since commission. Due to continuous running, impellers of pumps have been eroded and efficiency of the system has been decreased. It is	Claim Claimed Petitioner admissibility Regulation 25(2)(a) of the 2019 Tariff Regulations AC&V Pump Motor Set-1Nos. Two nos, AC & V Pumps are installed at pump floor of powerhouse for air conditioning and ventilation system. The existing installed AC & V pumps are in continuous operation since commission. Due to continuous running, impellers of pumps have been eroded and efficiency of the system has been decreased. It is causing temperature rise in Admissibility admissibility It is noticed that the claimed expenditure is primarily towards the replacement of old items, which form part of the original scope of works. Accordingly, the claims are allowed under Regulation 25(2)(a) of the 2019 Tariff



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			powerhouse resulting in temperature rise of different components of unit & affecting equipment life & generation as whole. For healthiness of HVAC system at powerhouse and improvement in plant temperature, replacement of these pumps is urgently required. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.	de-capitalized value of old asset has been determined under "Assumed Deletions".	
2	MIV service seal Assembly -02 Set	180.00	The MIV service seal and its accessories are critical part of MIV of the hydro turbine & it seals the water in MIV during stopping of the unit. Unit cannot be stopped on MIV service seal failure. Service seals are in operation since last 22 years and has eroded & it is planned for replacement For replacement in unit 1 and 2, two set of service seal assembly is required. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		180.00
3	Submersible Drainage Pump Set 55 KW: 2 Nos	20.60	Existing drainage pumps are installed in 2005 and 2006 and completed its life. Its repair is not economical and found beyond repair due to its ageing. Presently single pump are working in each drainage sumps while it should be two as per drainage requirement of power house. It is planned to replace these pumps to avoid flooding of the power house & subsequent generation loss. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		20.60
4	Firefighting pipe replacement	30.00	Power house is equipped with water firefighting system fed from fire tank installed at the		30.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			height of 200 meter at addit - IV , above the turbine floor & it is fed to different location of the power house through different piping arrangement. The firefighting pipeline in audit 4 tunnel has been installed since commissioning. Due to moisture and regular use, the inner wall has been eroded & leakage from the pipelines have been observed at several places. Temporary arrangement has been made to arrest the leakage, but it has been assessed during the checking that due to thinning of pipeline wall, leakage at other places is going to start. As firefighting is essentially to require keeping healthy as per statutory requirement & safety of powerhouse from intended fire, accordingly it is proposed to replace these old pipelines in tunnel area with new pipe MS seamless type for reliability of firefighting system. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.		
5	Raw Cooling Water Pump set -2 nos	30.00	One no raw water pump is working in primary cooling water circuit of each generating unit. These pumps get eroded due to working in silty water on continuous run facing frequent breakdown and need replacement. The failure of the pump is directly linked to generation loss. Accordingly, it is proposed to replace it by vertical inline pumps with mechanical seal for long durability, reliable functioning of cooling water system & avoid generation loss. The Petitioner has claimed the same under		30.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
-110	- Grann	- Olamiiou	Regulation 25(2)(a) of 2019	uuoo.oy	7.1101104
			Tariff Regulations.		
6	Duplex strainer: 03 Sets	50.00			50.00
			Petitioner has claimed the same under Regulation		
			25(2)(a) of 2019 Tariff		
	Sub-total (A)	317.60	Regulations.		317.60
B B			2010 Tariff Pegulations		317.00
	Purchase and installation of automatic weather station	10.00	Automatic weather station is to be installed at power station in compliance to the Central Water Commissions guidelines. This instrument is being used for measurement of solar radiation, wind direction, wind velocity, evaporation, daily ambient air temperature, rainfall etc. these data is being used for various purpose and compliances. The presently installed automatic weather station installed at Barrage premises is very old one (around 16 years) and had elapsed its life. It is a digital data logger type instrument		10.00



S.	Details of the	Amount	Justification submitted by the	Remarks on	Amount
No	claim	claimed	Petitioner	admissibility	Allowed
			whose utility is limited. Since	has been	
			upgraded instruments with	considered	
			more precise values has been	under "Assumed	
			developed which can be used	Deletions". The	
			at power station. In view of the	Petitioner is	
			elapsed life of existing AWS, a	however, directed	
			new one is proposed to be	to furnish the actual	
			installed for compliance of	expenditure along	
			Central Water Commissions'	with supporting	
			guidelines. The Petitioner has	documents at the	
			claimed the same under	time of truing-up of	
			Regulation 25(2)(c) of 2019	tariff.	
			Tariff Regulations.		
	Sub-total (B)	10.00			10.00
	Total (A+B)	327.60			327.60

79. In view of the above, the total additional capital expenditure allowed under original scope and other than original scope of work is Rs.327.60 lakh and Rs. 0.00 lakh respectively.

2023-24

(Rs. in lakh)

SI. No.	Regulation	,	2023-24				
(a)	25(2)(a)	Additional capitalization within the original scope and after the cut-off date, in case of replacement of assets deployed. 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.	7.00				
(b)	25(2)(c)	Additional capitalization within the original scope and after the cut-off date, replacement of such asset or equipment is necessary on account of obsolescence of technology	1000.00				
	Total additional capital expenditure claimed						

S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
	A. Regulation 2	25(2)(a) of the	e 2019 Tariff Regulations)	
1	Shaft seal cooling pump: 02 Nos	7.00	There is provision of two nos shaft seal cooling pumps for cooling of shaft seal of all four units. All 04 Units cannot be run without healthiness of shaft seal cooling. Presently only single pump is working & it is also in eroded	expenditure claimed is primarily towards the replacement of old items, which form part of the original scope of works. Accordingly, the claim is allowed under Regulation	7.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			condition. Its breakdown will cause outage of unit and subsequent generation loss. Accordingly, it is proposed to replace these two pumps with new pumps for healthy running of unit & avoid generation loss. The Petitioner has claimed the same under Regulation 25(2)(a) of 2019 Tariff Regulations.	Tariff Regulations. The de-capitalized value of old asset has been determined under "Assumed Deletions".	
	Sub-total (A)	7.00	gg		7.00
В. R			19 Tariff Regulations		4000.00
	Replacement of 400 KV oil filled cables with XLPE Cable- Circuit 1	1000.00	There is provision of two no 400 KV lines for power evacuation of Uri power station equipped with oil filled cables since last 22 years of project commissioning. Power station is facing oil leakage in 400 kV oil filled cables in both lines. Replacement of these cables with 400 KV XLPE cable has been done in line II in 2018. Outage of evacuation line may result in tripping of units & subsequent generation loss. For healthiness of line-I, it is planned to replace 400 kV oil filled cables with XLPE cables in circuit -1, to avoid outage of line on breakdown of oil filled cable. The Petitioner has claimed the same under Regulation 25(2)(c) of 2019 Tariff Regulations.	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 allowed under Regulation 25(2)(c) of the 2019 Tariff Regulations. The decapitalization of old asset/work has been considered under "Assumed Deletions". The Petitioner is also directed to furnish the actual expenditure along with supporting documents at the time of truing-up of tariff.	1000.00
	Sub-total (B)	1000.00			1000.00
	Total (A+B)	1007.00			1007.00

80. In view of the above, the total additional capital expenditure allowed under



original scope, change in law and other than original scope of work is Rs.1007.00 lakh and Rs. 0.00 lakh respectively.

De-capitalization

81. The Petitioner has claimed de-capitalization, in Form 9Bi, as under:

	(Rs. in lakh)						
ſ	2019-20	2020-21	2021-22	2022-23	2023-24		
Ī	(-) 32.20	(-)213.80	(-) 135.49	(-) 49.29	(-)279.40		

82. It is observed that the Petitioner has claimed projected decapitalization under 'Assumed Deletions'. Accordingly, the same has been dealt in the subsequent para.:

Assumed Deletions

- 83. As per consistent methodology adopted by the Commission, the expenditure on replacement of assets, if found justified, is to be 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 decapitalization 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 decapitalization which is not a book entry in the year of capitalization is termed as "Assumed Deletion". Further, in absence of the original value of the asset being decapitalized, the same is calculated by de-escalating the original value of new asset @ 5% per annum till the year of capitalization of the old asset.
- 84. Accordingly, based on above methodology, the projected decapitalization value of old asset has been worked out as under:

S. No.	Name of the Asset	Assumed Deletion claimed	Assumed Deletion allowed
	2019-20		
1	Submersible Drainage Pump Set 55 KW: 02 Nos.	5.72	6.71
2	Potable Cooling Water Pump 22 kw, 04 sets	4.66	5.47
3	Retrofitting of relays / protection scheme in generating units	21.82	25.61
	Total	32.20	37.79
			2020-21
1	Purchase of Boat	1.33	3.18
2	Blowdown air compressor-02 set	2.77	3.10
3	Shaft seal cooling pump: 02 Nos	1.94	2.17
4	AC & V Pump Motor Set - 1 Nos.	1.94	2.17
5	Chiller compressor	2.64	2.95
6	Shell and tube type, water to oil heat exchanger for thrust bearing - 4 nos.	11.10	12.40
7	Purchase of 320 KVA DG set	8.88	9.92
8	Pilot operated directional valve for MIV service seal operation: 1 set (Includes 3 No Valves)	6.94	7.75
9	Upgradation of existing hydraulic elevator of powerhouse	10.04	11.22
10	Modification / upgradation of existing excitation / governor system 1 units	166.22	153.83
	Total	213.80	208.70
	2021-22		
1	11 KV switch gear panel for Powerhouse	6.94	7.38
2	10 KVA inverter (Main and standby)	6.38	6.79
3	Blowdown air compressor-02 set	2.80	2.95
4	220V DC battery Bank- 01 set	23.31	24.81
5	48V DC battery Bank- 01 set	3.33	3.54
6	Firefighting pipe replacement	16.65	8.86
7	Raw cooling water pump (vertical inline pump), Qty: 02 Nos	8.32	8.86
8	Purchase of Generator	5.61	5.91
9	Modification of existing excitation/ governor system 1 Unit	62.15	73.24
	Total	135.49	142.34
	2022-23		
1	AC&V Pump Motor Set-1Nos.	1.94	1.97
2	Submersible Drainage Pump Set 55 KW: 2 Nos	5.72	5.79
3	Firefighting pipe replacement	16.65	8.44
4	MIV service Seal Assembly	59.39	50.62
5	Purchase and Installation of Automatic Weather Station	2.77	2.81
6	Raw Cooling Water Pump set -2 no's	8.34	8.44
7	Duplex strainer: 3 Sets	13.87	14.06



S. No.	Name of the Asset	Assumed Deletion claimed	Assumed Deletion allowed	
	Total	108.68	92.13	
	2023-24			
1	Shaft seal cooling pump: 02 Nos	1.95	1.87	
2	Replacement of 400 KV oil filled cables with XLPE Cable- Circuit 1	277.45	267.85	
	Total	279.40	269.72	

Discharge of liabilities

85. The closing balance of undischarged liabilities as on 31.3.2019 is Rs.204.49 Lakh. The Petitioner has claimed discharge of liabilities of Rs. 204.49 lakh in 2019-20 and the same has been allowed. Therefore, the closing balance of undischarged liabilities as on 31.3.2024 is "Nil". Accordingly, the summary of discharge of liabilities allowed is as under:

(Rs. in lakh)

		2019-20	2020-21	2021-22	2022-23	2023-24
Α	Opening undischarged liabilities	204.49	0.00	0.00	0.00	0.00
В	Liabilities corresponding to additional capital expenditure allowed during the year	0.00	0.00	0.00	0.00	0.00
С	Discharges of liabilities during the year	204.49	0.00	0.00	0.00	0.00
E	Closing undischarged liabilities (A+B-C)	0.00	0.00	0.00	0.00	0.00

Additional capital expenditure (net) allowed for the period 2019-24

86. In view of above, the net additional capital expenditure allowed for the period 2019-24 is as under:

	2019-20	2020-21	2021-22	2022-23	2023-24
Additional capital expenditure allowed (a)	186.06	1121.03	1274.20	327.60	1007.00
De-capitalisation considered (b)	37.79	208.70	142.34	92.13	269.72
Discharge of liabilities (c)	204.49	-	•	-	-



	2019-20	2020-21	2021-22	2022-23	2023-24
Net additional capital expenditure allowed (d)=(a)-(b)+(c)	352.76	912.33	1131.87	235.47	737.28

Capital cost allowed for the period 2019-24

87. Accordingly, the capital cost allowed for the period 2019-24 is as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	343177.18	343529.94	344442.27	345574.13	345809.60
Net Additional capital expenditure allowed during the year/ period	352.76	912.33	1131.87	235.47	737.28
Closing Capital Cost	343529.94	344442.27	345574.13	345809.60	346546.88

Debt-Equity Ratio

88. Regulation 18 of the 2019 Tariff Regulations provides as under:

"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.
- Explanation-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.
- (2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
- (3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt:equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:



Provided that in case of a generating station or a transmission system including communication, system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

- (4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.
- (5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."
- 89. In terms of the above regulations, the debt: equity ratio, was considered as 70:30, for the purpose of additional capitalization. De-capitalization of assets has been deducted from the corresponding loan as well as equity, taking into consideration the debt equity ratio, applied in the year in which it was capitalized. Accordingly, the details of debt-equity ratio in respect of the generating station as on 1.4.2019 and as on 31.3.2024 are as under:

	As on 1.4.2019		As on 1.4.2019 Additional De-ca		De-capital	ization	As on 31.3.2024	
	Amount		Amount		Amount		Amount	
	(Rs. in lakh)	(in %)	(Rs. in lakh)	(in %)	(Rs. in lakh)	(in %)	(Rs. in lakh)	(in %)
Debt	234165.40	68.23%	2884.27	70.00%	512.23	68.24%	236537.44	68.26%
Equity	109011.78	31.77%	1236.11	30.00%	238.45	31.76%	110009.44	31.74%
Total	343177.18	100.00%	4120.38	100.00%	750.68	100.00%	346546.88	100.00%

Return on Equity

- 90. Regulations 30 and 31 of the 2019 tariff Regulations provide 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-rate 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 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 Crore/Rs. 1000 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 grossed 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."
- 91. The Return on Equity (ROE) for the existing asset base and the additional capital expenditure allowed, in this order for asset/works within the original scope of work, has been calculated by grossing up the base ROE at MAT rate of 17.472% as submitted by the Petitioner. Further, based on the additional capital expenditure which are beyond the original scope and allowed in this order, ROE has been calculated considering the weighted average rate of interest claimed by the Petitioner. Accordingly, ROE has been worked out and allowed as under:

Return on Equity at Normal Rate:

	2019-20	2020-21	2021-22	2022-23	2023-24
Normative Equity- Opening (A)	109011.78	109109.74	109244.14	109491.17	109560.18
Addition of Equity due to additional capital expenditure (B)	97.96	134.40	247.04	69.01	216.40



Normative Equity – Closing (C=A+B)	109109.74	109244.14	109491.17	109560.18	109776.58
Average Normative Equity D=(A+C)/2	109060.76	109176.94	109367.66	109525.68	109668.38
Return on Equity (Base Rate) (E)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate (F)	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (Pre-	18.782%	18.782%	18.782%	18.782%	18.782%
$\tan(G) = (E)/(1-F)$					
Return on Equity (Pre-tax) - (annualized) (H) =(D)x(G)	20483.79	20505.61	20541.43	20571.11	20597.92

Return on Equity at WAROI

(Rs. in lakh)

				(2.5)	o. III lakiij
	2019-20	2020-21	2021-22	2022-23	2023-24
Normative Equity- Opening (A)	0.00	7.20	142.86	232.86	232.86
Addition of Equity due to additional capital expenditure (B)	7.20	135.66	90.00	0.00	0.00
Normative Equity – Closing (C=A+B)	7.20	142.86	232.86	232.86	232.86
Average Normative Equity D=(A+C)/2	3.60	75.03	187.86	232.86	232.86
Return on Equity (Base Rate) (E)	2.524%	2.524%	2.524%	2.524%	2.524%
Effective Tax Rate (F)	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (Pre-tax) (G) = (E)/(1-F)	3.058%	3.058%	3.058%	3.058%	3.058%
Return on Equity (Pre-tax) - (annualized) (H) =(D)x(G)	0.11	2.29	5.74	7.12	7.12

Total Return on Equity allowed

(Rs. in lakh)

						(KS. III IAKII)
		2019-20	2020-21	2021-22	2022-23	2023-24
Return on Equity at Normal Rate	А	20483.79	20505.61	20541.43	20571.11	20597.92
Return on Equity at WAROI	В	0.11	2.29	5.74	7.12	7.12
Total Return on Equity allowed	C= (A+B)	20483.90	20507.91	20547.18	20578.23	20605.04

Interest on Loan

- 92. 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 decapitalization 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-capitalisation 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."
- 93. The actual loan of the project has already been repaid. The normative loan on account of admitted additional capital expenditure during the respective years of the tariff period has also been considered as paid fully, as the admitted depreciation is more than the amount of normative loan in these years. As such Interest on Loan during the period 2019-24 is 'nil'.

Depreciation

- 94. 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."
- 95. Accordingly, the cumulative depreciation amounting to Rs. 245762.15 lakh as



on 31.3.2019, has been considered for the purpose of tariff. The COD of the generating station is 1.6.1997 and the project has completed more than 12 years of commercial operation on 1.4.2019. Hence, the remaining depreciable value has been spread over the balance useful life of the generating station. In terms of the 2014 Tariff Regulations, the useful life of a hydro generating station was 35 years. However, the 2019 Tariff Regulations stipulates that the useful life of a hydro generating station is 40 years. Accordingly, the balance useful life of the generating station as on 1.4.2019, has been considered as 18.17 years, in line with the 2019 Tariff Regulations. Accordingly, depreciation has been computed as under:

(Rs. in lakh)

	(· · · · · · · · · · · · · · · · · · ·				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross block (A)	343177.18	343529.94	344442.27	345574.13	345809.60
Closing gross block (B)	343529.94	344442.27	345574.13	345809.60	346546.88
Average gross block (C)=(A+B)/2	343353.56	343986.11	345008.20	345691.87	346178.24
Land Value (L)	0.00	0.00	0.00	0.00	0.00
Depreciable Value (D=(C-L)*90%)	309018.20	309587.49	310507.38	311122.68	311560.41
Remaining Depreciable Value at the beginning of the year (E=D-Cum Dep at 'J' at the end of previous year)	63256.05	60370.59	57925.97	55063.14	51939.06
Balance useful Life (F)	18.17	17.17	16.17	15.17	14.17
Depreciation (G=E/F)	3481.98	3516.73	3583.05	3630.54	3666.29
Cumulative Depreciation at the end of the year (H=G+ Cum Dep at 'J' at the end of previous year)	249244.14	252733.64	256164.46	259690.07	263287.64
Adjustment on account of decapitalization (I)	27.24	152.23	104.92	68.72	203.63
Cumulative Depreciation at the end of the year (J=H-I)	249216.90	252581.41	256059.54	259621.35	263084.01

Operation & Maintenance Expenses

96. The Petitioner has claimed the following additional O&M expenses:

(Rs. in lakh) 2019-20 2020-21 2021-22 2022-23 2023-24 Normative O&M expenses 9865.77 10336.03 10828.70 11344.85 per 11885.61 Regulation 35(3)(a) (A)

	2019-20	2020-21	2021-22	2022-23	2023-24
Additional O&M expenses due to 7 th Pay	1296.68	1358.53	1423.33	1491.23	1562.36
Commission wage revision- 3rd PRC					
applicable to CPSUs (B)					
Additional O&M expenses due to 7 th Pay	601.11	629.79	659.83	691.30	724.28
Commission wage Revision of Kendriya					
Vidyalaya (KV) Staff (C)					
Impact of Goods & Service Tax (D)	7.28	7.63	8.00	8.38	8.78
Total O&M Expenses claimed	11770.85	12331.98	12919.86	13535.75	14181.02
(A+B+C+D)					
Security Expenses (E)	3471.80	3637.40	3810.91	3992.69	4183.14

- 97. Regulation 35(2)(a) of the 2019 Tariff Regulations provides as under:
 - (2) Hydro Generating Station: (a) 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
 2022-21
 2021-22
 2022-23
 2023-24

 Uri- I
 9865.77
 10336.03
 10828.7
 11344.85
 11885.61

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

98. The generating station is in operation for more than 3 years, as on 1.4.2019. As the normative O&M expenses claimed by the Petitioner above, is in terms of Regulation 35(2)(a) of the 2019 Tariff Regulations, the same is allowed.

Additional O& M Expenses

Impact of wage revision

99. The Petitioner has claimed additional O&M expenses on account of the impact of wage/ pay revision and GST as under:

Period	2019-20	2020-21	2021-22	2022-23	2023-24
Additional O&M expenses	1296.68	1358.53	1423.33	1491.23	1562.36
due to 7 th Pay Commission					
wage revision- 3 rd PRC					
applicable to CPSUs (a)					
Additional O&M expenses	7.28	7.63	8.00	8.38	8.78
due to 7 th Pay Commission					
wage Revision of Kendriya					
Vidyalaya (KV) Staff (b)					



Period	2019-20	2020-21	2021-22	2022-23	2023-24
Impact of Goods & Service	601.11	629.79	659.83	691.30	724.28
Tax (c)					
Security Expenses (d)	3471.80	3637.40	3810.91	3992.69	4183.14
Total O&M Expenses	5376.87	5633.35	5902.06	6183.59	6478.55
claimed (a+b+c+d)					

100. The Petitioner has claimed expenditure for Rs.1296.68 lakh in 2019-20 as additional O&M expenses due pay revision of the Petitioner's staff, based on impact of pay revision of Petitioners' staff in 2018-19 and escalated @ 4.77%. In this regard, it is pertinent to mention that in Petition No.224/MP/2019, filed by the Petitioner seeking recovery of the additional O&M expenses for the generating station due to impact of wage/ pay revision for the period 2014-19, the Commission vide its order dated 10.11.2022 had allowed an amount of Rs.1237.64 lakh, as impact of wage revision in 2018-19. As such, the impact of wage revision in 2019-20 (after escalating @4.77% of the above amount allowed in 2018-19) works out to Rs.1296.68 lakh. Accordingly, the claim of the Petitioner for Rs.1296.68 lakh in 2019-20 is considered and the same is thereafter escalated @4.77% per annum, during the relevant years of the period 2019- 24 and allowed as additional O&M expenses due to pay revision impact as under:

				(Rs. in lakh)
2019-20	2020-21	2021-22	2022-23	2023-24
1296.68	1358.53	1423.33	1491.22	1562.35

Impact of Pay revision of KV staff

101. As regards the claim of Petitioner towards the impact of pay revision of KV staff, it is pertinent to mention that the Commission in its order dated 10.11.2022 in Petition No. 224/MP/2019 (as stated above) had allowed an amount of Rs. 7.28 lakh as impact of wage revision of KV staff in 2018-19. As such, the impact of wage revision in 2019-20 (after escalating @ 4.77% on the above allowed amount in 2018-



19) works out to Rs. 7.63 lakh. Accordingly, the claim of the Petitioner for Rs 7.28 lakh in 2019-20 is considered, being lower, and the same is thereafter escalated @4.77% per annum for the relevant years of the period 2019-24 and allowed as additional O&M expenses due to pay revision of KV staff as under:

				(Rs. in lakh)
2019-20	2020-21	2021-22	2022-23	2023-24
7.28	7.63	7.99	8.37	8.77

Goods & Service Tax

102. The Respondent BRPL has submitted that, the Petitioner is seeking the grant of GST without further examination whether the amount provided in the norm-based tariff is adequate or not. It has also submitted that any proposal which has a bearing on the norms can be accepted only if the Petitioner proves that the norms are inadequate to meet the additional expenditure on account of GST. The Respondent has also pointed out that the details provided by the Petitioner would show that the GST has been claimed under Security Services and operational services. In response, the Petitioner has submitted that subsequent to applicability of GST w.e.f. 1.7.2017 (in the State of J&K w.e.f. 8.7.2017), there has been additional impact on account of GST on the O&M expenses which were fixed by the Commission for the period 2014-19. The Petitioner has also submitted that since this is an additional expenditure on account of change in law i.e., introduction of GST, the Petitioner was unable to meet this expenditure from already allowed O&M expenses.

103. We have considered the matter. The Petitioner has claimed impact of GST for the period 2019-24 on the basis of the actual impact of GST in 2018-19. The Petitioner has submitted the total GST amount of Rs.992.56 lakh for the period from 1.7.2017 to 31.3.2019, based on actual audited accounts for 21 months (Rs. 418.81)

lakh in 2017-18 and Rs.573.75 lakh in 2018-19). On scrutiny of the details, it is noticed that the claim of Petitioner also includes impact of GST on security expenses, as under:

S. No.	Year	Security Services	Operational Services	Total
1	2017-18	354.74	64.07	418.81
2	2018-19 (till Dec.18)	347.23	63.10	410.33
3	2018-19 (1.1.19 to 31.03.19)	141.88	21.54	163.42
	Total	843.85	148.71	992.56

104. As per Regulation 35(2)(d) of the 2019 Tariff Regulations, Security expenses shall be allowed separately, after prudence check. Hence, excluding the security service expenses of Rs 843.85 lakh (as above), the amount of Rs 148.71 lakh, as shown in the table above, for the period from 1.7.2017 to 31.3.2019, has been normalized and an amount of Rs. 89.03 lakh has been worked out for 2019-20 (after escalating the GST amount of Rs.84.98 lakh pertaining to operational services for 2018-19 by 4.77%). For the remaining period of 2020-24, GST impact has been worked out by escalating the GST base value of Rs.89.03 lakh, as on 2019-20, by 4.77% for each year, as per note to Regulation 35(2)(a) of the 2019 Tariff Regulations. Accordingly, the impact of GST is allowed as under:

(Rs. in lakh)							
2019-20	2020-21	2021-22	2022-23	2023-24			
89.03	93.28	97.73	102.39	107.28			

Capital Spares

105. As regards capital spares, the Petitioner has submitted that same will be claimed at the time of truing-up of tariff based on the actual expenses incurred. In view of this, capital spares have not been considered in this order.

Security Expenses

106. Regulation 35(2)(c) of 2019 Tarff Regulations provides as under:

"(c) 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 with appropriate justification."

107. The estimated security expenses claimed by the Petitioner, based on security requirement of the generating station is as under:

(Rs. in lakh)							
2019-20	2020-21	2021-22	2022-23	2023-24			
3471.80	3637.40	3810.91	3992.69	4183.14			

108. The Petitioner has claimed actual security expenses of Rs. 3313.73 lakh in 2018-19 and has escalated the same at the rate of 4.77%. Considering the security requirements of the generating station, we allow the projected security expenses as claimed by the Petitioner for the period 2019-24. The Petitioner is however, directed to submit the actual security expenses (excluding GST) incurred, duly audited, at the time of truing up of tariff.

109. Accordingly, the O&M expenses allowed for the generating station are as under:

Allowed	2019-20	2020-21	2021-22	2022-23	2023-24
Normative O&M expenses	9865.77	10336.03	10828.70	11344.85	11885.61
(a)					
Additional O&M expenses	1296.68	1358.53	1423.33	1491.22	1562.35
due to 7 th Pay Commission					
wage Revision- 3rd PRC					
applicable to CPSUs (b)					
Additional O&M expenses	7.28	7.63	7.99	8.37	8.77
due to 7th Pay Commission					
wage Revision of Kendriya					
Vidyalaya (KV) Staff (c)					
GST (d)	89.03	93.28	97.73	102.39	107.28
Total expenses excl	11258.76	11795.47	12357.75	12946.84	13564.01
Security (e=a+b+c+d)					
Security Expenses (f)	3471.80	3637.40	3810.91	3992.69	4183.14
Total additional O&M	14730.56	15432.87	16168.66	16939.52	17747.15
Expenses (g=e+f)					



Interest on Working Capital

- 110. Sub-section (c) of clause (1) of Regulation 34 of the 2019 Tariff Regulations provides as under:
 - "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"
- 111. Regulation 34(3) of the 2019 Tariff Regulations provides as under:

"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 truingup, 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 Receivables

112. The Receivable component of working capital has been worked out based on 45 days of fixed cost as under:

(Rs. in lakh)						
2019-20	2020-21	2021-22	2022-23	2023-24		
4881.00	4983.69	5082.99	5191.45	5287.93		

Working Capital for Maintenance Spares

113. Maintenance spares @15% of O&M expenses are worked out and allowed as under:

(Rs. in lakh)					
2019-20 2020-21 2021-22 2022-2				2023-24	
2209.58	2314.93	2425.30	2540.93	2662.07	

Working capital for O&M Expenses

114. O&M expenses for 1 month for the purpose of working capital are as under:



(Rs. in lakh)

				(1 to: III laitil)	
2019-20	2019-20 2020-21		2022-23	2023-24	
1227.55	1286.07	1347.39	1411.63	1478.93	

Rate of Interest on Working Capital

115. 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 2023-24, SBI MCLR as on 1.4.2020 (7.75%),1.4.2021 (7.00%) and as on 1.4.2022 (7.00%) is also available which is lower in comparison to 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, 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 ,1.4.2021 and 1.4.2022, for the subsequent financial years. Accordingly, the rate of interest for the year 2019-20 is 12.05%, 2020-21 is 11.25%, 2021-22 is 10.50% and for the subsequent years the rate of interest of 10.50% has been considered (i.e., 1-year SBI MCLR of 7.75% as on 1.4.2020 + 350 basis points,1-year SBI MCLR of 7.00% as on 1.4.2022 + 350 basis points). Accordingly, Interest on working capital is allowed as under:

	2019-20	2020-21	2021-22	2022-23	2023-24
Working capital for O&M expenses (one month)	1227.55	1286.07	1347.39	1411.63	1478.93
Working capital for Maintenance Spares	2209.58	2314.93	2425.30	2540.93	2662.07
Working capital for Receivables	4881.00	4983.69	5082.99	5191.45	5287.93
Total Working capital	8318.13	8584.70	8855.68	9144.00	9428.93
Rate of interest (%)	12.05%	11.25%	10.50%	10.50%	10.50%
Interest on Working capital for	1002.33	965.78	929.85	960.12	990.04



Annual Fixed Charges for the period 2019-24

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

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	3481.98	3516.73	3583.05	3630.54	3666.29
Interest on loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	20483.90	20507.91	20547.18	20578.23	20605.04
Interest on Working capital	1002.33	965.78	929.85	960.12	990.04
O&M Expenses	14730.56	15432.87	16168.66	16939.52	17747.15
Total	39698.78	40423.29	41228.73	42108.42	43008.51

Note: (1) All figures are on annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such the sum of individual items may not be equal to the arithmetic total of the column.

Normative Annual Plant Availability Factor (NAPAF)

117. The Petitioner has claimed NAPAF of 74% in terms of Regulation 50(A)(4) of the 2019 Tariff Regulations.

- 50. Norms of Operation for Hydro Generating Stations: The norms of operation as given hereunder shall apply to hydro generating station:
- (A) Normative Annual Plant Availability Factor (NAPAF): (1) The following normative annual plant availability factor (NAPAF) shall apply to hydro generating station:
- (a) Storage and Pondage type plants with head variation between Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of up to 8%, and where plant availability not affected by silt: 90%.
- (b) In case of storage and pondage type plants with head variation between full reservoir level and minimum draw down level is more than 8% and when plant availability is not affected by silt, the month wise peaking capability as provided by the project authorities in the DPR (approved by CEA or the State Government) shall form basis of fixation of NAPAF.
- (c) Pondage type plants where plant availability is significantly affected by silt: 85%. Run-of-river generating stations: NAPAF to be determined plant-wise, based on 10-day design energy data, moderated by past experience where available/relevant.

Station	Type of Plant	Plant Capacity No. of Units x MW	NAPAF (%)
Uri I	ROR	4x120	74%

118. The Respondent PSPCL has submitted that as per the past data for the period 2014-19, the generating station has achieved much higher PAF consistently, and therefore, fixing the NAPAF at 74% is relatively low and unfair, as it adds burden on the beneficiaries, as over declaring the availability, entitles the Petitioner for



incentive. The Petitioner has however, clarified that the normative PAF for the station was notified based on the past performance of the plant, and also considering the fact that the performance of the generating station is affected by silt.

119. The matter has been examined. As stated, the Commission has notified the NAPAF of the generating station as 74% under Regulation 50(A)(4) of the 2019 Tariff Regulations after stakeholder consultations. The submissions of the Respondent PSPCL, if accepted, would amount to review of the said regulation, which is not permissible in the tariff determination proceedings. Thus, the contention of the Respondent is rejected and the NAPAF of 74% is allowed to the generating station.

Design Energy (DE)

120. The Commission, in this order, for the period 2014-19, has considered the annual Design Energy (DE) of 2587.38 MU for this generating station. Accordingly, the same has been allowed to the generating station for the period 2019-24 as per month-wise details as under:

Month		Design Energy (MU)
April	I	109.44
	II	109.44
	III	109.44
May	I	109.44
	II	109.44
	III	120.38
June	I	109.44
	II	109.44
	III	109.44
July		109.44
	II	109.44
	III	120.38
August	I	109.44
	II	91.84
	III	101.35
September		85.55
	II	67.02
	III	56.67
October		48.64

Month		Design Energy (MU)
	II	37.45
	III	31.60
November		25.26
	II	23.68
	III	23.28
December		22.59
	II	22.59
	III	26.21
January		25.96
	II	24.12
	III	31.00
February		47.80
	II	46.56
	III	38.73
March		62.71
	II	85.40
	III	116.77
	Total	2587.38

Application Fee and Publication Expenses

121. The Petitioner has sought the reimbursement of fees paid by it for filing the tariff petition and for publication expenses in respect of the same. Accordingly, in terms of the Regulation 70(1) of the 2019 Tariff Regulations, the Petitioner shall be entitled for the reimbursement of filing fees and publication expenses in connection with the present petition, directly from the beneficiaries, on pro-rata basis.

122. Similarly, RLDC fees & charges paid by the Petitioner in terms of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch Centre and other related matters) Regulations, 2015, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled recovery of statutory taxes, levies, duties, cess etc. levied by the statutory authorities in accordance with the 2019 Tariff Regulations.

Summary

123. Accordingly, the summary of the annual fixed charges claimed and allowed for



the period 2019-24 period allowed is as under:

(Rs. in lakh)

					(113. III lakii)
Annual Fixed Charges	2019-20	2020-21	2021-22	2022-23	2023-24
Claimed*	40247.75	41088.27	41969.82	42854.12	43772.47
Allowed*	39698.78	40423.29	41228.73	42108.42	43008.51

^{*}Including security charges

- 124. The tariff determined for the period 2019-24, is subject to truing up in terms of Regulation 13 of the 2019 Tariff Regulations.
- 125. Petition No. 255/GT/2020 is disposed of in terms of the above.

Sd/- Sd/- Sd/(Pravas Kumar Singh) (Arun Goyal) (I.S. Jha)
Member Member Member

