CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 296/GT/2020

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

Date of Order: 30th April, 2022

IN THE MATTER OF

Petition for revision of tariff of Loktak Hydroelectric Power Station (105 MW) for the period from 1.4.2014 to 31.3.2019 after truing up exercise.

AND

IN THE MATTER OF

NHPC Limited, NHPC Office Complex, Sector 33, Faridabad – 121003, Haryana

.... Petitioner

Vs

- Assam State Electricity Board,
 Bijuli Bhawan, Paltan Bazar
 Guwahati 781 001
- Department Of Power,
 Government of Arunachal Pradesh,
 C-Sector,
 Itanagar 799 111,
- 3. Electricity Department, Government of Mizoram, Aizawal – 796 001
- 4. Tripura State Electricity Corporation Limited, Vidyut Bhawan, North Banamalipur, Agartala 799 001
- 5. Meghalaya State Electricity Board, Meter Factory Area, Short Round Road, Shillong – 793 001
- 6. Electricity Department, Government of Manipur, Imphal – 795 001



7. Electricity Department, Government of Nagaland, Kohima – 797 001

Parties Present:

Shri Sachin Datta, Senior Advocate, NHPC Shri Rajiv Shankar Dwivedi, Advocate, NHPC Shri M.G. Gokhale, NHPC Shri Piyush Kumar, NHPC Shri Indrajit Tahbildar, APDCL

ORDER

This petition has been filed by the Petitioner, NHPC Limited, for revision of tariff of Loktak Hydroelectric Power Station (3 x 35 MW) (hereinafter referred to as 'the Generating Station') for the period from 1.4.2014 to 31.3.2019 in terms of Regulation 8(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as 'the 2014 Tariff Regulations').

Background

- 2. The generating station, located in the State of Manipur, was declared under commercial operation on 1.6.1983. The power generated from the project is being supplied to the various beneficiaries i.e. the Respondents herein in North Eastern Region in terms of the Power Purchase Agreement entered into between the Petitioner and the beneficiaries.
- 3. In Petition No. 228/GT/2014 filed by the Petitioner for approval of tariff for the generating station for the 2014-19 tariff period, the Commission vide its order dated 18.9.2015 approved the capital cost and annual fixed charges for the generating station. Thereafter, Petition No. 248/MP/2018 was filed by the Petitioner for approval of R&M of the generating station and the Commission vide its order dated 24.7.2019 disposed of the same, with certain directions.

4. The capital cost and the annual fixed charges approved vide order dated 18.9.2015 in Petition No. 228/GT/2014 are as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	16880.31	17584.65	17825.64	17965.17	17965.17
Admitted additional capitalization	704.34	240.99	139.53	0.00	0.00
Closing Capital Cost	17584.65	17825.64	17965.17	17965.17	17965.17

Annual Fixed Charges allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	1581.42	1611.02	1622.94	1627.30	1627.30
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	918.85	945.86	956.21	952.23	156.45
Interest on Working	591.95	628.76	667.14	707.53	732.27
Capital					
O&M Expenses	9673.64	10316.36	11001.78	11732.74	12512.26
Total	12765.86	13502.00	14248.06	15019.81	15028.29

5. Reply to the petition has been filed by the Respondent, APDCL vide affidavit dated 24.5.2021 and the Petitioner has filed its rejoinder to the same on 4.6.2021. The Petition was heard on 25.5.2021 through video conferencing. During the hearing, the learned Senior Counsel for the Petitioner submitted that the generating station has completed its useful life on 31.5.2018 and is in the process of implementation of R&M since December 2020. He further submitted that the petition for approval of tariff approval will be filed before the Commission after completion of the R&M works, which were approved by the Commission. On a specific query of the Commission regarding shutdown of the plant, the learned senior counsel submitted that the generating station would undergo complete shutdown from November, 2022. The Commission after hearing the parties reserved its order in the petition. Based on the submissions of the parties and the documents available on record and on prudence check, we proceed for truing up the tariff of the generating station for the 2014-19 tariff period, as stated in the subsequent paragraphs.

- 6. Regulation 8(1) of the 2014 Tariff Regulations provides as under:
 - "8. Truing up
 - (1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2019, as admitted by the Commission after prudence check at the time of truing up:

Provided that the generating company or the transmission licensee, as the case may be, shall make an application for interim truing up of capital expenditure including additional capital expenditure in FY 2016-17."

7. The Petitioner has filed the present petition for truing-up of tariff of the generating station for the 2014-19 tariff period based on the actual capital expenditure incurred for the said period, as per audited accounts. Accordingly, the capital cost and annual fixed charges claimed by the Petitioner are as under:

Capital cost claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	16880.31	17621.25	18269.54	18834.17	19189.58
Add: Addition during the	740.94	648.30	564.63	355.41	345.13
year/ period					
Closing Capital Cost	17621.25	18269.54	18834.17	19189.58	19534.71

Annual Fixed Charges claimed

(Rs. in lakh)

				1.10	74.7.17
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	920.29	970.22	1016.41	1094.19	320.22
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	1598.71	1646.63	1671.78	1712.16	1741.16
Interest on Working Capital	592.38	630.14	669.65	712.75	738.66
O&M Expenses	9673.64	10316.36	11001.78	11732.74	12512.26
Total	12785.03	13563.35	14359.62	15251.83	15312.31

Capital Cost

- 8. 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."

9. The Commission vide its order dated 18.9.2015 in Petition No. 228/GT/2014 had approved the closing capital cost of Rs.16880.31 lakh as on 31.3.2014. Accordingly, the capital cost of Rs.16880.31 lakh, as on 31.3.2014, has been considered as the opening capital cost as on 1.4.2014, for the purpose of truing-up of tariff for the 2014-19 tariff period.

Additional Capital Expenditure

- 10. Regulation 14(3) of the 2014 Tariff Regulations provides as under:
 - "14.(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 un-discharged 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-materialization 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.

11. The year-wise, net projected additional capital expenditure allowed for the 2014-19 tariff period, vide order dated 18.9.2015 in Petition No. 228/GT/2014 is as under:

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

 704.34
 240.99
 139.53
 0.00
 0.00
 1084.86

12. The Petitioner has submitted that there is variation between the actual capital expenditure incurred by the generating station, as against the additional capital expenditure allowed by the Commission vide order dated 18.9.2015 in Petition No. 228/GT/2014 for the 2014-19 tariff period. The detailed break-up of the additional capital expenditure claimed by the Petitioner are as under:

					(Rs. in lakh)
	2014-15	2015-16	2016-17	2017-18	2018-19
Additions during the year (a)	844.84	706.60	591.85	400.45	333.09
Deletions during the year (b)	103.90	62.52	82.67	61.46	0.00
Discharges during the year (c)	0.00	4.21	55.45	16.42	12.04
Net additional capital	740.94	648.30	564.63	355.41	345.13
expenditure claimed					
(d)=[(a)-(b)+(c)]					

13. The Respondent APDCL has mainly submitted that the Commission may examine the claims of the Petitioner on prudence check and admit only those expenditures which were approved by order dated 18.9.2015 in Petition No. 228/GT/2014. The details of the additional capital expenditure claimed by the Petitioner under the provisions of Regulation 14(3) of the 2014 Tariff Regulations are as under:

SI.	Pogulations	Amount (Rs. in lakh)				
No.	Regulations	2014-15	2015-16	2016-17	2017-18	2018-19
1	14(3)(i)	0.00	0.00	0.00	0.00	26.28
2	14(3)(iii)	185.56	30.23	329.47	45.75	81.67
3	14(3)(viii)	659.28	676.37	262.38	354.70	225.14
4	14(3)(vi)	0.00	4.21	55.45	16.42	12.04
5	14(3) (De-capitalization)	103.90	62.52	82.67	61.46	0.00
	Total as per Form-9A (Net)	740.94	648.30	564.63	355.41	345.13

14. The additional capital expenditure claims of the Petitioner are examined below:

2014-15

(Rs. in lakh)

SI.		Regulation	2014-15
No.			
(a)	14(3)(iii)	Expenses incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Govt. Agencies of statutory authorities responsible for national/internal security	185.56
(b)	14(3)(viii)	Additional works/expenditure which has become necessary for efficient and successful operation of plant	659.28
	Total ad	ditional capital expenditure claimed	844.84

(a) Additional capital expenditure claimed under Regulation 14(3)(iii)

SI. No.	Details of the claim	Amount claimed	Justification submitted	Remarks on admissibility	Amount Allowed
		(Rs. in lakh)	by the Petitioner		(Rs. in lakh)
Items	allowed in order	dated 18.9.2	2015 in Petition No. 22	8/GT/2014	
1	Providing and	20.24	These assets /	It is noticed that	20.24
	laying of		works claimed	the additional	
	water supply		were admitted vide	capital	
	lines and		order dated	expenditure	
	construction		18.9.2015 in	claimed under	
	of toilets for		Petition No.	these heads were	
	CRPF watch		228/GT/2014	allowed on	
	towers at		(projected item No.	projected basis	
	penstock		9 & item No.10 of	for Rs.23 lakh	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
	area.		2014-15).	and Rs.24 lakh respectively in 2014-15 vide order dated	
2	Construction of watch tower at Powerhouse, Loktak complex gate, CRPF camp at valve house.	16.26		18.9.2015 in Petition No. 228/GT/ 2014 under Regulation 14 (3) (viii) of the 2014 Tariff Regulations, on the ground that these assets were considered necessary for efficient and successful operation of the generating station. Considering the fact that the additional capital expenditure is necessary for safety of the plant of the generating station, the claim is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.	16.26
3	Construction of five number new morcha at Ithai Barrage.	12.33	These assets / works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014 (projected item No. 11 of 2014-15).	It is noticed that the additional capital expenditure claimed under this head was allowed on projected basis for Rs.12 lakh vide order dated 18.9.2015 in Petition No. 228/GT/2014, on the ground that the asset was	12.33

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
		(rtor m ranary	by the reditioner	considered	(rter iii raiii)
				necessary for	
				efficient and	
				successful	
				operation of the	
				_	
				generating station.	
				Considering the fact that the	
				additional capital	
				expenditure is	
				necessary for	
				efficient and	
				successful	
				operation of the	
				generating	
				station, the claim	
				is allowed under	
				Regulation	
				14(3)(viii) of the	
				2014 Tariff	
				Regulations.	
				Considering the	
				fact that the	
				additional capital	
				expenditure is	
				considered	
				necessary for	
				safety of the	
				plant, the	
				additional capital	
				expenditure	
				claimed is	
				allowed under	
				Regulation	
				14(3)(iii) of the	
				2014 Tariff	
				Regulations. The	
				de-capitalization	
				value of Rs.1.03	
				lakh for old,	
				replaced	
				assets/works has	
				been considered	
				under 'Assumed	
				Deletions'.	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
4	Construction of cook house cum Kitchen for CRPF.	23.59	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014 (projected item No. 12 of 2014-15).	It is observed that the additional capital expenditure claimed under this head was allowed on projected basis for Rs.24.00 lakh and decapitalization of Rs.0.65 lakh i.e. Rs.23.35 (24.00-0.65) lakh vide order dated 18.9.2015 in Petition No. 228/GT/2014, as the asset/work is necessary for the benefit of employees working in remote areas of the generating station and in turn will ensure the successful and efficient operation of the plant. In view of this, the additional capital expenditure claimed is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.65 lakh for old, replaced assets/ works has been considered under 'Assumed deletions.'	23.59

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
5	Construction of 6 barracks for CRPF.	64.99	These assets/works claimed were admitted vide Tariff order dated 18.9.2015 in Petition No. 228/GT/2014 (projected item No. 3 of 2015-16).	The additional capital expenditure claimed under this head was allowed for Rs.90.00 lakh and decapitalization of Rs.5.04 lakh i.e. Net Rs.84.96 (90.00-5.04) lakh vide order dated 18.9.2015 in Petition No. 228/GT/2014. Considering the fact that the additional capital expenditure is considered necessary for safety of the plant, the additional capital expenditure claimed is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.5.04 lakh for old replaced assets/works has been considered under 'Assumed deletions.'	64.99
New I				T -	Γ
6	Providing and fixing of RBT Concertina coil fencing along boundary wall at Leimatak.	13.66	The Petitioner has submitted that in view of security threats due to bad law and order situations in Manipur and	Considering the fact that the expenditure incurred is not directly related to the operation of the generating	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			powerhouse being situated in critical areas/ isolated place, vital installation of Power Station like Penstock, Power House and Leimatak Colony etc. has been secured with concentring coil fencing.	station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	
7	Construction of security boundary wall at Ithai Barrage.	0.34	The Petitioner has submitted that CRPF is entrusted with the task of security of Ithai Barrage and in view of the above the security considerations and requirements of CRPF, construction of security boundary wall at Ithai Barrage was constructed.		0.00
8	Construction of toilet room for CRPF personal at Tiger Hill Ithai.	2.63	The Petitioner has submitted that one platoon of CRPF personnel is posted at Tiger Hill for protection of Barrage of Loktak Power Station. Further, CRPF have raised the requirement of toilet near watch tower for the duty personals deployed for round the clock duty.		0.00
9	Providing and fixing RBT Concertina	11.32	The Petitioner has submitted that in view of security		0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
	Coil fencing penstock to main gate at Leimatak		threats due to bad law and order situations in Manipur, and power house being situated in critical areas/isolated place, vital installation of Loktak Power Station like Penstock, Power House and Leimatak Colony etc. have been secured with Concertina Coil Fencing. The same was required/ suggested by CRPF at Leimatak from security point of view.		
10	Providing and fixing Concertina coil fencing from penstock to river end near Powerhouse.	5.89	The Petitioner has submitted that in view of security threats due to bad law and order situations in Manipur, and power house being situated in critical areas/isolated place, vital installation of Loktak Power Station like Penstock, Power House and Leimatak Colony etc. have been secured with Concertina Coil Fencing. The same was required/ suggested by	Considering the fact that the assets/ works are covering the station area and are necessary for the safety and security of the generating station in terms of the recommendations of the Central Security agency, the additional capital expenditure claimed is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.	5.89

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner CRPF at Leimatak from security point	Remarks on admissibility	Amount Allowed (Rs. in lakh)
11	Construction of Kitchen & storeroom for CRPF at Lamdan	12.12	of view. The Petitioner has submitted that Loktak Power Station is having CRPF personnel deployed at Lamdan outpost. CRPF personnel at their own have arranged somehow the kitchen and storeroom made up of CGI sheet roofing and temporary walls. The temporary sheds are not in good condition as well as not secured in this high security zone. Hence, construction of new kitchen and storeroom was becoming necessary on receipt of proposal letter of CRPF.	Considering the fact that the assets/ works are necessary for the safety and security of the generating station and is based on the recommendations of the Central Security agency, the additional capital expenditure claimed is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.	12.12
12	Door Frame and Metal Detector (DFMD) (06 numbers)	2.18	A branch of SBI bank is situated inside the Power Station campus which is being used by employees as well as by outsiders. In view of security threats due to bad law & order situation in Manipur, security checking of outsiders as well	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M, the additional capital expenditure claimed is not allowed.	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			as their vehicles is essential. Hence for security check various security items have been purchased.		
	Total amount claimed	185.56			
	Total amount a	llowed			155.42

(b) Additional Capital Expenditure claimed under Regulation 14(3)(viii)

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)		
Items	Items allowed in order dated 18.9.2015 in Petition No. 228/GT/2014						
1	Lift for Powerhouse	30.16	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	It is observed that the additional capital expenditure claimed under this head was allowed for Rs. 31.00 lakh and decapitalization of Rs.1.59 lakh i.e. net Rs.29.41 (31.00-1.59) lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as the assets/works are already approved. Considering the fact that the	30.16		

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
				additional capital expenditure incurred will facilitate the efficient and successful operation of the generating station, the same is allowed. The decapitalization value of Rs.1.59 lakh for old, replaced assets/ works has been considered under 'Assumed	
2	Construction of one semi-permanent type-I building having 04 numbers of quarters at surge shaft	59.22	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	deletions'. It is observed that the additional capital expenditure claimed under this head was allowed for Rs.60.00 lakh and decapitalization of Rs.3.35 lakh i.e. Net Rs.56.65 (60.00-3.35) lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as	59.22

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
				the assets/ works are already approved. Considering the fact that the additional capital expenditure incurred will facilitate efficient and successful operation of the generating station, the same is allowed. The de- capitalization value of Rs.3.35 lakh for old, replaced assets/works has been considered under 'Assumed deletions.	
3	Construction of Permanent type - II Double storied building 04 blocks having 04 quarters in each block at Loktak.	256.68	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	It is observed that the additional capital expenditure claimed under this head for Rs. 325.00 lakh and decapitalization of Rs.3.90 lakh i.e. Net Rs.321.10 (325.00-3.90) lakh by order dated 18.9.2015 in Petition No. 228/GT/2014	256.68

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
				under Regulation 14(3)(viii) of the 2014 Tariff Regulations. Considering the fact that the additional capital expenditure incurred will facilitate efficient and successful operation of the generating station, the same is allowed. The de- capitalization value of Rs.3.90 lakh for old, replaced assets/works has been considered under 'Assumed deletions'.	
4	Disaster management pumps (2 numbers)	66.73	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	It is observed that the additional capital expenditure claimed under this head was allowed for Rs.67.00 lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations,	66.73

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
				since the asset is considered necessary for efficient and successful operation of the generating station. In view of this, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff	
5	Three Phase relay kit	26.37	These assets/works claimed were admitted vide Tariff order dated 18.9.2015 in Petition No. 228/GT/2014.	Regulations. It is observed that the additional capital expenditure claimed under this head was allowed for Rs.27.00 lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations since the asset is considered necessary for efficient and successful operation of the generating station. In view of this, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff	26.37

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
6	Replacement of LT distribution lines by underground LT Cabling at Loktak Colony	20.73	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/ 2014. The Commission had allowed this item as the asset is considered necessary for the benefit of employees (families) working in remote areas of the generating station and in turn will ensure the efficient and successful operation of the plant. The gross value of old asset is indicated as Rs.6.09 lakh.	The additional capital expenditure claimed under this head was allowed for Rs.35.00 lakh and decapitalization of Rs.6.09 lakh i.e. Net Rs.28.91 (35.00-6.09) lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as the asset is considered necessary for the benefit of employees (families) working in remote areas of the generating station and in turn will ensure the efficient and successful operation of the plant. In view of this, the additional capital expenditure incurred is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	20.73

SI.	Details of the	Amount	Justification	Remarks on	Amount
No.	claim	claimed (Rs. in lakh)	submitted by the	admissibility	Allowed (Rs. in lakh)
		(KS. III lakii)	Petitioner	The de-	(NS. III IANII)
				capitalization	
				value of	
				Rs.6.09 lakh for	
				old, replaced	
				assets/works	
				has been	
				considered	
				under	
				'Assumed	
				deletions'.	
7	Replacement	69.76	These assets/works	It is observed	69.76
	of 11 kV line		claimed were	that the	
	from Leimatak		admitted vide order	additional capital	
	to loktak		dated 18.9.2015 in Petition No.	expenditure of Rs.75.00 lakh	
			228/GT/2014.	and de-	
				capitalization of	
				Rs.38.61 lakh	
				i.e. Net Rs.	
				36.39 (75.00-	
				38.61) lakh was	
				allowed under this head vide	
				order dated	
				18.9.2015 in	
				Petition No.	
				228/GT/2014	
				under Regulation	
				14(3)(viii) of the	
				2014 Tariff Regulations	
				since the asset	
				is considered	
				necessary for	
				efficient and	
				successful	
				operation of the generating	
				station. In view	
				of this, the	
				additional capital	
				expenditure	
				claimed is	
				allowed under	
				Regulation 14(3)(viii) of the	
				2014 Tariff	
				Regulations. The	
				de-capitalization	
				value of	
				Rs.38.61 lakh for	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			rentioner	old, replaced assets/works has been considered under 'Assumed deletions'.	(1.62.77.16.07)
New It	1	T		T	
8	Construction of Toilet of community Hall at Loktak	17.77	The Petitioner has submitted that a new Community Hall was constructed during 2011-12. When the same was put to use, the necessity of toilet adjacent to community hall was observed during various gatherings like official meetings, programs etc. of Power Station.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00
9	Siemens make, sentron series 3WL, air circuit breaker (02 numbers)	5.08	The Petitioner has submitted that the existing Air Circuit Breakers (ACB's) installed in the various panels for control of auxiliary equipment's had outlived their useful life and started giving troubles. Hence, ACBs were purchased and replaced in the respective UABs of individual units for improving the reliability of functioning of auxiliaries for smooth operation of machines. The Petitioner further submitted that	In view of the submissions of the Petitioner and keeping in view that the additional capital expenditure incurred is for the efficient operation of the generating station, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The decapitalization value of Rs. 0.58 lakh for old, replaced assets/works	5.08

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			based on Indexation method, gross value of old assets is considered as Rs.57514 and WDV as Rs.8083.	as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs.1.12 lakh under 'Assumed deletions'.	
10	Construction of Elevated water tank at Ithai Barrage, Ithai.	6.98	The Petitioner has submitted that the generating station has barrage in Ithai where sufficient numbers of Petitioner's and CRPF personnel are deployed. Being an extremely remote location, there is lack of proper water supply system in the area. For proper storage system for drinking water, the construction of elevated Water Tank at Ithai Barrage became inevitable.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00
11	Tubewell at Liematak	4.86	The Petitioner has submitted that for better water supply and to maintain hygiene level of employees posted		0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			at Leimatak, a borewell for fresh water was installed at Leimatak. This work was essential keeping in view the requirement of OHSAS.		
12	Tubewell at Ithai Barrage	4.89	The Petitioner has submitted that the generating station has barrage in Ithai where sufficient numbers of Petitioner's and CRPF personnel are deployed. Being an extreme location & lack of proper water supply system, staff were using the river water directly for drinking and other purposes. Considering the safety of health of staff, tapping of water through tube Well at Ithai Barrage became very essential.		0.00
13	Air Circuit Breaker 630 Amp, 440 Volt (03 numbers)	3.69	The Petitioner has submitted that earlier there were Oil Circuit Breakers (OCBs) in operation, which were installed way back in 1980s. As the OCBs have outlived their useful lives and the spare parts of those OCBs are also not available these days in the	Considering that the additional capital expenditure incurred is for assets/works which are necessary for the successful and efficient operation of the generating station, the same is	3.69

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			market, hence to overcome the frequent problems in operation as well as to avoid any accident, the replacement of old OCBs with new ACBs became very necessary. Further, the Petitioner submitted that based on Indexation method the gross value of old assets is considered as Rs.41824 and WDV as Rs.5636.	allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The decapitalization value of Rs.0.42 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs.0.81 lakh under 'Assumed deletions'.	
14	2X10 KVA Online UPS System	8.60	The Petitioner has submitted that prior to purchase of 2x10 KVA, there was only one 2 KVA UPS for power supply to the servers and the existing LAN. However, with the ongoing upgradation and enhancement of the existing LAN, new equipment's and accessories like new servers, new L3 and L2	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed. The	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
		,	switches, New	corresponding	,
			Routers for Leased	de-	
			Line and VSAT,	capitalization	
			KVM Switches,	on account of	
			OFC Equipment's	the same is	
			etc. were added to	also not	
			the existing	allowed.	
			network		
			infrastructure for		
			uninterrupted		
			power supply.		
			Moreover, the		
			upgraded LAN is		
			connected with		
			Corporate WAN		
			through high		
			speed leased lines		
			and VSAT which		
			also require		
			reliable and		
			uninterrupted		
			power supply		
			round the clock.		
			Considering the above		
			requirements as well as to make up		
			for the frequent		
			power cuts in		
			generating station		
			area, a stable and		
			redundant online		
			UPS system was		
			required to keep		
			pace with CO		
			ERP, Internet etc.		
			Hence the		
			redundant UPS		
			systems were		
			purchased. The		
			gross value of old		
			assets is Rs.35950		
			and WDV is		
			Rs.6017.		
15	2kVA 24V	1.07	The Petitioner has	Considering the	0.00
	pure sine		submitted that the	fact that the	
	Wave		Power supply at	expenditure	
	Inverter /		Ithai barrage area	incurred is not	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
	Home UPS-		is very erratic and	directly related	
	Luminous		frequent power	to the operation	
	Make (02		cuts are often in	of the	
	numbers)		the area. Two	generating	
			number	station and is in	
			accelerographs	the nature of	
			are installed for	O&M	
			monitoring of	expenses, the	
			earthquake	additional	
			activities at Ithai	capital	
			Barrage which	expenditure	
			requires LAN	claimed is not	
			connectivity and	allowed.	
			adequate power		
			supply backup		
			round the clock.		
			The LAN		
			connectivity at Ithai		
			Barrage needs to		
			be integrated with		
			corporate WAN		
			through VSAT at		
			Ithai, which also		
			requires round the		
			clock power		
			supply. To sort out		
			the frequent power		
			cut problems as		
			well as to provide		
			round the clock		
			power supply with		
			adequate power		
			backup to the		
			accelerographs,		
			VSAT equipment		
			and LAN		
			equipment, 2		
			numbers 2kVA		
			24V pure sine		
			wave inverter with		
			adequate battery		
			banks were		
			required. Hence,		
			these equipment		
			were purchased.		

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
16	Cisco router 1921 with 02 numbers gigabit ethernet Ports.	0.03	The Petitioner has submitted that all the important WAN Link between CO and powerhouse at Leimatak has been provided by Ku Band VSAT Link only. The VSAT link has limited bandwidth as well as the link is not reliable and hence it creates a lot of problems in various office works requiring ERP applications and Internet at Leimatak powerhouse area. To provide a reliable and faster primary MPLS Link for the WAN connectivity to Leimatak powerhouse, the equipment was purchased.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00
17	HP L2 2530 managed Switch-48 10/100/1000 Ports with 4SFP slots with 2 number 10G SFP Module with POE	4.54	The Petitioner has submitted that the existing LAN switches at the generating station had a temporary setup catering to about 90 nodes only and these switches does not support OFC modules. The number of existing nodes was not enough considering the widespread implementation of	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			ERP applications		
			in all areas of the		
			generating Station.		
			With the		
			implementation of		
			ERP applications,		
			about 200 network		
			node points were		
			required for all the		
			locations in the		
			generating station		
			area. Further after		
			upgradation of the		
			LAN, the existing		
			switches alone will		
			not be sufficient to		
			cater all the nodes.		
			Considering the		
			above		
			requirements and		
			keeping in mind for		
			integrating with the		
			future expansion		
			/upgradation to		
			OFC based a		
			permanent LAN, 4		
			numbers of 48 port		
			L2 Managed		
			Switches with fibre module slots were		
			required over and		
			above the existing		
			switches.		
			Therefore, these		
			switches were		
			purchased.		
18	CO2 type fire	6.15	The Petitioner has	In view of the	6.15
. •	extinguisher	5.15	submitted that	submissions of	0.10
	complete with		many fire	the Petitioner	
	all necessary		extinguishers	and	
	fittings		installed at	considering the	
	9-		different location of	fact that the	
			generating station	additional	
			has become	capital	
			obsolete and	expenditure	
			needs to be	incurred is for	
			replaced.	the safety and	
			Moreover, some	security of the	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			additional locations are also identified for compliance of OHSAS and environment policy, where fire extinguishers need to be installed. Therefore, fire extinguisher has been purchased. The gross value of replaced items is Rs.108866 and WDV is Rs.18.	generating station, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The decapitalization value of Rs. 1.09 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs. 1.36 lakh under 'Assumed deletions'.	
19	HP proliant DL380E G8 server- intel Xeon e5- 24078gb ram,1.2tb sas hdd, dvd rw, keyboard, mouse,18.5tft (04 numbers)	8.53	The Petitioner has submitted that the existing domain servers in generating stations administrative office and Leimatak Powerhouse were very old and are in deteriorating conditions. These servers were purchased before 2006 and as such	In view of the submissions of the Petitioner and considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station the same is	8.53

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
		(NS. III Iakii)	the items have	allowed under	(NS. III IAKII)
			already outlived	Regulation	
			their useful life.	14(3)(viii) of the	
			Further, the	2014 Tariff	
			servers were	Regulations.	
			running on	The de-	
			Microsoft Windows	capitalization	
			2003 Server	value of	
			Operating System	Rs.1.38 lakh for	
			which are already	old, replaced	
			after end-of-	assets/works	
			support by	as claimed by	
			Microsoft. Since	the Petitioner	
			servers are the	appears to be	
			main backbone of	on the lower	
			the entire network	side. Hence,	
			in generating	considering the	
			station, these are	methodology	
			to be kept in	described in	
			smooth running condition 24X7.	paragraph 27 of this order	
			The existing	below, the de-	
			servers are	capitalization of	
			technically not	the same has	
			suitable for new	been	
			applications and	considered as	
			are having lower	Rs.1.88 lakh	
			processing	under	
			capabilities, which	'Assumed	
			creates	deletions'.	
			bottlenecks in the		
			implementation of		
			new application		
			packages like		
			ERP. In view of the		
			above as well as		
			considering future		
			scalability of the entire network		
			infrastructure, new		
			server computers		
			along with new		
			operating systems		
			are required to be		
			installed in		
			generating station		
			for smooth		
			functioning of		

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			office works. Hence the servers were purchased. The gross value of old assets is Rs.138000 and WDV is Rs.6900.		
20	Handheld VHF device - MOTOROLA GP328 (03 numbers)	0.35	The Petitioner submitted that since the generating station is in remote locations, generating station is having few sites beyond mobile networks. In the absence of any prominent mode of communication and to get the uninterrupted connectivity with the generating station from various sites adequate nos. of VHF sets are required. The gross value of old assets is Rs.55590 and WDV is Rs.3.	In view of the submissions of the Petitioner and since the additional capital expenditure incurred is for the efficient operation of the generating station the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The decapitalization value of Rs.0.56 lakh for old, replaced assets/works has been considered under 'Assumed deletions'.	0.35
21	CVT, 132KV, 4400PF (04 numbers)	13.72	The Petitioner has submitted that three numbers of captive voltage transformers had been installed in the 132 KV Feeders at generating station for voltage monitoring and synchronising	In view of the submissions of the Petitioner and since the additional capital expenditure incurred for the efficient operation of the generating station the	13.72

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
22	Current Transformer 132 KV, CTR 300-200/1; Class 5P10; Burden 30VA	1.10	petitioner purpose. During conditioning monitoring test of these CVTs, Tan Delta Test results showed that these three numbers of CVTs installed in Jiribam-II Feeders are in very bad condition and may fail at any time. Additionally, one no. of CVT installed in Imphal- I feeder was also not working properly. Therefore, four numbers of CVTs were replaced in 2014-15 to improve the system reliability. Based on Indexation method, gross value of old assets is considered as Rs.155397 and WDV as Rs.22739. The Petitioner has submitted that due to oil leakage in the old installed CT, the same got replaced with the newly purchased 132 kV CT during 2014-15. The old 132KV transformer was purchased/ installed way back during commissioning of the generating	same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de- capitalization value of Rs.1.55 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the de- capitalization of the same has been considered as Rs.3.02 lakh under 'Assumed deletions'. In view of the submissions of the Petitioner and since the additional capital expenditure incurred for the efficient operation of the generating station the same is allowed under Regulation	1.10
			station. Based on Indexation method,	14(3)(viii) of the 2014 Tariff	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			gross value of old asset (O&M Gross Block) is considered as Rs.12479 and WDV as Rs.1801.	Regulations. The decapitalization value of Rs.0.12 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs.0.24 lakh under 'Assumed deletions'.	
23	132 kV/ 63.5V potential Transformer (PT) (Single Phase) (06 numbers)	16.19	The Petitioner has submitted that as per the new guidelines issued by CEA every PT should be class 0.2 accuracy. Being old generating station, all the bus PTs were installed with accuracy class 1. Therefore, in 2014-15, 6 numbers of 132 kV bus PT were replaced to improve the system reliability and to improve the measuring accuracy. Based on Indexation	In view of the submissions of the Petitioner and since the additional capital expenditure incurred for the efficient operation of the generating station the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The decapitalization value of Rs.1.83 lakh for	16.19

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
		(No. III Idail)	method, gross value of old assets is considered as Rs.183355 and WDV as Rs.25769. The Respondent has submitted that any such expenditure which is vital to increase the performance of the unit may be claimed by the Petitioner with proper reasoning after completion of R&M activities of the Project.	old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs.3.57 lakh under 'Assumed	(13. III Idali)
24	Beacon make pump model 10LA4 bare shaft pump for cooling water system of PH	26.08	The Petitioner has submitted that old cooling water pumps had been installed at the generating station way back since commissioning and due to ageing, wear and tear, the discharge of these old pumps had been reduced considerably resulting in reduced efficiency in cooling of various coolers associated with generating units. To improve the cooling system of generating units, Beacon make cooling water pumps were replaced in 2014-	deletions'. In view of the submissions of the Petitioner and since the additional capital expenditure incurred for the efficient operation of the generating station the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The decapitalization value of Rs.2.95 lakh for old, replaced assets/works as claimed by the Petitioner appears to be	26.08

SI.	Details of the	Amount	Justification	Remarks on	Amount
No.	claim	claimed	submitted by the	admissibility	Allowed
		(Rs. in lakh)	Petitioner		(Rs. in lakh)
			15. Based on Indexation method, gross value of old assets is considered as Rs.295476 and WDV as Rs.41526.	on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs.5.75 lakh under 'Assumed deletions'.	
	Total amount claimed	659.28			
	Total amount al	lowed			610.54

15. Based on the above, the total additional expenditure of Rs.765.96 lakh {Rs.155.42 lakh +Rs.610.54 lakh} is allowed in 2014-15.

2015-16

16. The details of the actual additional capital expenditure claimed by the Petitioner in 2015-16 under the various provisions of Regulation 14(3) of the 2014 Tariff Regulations are examined below:

(Rs. in lakh)

	(1.tel III le				
SI. No.		Regulation	2015-16		
(a)	14(3)(iii)	Expenses incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Govt. Agencies of statutory authorities responsible for national/ internal security	30.23		
(b)	14(3)(viii)	Additional works/expenditure which has become necessary for efficient and successful operation of plant	676.37		
	Total additional capital expenditure claimed				

(a) Additional Capital Expenditure claimed under Regulation 14(3)(iii)

SI.	Details of the	Amount	Justification submitted	Remarks on	Amount
No.	claim	claimed (Rs. in lakh)	by the Petitioner	admissibility	Allowed (Rs. in lakh)
Item	s allowed in order		15 in Petition No. 228/GT/	/2014	(rtor iir iaiti)
1	Construction of 6 barracks for CRPF.	5.22	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	It is observed that the additional capital expenditure claimed under this head were allowed for Rs.90.00 lakh and decapitalization of Rs.5.04 lakh i.e. Rs.84.96 (90.00-5.04) lakh vide order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as the asset is necessary for the benefit of employees (families) working in remote areas of the generating station and in turn will ensure the successful and efficient operation of the plant. In view of this, the additional capital expenditure claimed is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	5.22
New	Items				
2	CCTV equipment system for KV school, Loktak	6.93	The Petitioner has submitted that in view of security threats due to bad law and order situations in Manipur various vulnerable locations of the Project and generating station areas have been kept under CCTV Surveillance so that the critical areas near to Power station could	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			be closely monitored by the department.		
3	CO2 type fire extinguisher complete with all necessary fittings (29 numbers)	2.96	The Petitioner has submitted that fire extinguishers were purchased for meeting the requirement of safety of generating station equipment as well as in the various premises of generating station. Installation of fresh fire extinguishers became mandatory in compliance of OHSAS and environment policy requirement. The Gross value of old assets are as Rs.48385 and WDV as Rs.8.	In view of the submissions of the Petitioner and considering the fact that the additional capital expenditure incurred is for the safety and security of the generating station, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The decapitalization value of Rs.0.48 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs. 0.62 lakh under 'Assumed deletions'.	2.96
4	Battery charger. Input voltage: 220V AC, charging voltage range: 6V to 36V DC (04 numbers)	0.00*	The Petitioner has submitted that a branch of SBI bank is situated inside the generating station which is being used by employees as well as	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature	0.00
5	Day binocular with inbuilt digital compass (05 numbers)	0.00*	by outsiders. In view of security threats due to bad law & order situation in Manipur,	of O&M expenses, the additional capital expenditure claimed is not allowed . The	



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
6	Handheld metal detector (05 numbers)	0.00*	security checking of outsiders as well as their vehicles is essential. Hence for	discharge of liabilities for these assets are also not considered.	
7	Under vehicle searching mirror (with torch), make see, model: evusm (02 numbers)	0.00*	security check various security items have been purchased. The Petitioner has claimed this under undischarged liability.		
8	Handheld search light (02 numbers)	0.00*			
9	Lan for CCTV at generating station (PO10215/37)	2.90	The Petitioner has submitted that in view of security threats due to bad law and order	Considering the fact that the expenditure incurred is not directly related to the	0.00
10	IP based Bullet type Fixed camera, Samsung, PS- SNO-7080R for different locations of generating station (PO10214/161)	12.24	situations in Manipur, various vulnerable location of the Project and generating station area have been kept under CCTV Surveillance so that the same could be closely monitored by the department. Asset is considered necessary for the safety of the generating station.	operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
	Total amount claimed	30.23			
	Total amount all	owed			8.18

^{*}The Petitioner has claimed these expenditures under un-discharged liabilities during 2015-16 however, these liabilities have been discharged during 2016-17.

(b) Additional Capital Expenditure claimed under Regulation 14(3)(viii)

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
Items	allowed in order	dated 18.9.2	015 in Petition No. 228/GT/2	2014	
1	Replacement	17.02	These assets/works	It is observed that	17.02
	of LT		claimed were admitted	the additional	
	distribution		vide order dated	capital expenditure	
	lines by		18.9.2015 in Petition	for Rs.35.00 lakh	
	underground		No. 228/GT/2014.	and decapitalization	



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
	LT Cabling at Powerhouse Colony.			of Rs.6.09 lakh i.e. net Rs.28.91 (35.00-6.09) lakh was allowed in 2015-16 by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as the asset is necessary for the benefit of employees (families) working in remote areas of the generating station and in turn will ensure the successful and efficient operation of the plant. In view of this, the additional capital expenditure claimed is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of old replaced assets/ works has been considered under 'Assumed deletions'.	
2	Replacement of EPABX System.	17.55	These assets/works claimed were admitted vide Tariff order dated 18.9.2015 in Petition No. 228/GT/2014. The Commission had allowed this item as the item is considered necessary for efficient and successful operation of the generating station. The	It is observed that the additional capital expenditure for Rs.30.00 lakh and decapitalization of Rs.6.85 lakh i.e.net Rs.23.15 (30.00-6.85) lakh was allowed by order dated 18.9.2015 in Petition No.	17.55

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
		(KS. III IAKII)	gross value of old asset is considered as Rs.6.85 lakh.	228/GT/ 2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as the asset is necessary for the benefit of employees (families) working in remote areas of the generating station and in turn will ensure the successful and efficient operation of the plant. In view of this, the additional capital expenditure claimed is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.6.85 lakh for old, replaced assets/works has been considered under 'Assumed deletions'.	(NS. III Idini)
3	Construction of Permanent type - II Double storied building 04 blocks having 04 quarters in each block at Loktak.	112.34	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014. The Commission had allowed this item as the asset is necessary for the safety of employees working in remote areas of the generating station and in turn will ensure the successful and efficient operation of the plant. The gross value of old asset is considered as Rs.3.90 lakh.	It is observed that the additional capital expenditure claimed under this head was allowed for Rs.325.00 lakh and decapitalization of Rs.3.90 lakh i.e. Rs.321.10 (325.00-3.90) lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as the assets / works are	112.34

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
				already approved. In view of this, the additional capital expenditure is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	
4	Construction of Boundary Wall for CRPF Camp at Valve House	29.75	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	It is observed that the additional capital expenditure claimed under this head was allowed for Rs.35.00 lakh and decapitalization of Rs.0.44 lakh i.e. Rs.34.56 (35.00-0.44) lakh by the dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3) (viii) of the 2014 Tariff Regulations, as the asset is necessary for the safety of employees working in remote areas of the generating station and in turn will ensure the successful and efficient operation of the plant. In view of this, the additional capital expenditure incurred is allowed under Regulation 14(3) (viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.44 lakh for old, replaced assets/works has been considered	29.75

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
				under 'Assumed deletions'.	
5	Purchase of high mast Light Tower for area illumination.	21.86	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	It is noticed that the additional capital expenditure claimed under this head was allowed for Rs.22.00 lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations. In view of this, the additional capital expenditure claimed is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulation 14(3)(viii) of the 2014 Tariff Regulations.	21.86
	Items	T			
6	Supply & Installation of HSD Tank & Dispensing Unit at Loktak power station. (PO10214/ 213)	11.38	The Petitioner has submitted that generating station has sufficient numbers of Department and hired vehicles along with other heavy vehicle/ equipment to meet the day to day requirement of Power Station. Old HSD Tank which was in use for a long time got damaged due to rusting and a huge amount of Sludge got accumulated inside the tank. This has caused an increase in percentage of wastage of diesel. As per the observation of store wing and IOCL team, a	In view of the submissions of the Petitioner and considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station, the claim is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.1.14 lakh for old, replaced assets/works as claimed by the	11.38

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
		(NS. III IANII)	new HSD tank got installed at the power station to avoid such wastage. Gross Value old asset is considered as Rs.113800.	Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs.2.39 lakh under 'Assumed deletions'.	(NS. III IANII)
7	Handheld VHF device - MOTOROLA GP328 (11 numbers)	1.82	The Petitioner has submitted that being in remote locations, generating station is having few sites beyond mobile networks. In the absence of any prominent mode of communication and to get the uninterrupted connectivity with the generating station from various sites adequate nos. of VHF sets are required. Gross value of old assets are Rs.111180 and WDV as Rs.6.	In view of the submissions of the Petitioner and considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station, the claim is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.1.11 lakh for old, replaced assets/works has been considered under 'Assumed deletions'.	1.82
8	UTM/FIREWA LL-MIN 8 ETHERNET, 2USB; MIN 120000CONC UR SESNS; MIN4000 NEW SESNS/SEC; MIN1000 IPS throughput (02 numbers)	4.20	The Petitioner has submitted that generating station is connected with internet facility through a 4 mbps internet lease line and Ku Band VSAT connection by BSNL. The internet facilities are connected to NHPC LAN at generating station Admin Office and	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Leimatak Powerhouse.		
			The end users are also		
			browsing ERP through		
			LAN and WAN links. To		
			protect the network from		
			virus, trojans, malware,		
			spoofing, online transaction attacks and		
			for providing information		
			and data protection		
			hardware based unified		
			threat management		
			firewall was a necessary		
			requirement as advised		
			by generating stations		
			IT&C Division vide letter		
			no. dated 2-11-2012.		
			Since two independent		
			LANs (one at Loktak		
			Admin Office Complex		
			and the other at		
			Leimatak Powerhouse		
			area which are		
			approximately 25 Kms apart) 2 UTM/Firewall		
			devices were		
			purchased.		
9	Upgradation of	41.73	The Petitioner has	In view of the	41.73
	LAN at		submitted that the	submissions of the	
	Generating		existing Local Area	Petitioner and	
	station		Network (LAN) at	considering the fact	
			generating station was	that the additional	
			having about 68 nodes	capital expenditure	
			covering only 7	incurred is for the	
			locations at Loktak	efficient operation of	
			Administrative Complex	the generating	
			and only 4 locations at	station, the claim is	
			Leimatak Powerhouse Complex. The existing	allowed under Regulation	
			network system was	14(3)(viii) of the	
			based on UTP cables	2014 Tariff	
			and LAN extender	Regulations. The	
			Modems through	de-capitalization	
			telephone Lines.	value of Rs.18.92	
			Moreover, the two LANs	lakh for old,	
			were existing as	replaced	
			separate entities without	assets/works has	
			any intercommunication.	been considered	
			With the introduction of	under 'Assumed	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
		(ERP in the Petitioner's	deletions'.	(**************************************
			company almost all the		
			office proceedings/		
			works have to be carried		
			out online through ERP		
			applications and hence		
			a wider reach of		
			computing facilities to		
			maximum locations		
			have been required.		
			With the coming of ERP,		
			high speed		
			communication		
			networks like managed		
			leased lines and ku		
			Band VSAT		
			communication systems were installed at		
			generating station so		
			that the ERP		
			applications can be		
			accessed smoothly from		
			the generating station		
			through Petitioner's		
			Corporate WAN. The		
			existing LANs were not		
			suitable for high-speed		
			requirements and were		
			also restricted to only a		
			few locations. Moreover,		
			integration of the		
			existing network with the		
			corporate WAN was not		
			reliable as the existing		
			infrastructures were		
			outdated. Further,		
			intercommunication		
			between the two LANs		
			is required for efficient		
			communication and		
			resource sharing		
			between the two		
			locations. In view of the		
			above points and for wider reach of ERP		
			Application access from maximum locations of		
			the office, a high-		
			speed LAN System		

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			comprising of OFC and UTP cable links with client-server-based technology as well as capable of integration with Corporate WAN through managed Leased Circuits and VSAT is required. The gross value of old assets are Rs. 1892037 and WDV as Rs.94602.		
10	Water treatment plant 300 CUM of water per day (15000 PH), kirloskar, ECO water solution (300 KLD) (02 numbers)	24.04	The Petitioner has submitted that the generating station colonies are situated in the areas of Manipur where monsoon persist for almost half years or may be more than that. Water of Loktak lake is the only source of water supply to the colony of the power station for drinking & other uses. During monsoon, the water becomes very muddy/ contaminated. Plenty of families /officials are residing in Township situated at Loktak & Leimatak and water supply to these colonies were being maintained/ cleaned by adding alum in the tanks where water is stored from adjacent river only. Considering the health of employees and their families and to minimize the problems arising from contaminated water, installation of water treatment plant was inevitable.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00
11	Laying of alternate water supply line at	47.12	The Petitioner has submitted that Lokchoa (nallah) is the only	Considering the fact that the expenditure incurred is not	0.00

SI. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
	loktak	(Rs. in lakh)	source of water supply for the generating station. The Power Station had to sometimes experience the drain blockage and pipeline problem also. In view of above and the shortage of waters supply during dry season, an alternative water supply arrangement was very necessarily required to meet out the day to day requirement from power Channel.	directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	(Rs. in lakh)
12	Sedimentation tank at zero colony-loktak	18.69	The Petitioner has submitted that there are only two water tanks which supply old colony, new colony and zero colony. The residential and office area of generating station is scattered very widely and considering the low pressure and frequent complaint received from employees residing/working in zero colony especially during dry season, a necessity for construction of new sedimentation tank was required.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00
13	GPS based time synchroni- sation equipment	2.32	The Petitioner has submitted that as per guidelines, it is mandatory that every generating station should have healthy GPS time Sync unit. Further, every numerical protection relay and event logger installed at generating station should be time synchronised with GPS	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
14	Evenutive field	159.50	system. It was therefore essential to purchase one no. complete "GPS based Time Synchronisation" equipment's for powerhouse so that all the numerical relays and event logger can be time synchronised with GPS. The Petitioner has	In view of the	
	Executive field hostel at Loktak (16 quarters).	139.30	submitted that the existing structures of generating station was constructed during the period of 1975-76 and most of these quarters are made of ekra walling with wooden structure and CGI Sheet roofing. These structures have outlived their useful life and not worth for economical repairs. There is a potential danger of collapsing/damaging of these structures if a heavy cyclonic wind is experienced in the region. Considering all the factors recorded above construction of field hostel was become necessary. The Gross value of old assets is considered Rs.595308 and WDV as Rs.59531. The partial amount of executive field hostel has been capitalised during FY 2016-17.	submissions of the Petitioner and considering the fact that the additional capital expenditure incurred is necessary for the employees of the generating station and in turn contribute to the efficient operation of the plant, the claim is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.5.95 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs.33.47 lakh under 'Assumed	159.50

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
15	Club building at Powerhouse Colony, Leimatak (102/001145)	81.38	The Petitioner has submitted that generating station was not having any club building at Leimatak earlier. An old temporary structure made of CGI Sheet constructed along with colony in years back in 1975-76 was used by the generating station for any official gathering etc. However, there are various officers with their family residing in Leimatak colony and no other market / any enjoyment facility available nearby. Accordingly, to maintain physical & mental health of employees, it was necessary to construct a club building. In recent time during visit of dignitaries, high level officials, locals etc., the necessity of a club for meeting, gathering etc. was realized and accordingly, the same was constructed. Major portion of asset is capitalized during FY 2015-16 and the balance amount capitalized during FY 2017-18.	deletions'. Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed. The Petitioner may, if need be, claim the same along with R&M.	0.00
16	Numerical generator protection relay, ABB Reg 670	9.31	The Petitioner has submitted that various electromagnetic / static type protection relays were installed for the protection of all generating units. As per the Protection guidelines every	Considering the additional capital expenditure incurred is necessary for the efficient operation of the generating station, the claim is allowed under	9.31

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			generator / feeder / transformer protection shall be installed in Main-I and Main-II (i.e. redundancy) and should be Numerical type relays due various advantages over electromagnetic / static relays like reliability, selectivity, cost effective and various information of fault is also provided by these relays. In the Year 2012-13, old EM relay was already replaced by Numerical Relay in Main-I Protection. In 2015-16, EM Relay of Main-II was replaced with ABB make Numerical Relay. Based on Indexation method, gross value of old assets is considered as Rs.99877 and WDV as Rs.13169.	Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs. 1.00 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the de- capitalization of the same has been considered as Rs. 1.95 lakh under 'Assumed deletions'.	
17	220V DC, 500AH lead acid battery bank with all accessories	14.53	The Petitioner has submitted that one number of 220V DC battery banks of 300 AH capacity Lead-Acid cells	Considering the additional capital expenditure incurred is necessary for the	14.53
18	220V DC, float / float cum boost charger, three phase 415V AC, rating 50/80 Amp	5.69	with associated chargers and DC distribution system are installed at Power House of generating station. These battery banks and associated chargers are used to provide the DC Power to 3 X 35 MW generating units Start – Stop circuits, various control and protection relays, Governing System, Excitation system (For field flashing) and even various control circuit of	efficient operation of the generating station and hence the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.2.41 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower	5.69

SI.	Details of the	Amount	Justification submitted	Remarks on	Amount
No.	claim	claimed	by the Petitioner	admissibility	Allowed
		(Rs. in lakh)	122 b) / Foodore Old	aida Hanaa	(Rs. in lakh)
			132 kV Feeders. Old	side. Hence,	
			Battery Bank working	considering the	
			since commissioning has already outlived	methodology described in	
			their useful life.	paragraph 27 of this	
			Previously it was felt	order below, the de-	
			several times that	capitalization of the	
			generating units was	same has been	
			tripped to the fault in	considered as Rs.	
			Charger and very less	4.24 lakh under	
			backup of Battery Bank.	'Assumed	
			Hence to improve the	deletions'.	
			system reliability, One		
			set of 500 AH Battery		
			Bank and associated		
			Charger was purchased		
			and replaced in the FY		
			2015-16. Based on		
			Indexation method, gross value of old		
			assets is considered as		
			Rs.241036 and WDV as		
			Rs.29967.		
19	Submersible	0.00*	The Petitioner has	The Petitioner has	0.00
	pump 02 HP.		submitted that old	claimed expenditure	
	Make- Modi		submersible pumps	amounting to	
	(02 numbers)		installed in the Cable	Rs.2.38 lakh on	
			Gallery of Powerhouse	accrual basis and	
			and outdoor drainage	this full amount is	
			was faulty and was not	shown as un-	
			in working conditions.	discharge liability. It	
			So, these two pumps	is noticed that Petitioner had	
			were replaced in 2015- 16 to improve the	claimed this amount	
			system reliability and for	as discharge of	
			continuous dewatering	liability in 2016-17.	
			of seepage water. The	It is further noticed	
			old assets actually got	that the Petitioner	
			deleted in the books of	has de-capitalized	
			account during FY	an amount of	
			2016-17 (gross value of	Rs.0.29 lakh in	
			old assets is considered	2015-16 and	
			as Rs.28961/-).	claimed the same	
			Accordingly, the deletion	under exclusion in	
			of old assets is claimed	2016-17 i.e. actual	
			as De-capitalization	year of	
			during FY 2015-16 and	capitalization of the	
			kept under exclusion	asset. Considering	
			during FY 2016-17.	the fact that the	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
				additional capital expenditure incurred is necessary for the efficient operation of the generating station, the same is allowed on accrual basis, during 2015-16 and corresponding liabilities are allowed during 2016-17 under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.29 lakh for old, replaced assets/works has been considered under 'Assumed deletions'.	
20	Guide vane lower ring assembly (drawing no. 51620100)	52.67	The Petitioner has submitted that as per IND AS accounting policy, spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The new Assets were purchased during 2015-16 and the same was put to use during 2015-16. Based on Indexation method, gross value of	Considering the additional capital expenditure under this head is in the nature of capital spares, the same is not allowed. The corresponding decapitalization on account of the same is also not allowed.	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			old assets is considered as Rs.565155 and WDV as Rs.72880.		
21	132kV Current Transformer ratio-400.	3.49	The Petitioner has submitted that as per IND AS Accounting policy, spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The new Assets were purchased during 2015-16 and the same was put to use during 2015-16. Based on Indexation method, gross value of old assets is considered as Rs.39517 and WDV as Rs. 5439.		0.00
	Total amount	676.37			
	claimed				
	Total amount a				442.48

^{*}The Un-discharge liabilities of these assets are claimed in 2016-17

17. Based on the above, the total additional expenditure of Rs.450.66 lakh {Rs.8.18 lakh + Rs.442.48 lakh} in 2015-16 is allowed.

2016-17

18. The details of the actual additional capital expenditure claimed by the Petitioner in 2016-17 under the various provisions of Regulation 14(3) of the 2014 Tariff Regulations are examined below:

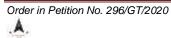
(Rs. in lakh)

SI. No.		Regulation	2016-17
(a)	14(3)(iii)	Expenses incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Govt. Agencies of statutory authorities responsible for national/internal security	262.38
(b)	14(3)(viii)	Additional works/expenditure which has become necessary for efficient and successful operation of plant	329.47
	Total add	itional capital expenditure claimed	591.85

(a) Additional Capital Expenditure claimed under Regulation 14(3)(iii)

SI. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
140.	Claiiii	(Rs. in lakh)	by the retitioner	adinissibility	(Rs. in lakh)
Item	s allowed in orde		2015 in Petition No. 228/GT/	2014	(
1	Construction	69.44	These assets/works	It is noticed that the	69.44
	of 5 barracks		claimed were admitted	additional capital	
	for CRPF.		vide order dated	expenditure claimed	
			18.9.2015 in Petition	under this head was	
			No. 228/GT/2014.	allowed for Rs.75	
				lakh and de-	
				capitalization of	
				Rs.6.46 lakh	
				i.e.Rs.68.54 (75.00-	
				6.46) lakh vide order	
				dated 18.9.2015 in	
				Petition No.	
				228/GT/2014 under	
				Regulation 14(3)(viii)	
				of the 2014 Tariff	
				Regulations as the	
				asset is necessary	
				for the benefit of	
				employees (families)	
				working in remote	
				areas of the	
				generating station	
				and in turn will	
				ensure the	
				successful and	
				efficient operation of	
				the plant. In view of	
				this, the additional	
				capital expenditure	
				claimed is allowed	
				under Regulation	
				14(3)(iii) of the 2014	
				Tariff Regulations.	
				The de-capitalization	
				value of Rs. 6.46	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
Now	Items	(1.0.1.1.1.1.1.1)		lakh for old replaced assets/works has been considered under 'Assumed deletions'.	(1.50.11.11.11)
		404.00	The Detition on her		0.00
2	Fencing of Left & Right bank of Power Channel (TDM bridge to Intake/ Emergency gate)	124.06	The Petitioner has submitted that the left & right bank of the Power Channel from TDM bridge to Intake/ Emergency Gate are not having any boundary wall /fencing to prevent localities/ others from fishing and other activities. Due to fishing, sometimes materials in the form of stones, nets etc., thrown in the power channel used to stuck on the intake steel trash rack and results in affecting the inflow of water into the tunnel for power generation. Moreover. the level of water in power channel during rainy seasons becomes higher and frequent movements of localities (including children's) in the absence of boundary walls, may also result in loss of life. Hence the work became necessary for security/safety point of view considering the depth and flow of water.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00
3	Construction of 1 number Watch Tower near Main Gate of Transport Yard.	7.11	The Petitioner has submitted that a strong earthquake was felt at generating station on 4.1.2016. Due to this, watch tower in Transport Yard was damaged completely.	Considering the fact that the additional capital expenditure incurred is necessary for the efficient operation of the generating station, the same is	7.11



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			The construction of watch tower is inevitable for security reasons. The Gross value of Old assets is Rs.3.94 lakh.	allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The decapitalization value of Rs.3.94 lakh for old, replaced assets/works has been considered under 'Assumed deletions'.	
4	Construction of 1 number arms & ammunition room for CRPF at Ithai Barrage	19.38	The Petitioner has submitted that due to bad law and order situation in Manipur, CRPF has been deployed at Ithai barrage for safety and security of Barrage and colony. Previously there was no room for storage of magazine. Arms and ammunition required by CRPF are kept at CGI sheet made shed which is just adjacent to the kitchen (mess room). Due to this, construction of arms and ammunition room for CRPF at Ithai Barrage was become inevitable as per the requirement of CRPF.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
5	Construction of 4 numbers watch tower for CRPF (2 numbers Loktak, 2 at Jeevan Nagar and Lamadan)	18.58	The Petitioner has submitted that CRPF based on their requirement has assessed/ proposed to construct 2 numbers of Watch Tower at Jeevan Nagar on priority for security reasons.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
6	CO2 Fire Fighting System	23.02	The Petitioner has submitted that fire extinguishers were purchased for meeting the requirement of	Considering the fact that the additional capital expenditure incurred is necessary for the	23.02

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			safety of Powerhouse equipment as well as in the various premises of generating station, where installation of fresh fire extinguishers became mandatory for compliance of OHSAS and environment policy requirement. The Gross value of old assets is Rs.155064 and WDV as Rs.24.	safety and security of the generating station and hence the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.1.55 lakh for old, replaced assets/works has been considered under 'De-capitalization'.	
7	Optical Zoom CCTV Cameras (2 numbers) for HOP office Building	0.79	The Petitioner has submitted that the generating station finds the existing cameras installed at the office campus are not sufficient to monitor/cover the entire area around the HOP office. These cameras cover the main entrance gate only and leaving the open area Infront of HOP office as well as corridor of Admin Office. There is regular movement of outsiders/localities for official meeting to HOP office and other division at Admin Office. Considering the law and order situation in Loktak Power Station, Manipur, two nos. of CCTV cameras are installed for safety and security of HOP office.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00
	Total	262.38			
	amount claimed				
	Total amount	allowed			99.56

(b) Additional Capital Expenditure claimed under Regulation 14(3)(viii)

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
Item	s allowed in orde		2015 in Petition No. 228/GT/	/2014	(Tiermiem,
1	Bullet Proof Scorpio (1 number)	56.59	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	It is noticed that the additional capital expenditure claimed under this head was allowed for Rs.50.00 lakh and decapitalization of Rs.8.38 lakh i.e. Rs.41.62 (50.00-8.38) lakh in 2016-17 vide order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations since the asset is considered necessary for efficient and successful operation of the generating station. In view of this, the additional capital expenditure claimed is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	56.59
2	Purchase of 1 number 12.5 MT Hydraulic Slew Crane against replacement.	60.92	These assets/works claimed were admitted vide order dated 18.9.2015 in Petition No. 228/GT/2014.	It is noticed that the additional capital expenditure claimed under this head was allowed in 2015-16 for Rs.80.00 lakh and decapitalization of Rs.4.73 lakh i.e. Rs.75.27 (80.00-4.73) lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii)	60.92



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed
		(RS. III lakii)		of the 2014 Tariff	(Rs. in lakh)
				Regulations since	
				the asset is	
				considered	
				necessary for	
				efficient and	
				successful operation	
				of the generating	
				station. In view of	
				this, the additional	
				capital expenditure	
				incurred is allowed	
				under Regulation	
				14(3)(viii) of the	
				2014 Tariff	
				Regulations. The de-	
				capitalization value	
				of Rs.4.73 lakh for	
				old, replaced	
				assets/works has	
				been considered	
				under 'De-	
				capitalization'.	
3	Purchase of	12.50	These assets/works	It is observed that	12.50
	one number		claimed were admitted	the additional capital	
	10-seater		vide Tariff order dated	expenditure claimed	
	boat with self-		18.9.2015 in Petition	under this head for	
	starter motor		No. 228/GT/2014.	Rs.20.00 lakh and	
	and accessories			de-capitalization of Rs.1.95 lakh i.e.	
	etc.			Rs.18.05 (20.00-	
	GIU.			1.95) lakh in 2015-	
				16 by order dated	
				18.9.2015 in Petition	
				No. 228/GT/2014	
				under Regulation	
				14(3)(viii) of the	
				2014 Tariff	
				Regulations since	
				the asset is	
				considered	
				necessary for	
				efficient and	
				successful operation	
				of the generating	
				station. In view of	
				this, the additional	
				capital expenditure	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed
				incurred is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The decapitalization value of Rs.1.95 lakh for old replaced assets/works has been considered under 'Decapitalization'.	
New	Items				
4	Executive field hostel at Loktak (16 quarters).	21.40	The Petitioner has submitted that the existing structures of generating station was constructed during the period of 1975-76 and most of these quarters are made of ekra walling with wooden structure and CGI Sheet roofing. These structures have outlived their useful life and not worth for economical repairs. There is a potential danger of collapsing/damaging of these structures if a heavy cyclonic wind is experienced in the region. Considering all the factors recorded above construction of field hostel was become necessary. The Gross value of old assets is considered Rs.595308 and WDV as Rs.59531. The partial amount of executive field hostel has been capitalised during FY 2016-17 (balance amount).	Considering the fact that the additional capital expenditure incurred is necessary for the employees of the generating station and in turn will contribute to the efficient operation of the generating station, the claim of the Petitioner is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The decapitalization value of the asset has been dealt with in 2015-16.	21.40
5	11 KV VCB Panel for	4.48	The Petitioner has submitted that the OCBs	Considering the fact that the additional	4.48

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
	DPH, Loktak		have been in operation since commissioning. As the OCBs were outlived their useful lives and the spare parts of those OCBs are also not available in the market. Hence, replacement of 2 numbers VCB are inevitable to avoid any unanticipated problems and accident. Based on Indexation method, the gross value of old asset is considered as Rs.57742 and WDV as Rs.6510.	capital expenditure incurred is necessary for the safety and security of the generating station, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The decapitalization value of Rs.0.58 lakh for old, replaced assets/works as claimed by the Petitioner appears to be on the lower side. Hence, considering the methodology described in paragraph 27 of this order below, the decapitalization of the same has been considered as Rs.0.90 lakh under 'Assumed deletions'.	(KS. III IdKII)
6	Water Cooling Pump- Motor Set (1 number)	13.25	The Petitioner has submitted that total four numbers of cooling water pump motor sets are installed for cooling water supply to various coolers of bearing and stator air cooler. Pumps are in operation since commissioning and almost outlived their life. Out of four pumps two numbers of pump-motor pump sets were already replaced. The replacement of other two nos. is required due to reduction of efficiency in cooling water pump Set. The gross value of old asset is Rs.470080.	Considering the fact that the additional capital expenditure incurred is necessary for the safety and security of the generating station, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The decapitalization value of Rs.4.70 lakh for old, replaced assets/works has been considered under 'Decapitalization'.	13.25

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
7	LT Distribution Panel, 440V	6.69	The Petitioner has submitted that all LT distribution panels were purchased 40 years back. There are oil circuit breakers which creates lot of problems during switching on and off. Two numbers LT distribution panels have been purchased for smooth power supply at colony and office and other establishment areas.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
8	Biometric Machines (10 numbers) - Finger Print Reader with smart card reader facility	4.68	The Petitioner has submitted that attendance through Biometric Machine of the employees in Government Office became mandatory as per Gol guidelines. Accordingly, Corporate Office vide Circular No.64/2014 dated 21.11.2014 and further as per IOM Reference No.PPL-501/236 dated 29.12.2014 instructed to install appropriate numbers of Biometric Machines for attendance capturing of employees. Initially, generating station finds the requirement of 5 numbers of Biometric Machines considering the different locations/sites. Further HR division, facing the constraints and insufficiency of machines, identified the additional requirement of 5 numbers of Biometric Machines of Biometric Machines	Considering the fact that the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed.	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
9	Switch/Server Rack (27U)	0.66	The Petitioner has submitted that the existing LAN system at generating station administrative office comprises of multiple servers and clients. Earlier, the servers were kept in open tables and the management used to be done separately for each server. Since these servers are the backbone of the entire network, hence the same are required to be kept inside a server/switch rack, so that their management/maintenan ce can be done centrally through KVM switch. Hence the purchase of Switch/Server Rack became essential.	Considering the additional capital expenditure incurred by the Petitioner is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
9	OTDR Machine for Optical Fibre Cable	3.83	The Petitioner has submitted that the existing LAN system in Loktak Power Station connects various remote locations by using Optical Fiber Cable and also the main communication link between Loktak Admin Office and Leimatak Powerhouse is through OFC cables via 11 KV Poles. Whenever there is breakdown in the fibre networks, it becomes difficult to trace the breakdown points in the absence of OTDR (Optical Time Domain Reflectometer) machine. Hence to reduce fibre downtime as well as for	Considering the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
			maintaining the smooth communication links, there is an urgent requirement of OTDR with all accessories in the office.		
10	Fusion Splicing Tool for OFC	2.30	The Petitioner has submitted that the existing LAN system in generating station connects the various remote locations by using the Optical Fibre Cable (OFC) and also the main communication link between Loktak Admin Office and Leimatak Power Hoyyuse is through OFC Cables via 11 KV Poles. These OFC links are required to be maintained properly so that OFC down time is minimum. Whenever OFC cables are cut/broken or if a new LAN point is to be extended with OFC Cable, the fibre cable are required to be joined with a specialized tool i.e. Fibre fusion splicer machine. Being a remote location, such tools are not easily available in the state of Manipur and in case a fibre breakdown occurs, the network could be resumed only on the availability of Splicer Machine. Till the time the LAN as well as communication system remains interrupted in the Power Station, the telephone lines, internet,	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of tools and tackles, the additional capital expenditure claimed is not allowed .	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
			ERP etc. remain unavailable for use for long time. Considering these factors, the purchase of Fusion Splicing Tool for OFC became inevitable.		
11	14 Nos.120 kV, 10 kA, CLASS-III , Metal oxide lightning arrester- MAKE: ELPRO , MODEL: 9L12BNH120	1.36	The Petitioner has submitted that as per IND AS Accounting policy, Spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The Assets has been purchased during 2016-17 and the same was put to use during 2016-17. Based on Indexation method, gross value of old assets is considered as Rs.14632 and WDV as Rs.1788.	Considering the additional capital expenditure under this head is in the nature of capital spares, which are claimed after the cut-off date, the same is not allowed. The corresponding decapitalization on account of the same is also not allowed.	0.00
12	132kV Current Transformer ratio-400.	41.86	The Petitioner has submitted that s per IND AS Accounting policy, Spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this	Considering the additional capital expenditure under this head is in the nature of capital spares, claimed after the cut-off date, the same is not allowed . The corresponding decapitalization on account of the same is also not allowed .	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
			spare is capitalised. The Assets has been purchased during 2016-17 and the same was put to use during 2016-17. Based on Indexation method, gross value of old assets is considered as Rs.474207 and WDV as Rs.58404.		
13	Generator bearing oil cooler (GBOC), 66C.392.368 (02 Nos)	70.25	The Petitioner has submitted that Generator bearing oil coolers are being used for cooling the oil circulated in the thrust bearing, upper guide bearing and lower guide bearing of machine. The generator bearing oil coolers installed in PS were being used since commissioning of the project. Due to ageing and erosion of the copper nickel pipes of the coolers, leakage occurred and got mixed with turbine oil which resulted in heavy losses of turbine oil. Further, use of leaked tubes decreased the efficiency of heat exchange and led to overall high bearing temperatures and efficiency loss of the machines. As per record available, thrust bearing temperature was getting increased up to 84 degree in summer. To increase the cooling requirements and to reduce other detrimental effects, one no. of Generator bearing oil	Considering the additional capital expenditure under this head is in the nature of capital spares, claimed after the cut-off date, the same is not allowed. The corresponding decapitalization on account of the same is also not allowed.	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
			cooler (01 Set) got replaced in 2013-14 and two Sets for Unit # 2 and Unit # 3 were replaced in 2014-15 for improving the overall efficiency and reduction of generation losses. As per IND AS Accounting policy, Spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. Based on Indexation method, gross value of old assets is considered as Rs.795798 and WDV as Rs.106849. This is in terms of change in Accounting policies as per guidelines of IND AS for PPE treatment.		
14	Generator bearing oil cooler (GBOC), 66C.392.368	28.71	The Petitioner has submitted that as per IND AS Accounting policy, Spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this	Considering the additional capital expenditure under this head is in the nature of capital spares, claimed after the cut-off date, the same is not allowed. The corresponding decapitalization on account of the same is also not allowed.	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
			spare is capitalised. The new Assets were purchased during 2013-14 which was kept under exclusion and now the same was put to use during 2016-17. Based on Indexation method, gross value of old assets is considered as Rs.35464 and WDV as Rs. 5190.		
	Total	329.47			
	amount				
	claimed				
	Total amount	allowed			169.13

19. Based on the above, the total additional expenditure of Rs.268.70 lakh {Rs.99.56 lakh +Rs.169.13 lakh} in 2016-17 is allowed.

2017-18

20. The details of the actual additional capital expenditure claimed by the Petitioner in 2017-18 under the various provisions of Regulation 14(3) of the 2014 Tariff Regulations are examined below:

(Rs. in lakh)

SI.		Regulation	2017-18			
No.						
(a)	14(3)(iii)	Expenses incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Govt. Agencies of statutory authorities responsible for national/internal security	45.75			
(b)	14(3)(viii)	Additional works/expenditure which has become necessary	354.70			
		for efficient and successful operation of plant				
	Total additional capital expenditure claimed					

(a) Additional Capital Expenditure claimed under Regulation 14(3)(iii)

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
New	Items				
1	Providing and fixing of RBT concertina coil fencing along boundary wall at Ithai (102/001879)	30.51	The Petitioner has submitted that due to bad law and order in Manipur and for security reasons it is necessary to have fencing of the boundary wall at Itahi. This was not envisaged earlier during the filing of Tariff Petition.	Considering the fact that the assets/ works are necessary for the safety and security of the generating station and is in terms of the recommendations of the Central Security agency, the additional capital expenditure claimed is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.	30.51
2	Construction of damaged watch tower at Transport Yard at Loktak (102/001837)	13.33	The Petitioner has submitted that due to bad law and order in Manipur and for security reasons it was necessary to construct Watch Tower for CRPF at Loktak on priority.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses,	0.00
3	2 MP IP PTZ HD outdoor CCTV camera, DS- 2DE52201- AE at Ithai Barrage.	1.91	The Petitioner has submitted that in view of security threats due to bad law and order situations in Manipur, various vulnerable location of the Project, Itahi Barrage and Power House areas were kept under CCTV Surveillance so that the critical areas near to Power station could be closely monitored by the department.	the additional capital expenditure claimed is not allowed .	0.00
	Total amount	45.75	•		
	claimed				22 = :
	Total amount	allowed			30.51

(b) Additional Capital Expenditure claimed under Regulation 14(3)(viii)



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)				
Items allowed in order dated 18.9.2015 in Petition No. 228/GT/2014									
1	Purchase of 02 numbers of Minibus against replacement	40.42	These assets/works claimed were admitted vide Tariff order dated 18.9.2015 in Petition No. 228/GT/2014.	It is noticed that the additional capital expenditure claimed under this head was allowed for Rs.30.00 lakh and decapitalization of Rs.19.35 lakh i.e. (30.00-19.35) lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as the assets are already approved. In view of this, the additional capital expenditure incurred is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The actual decapitalization value of Rs.14.93 lakh for old replaced assets/ works has been considered under 'Assumed deletions'.	40.42				
New	Items			Assumed deterions.					
2	Permanent Store Cum Office Building at Transport Yard (102/001795) and Electrification work of the Building	72.49	The Petitioner has submitted that the older buildings presently in use in the project were constructed in 1978-80 and are temporary in nature. The buildings constructed had no RCC foundation. The super structure was supported on wooden pillars. The walls were made up of Bamboo stick net having mud	Considering the fact that the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00				



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			plaster on both sides. The roofing is of GI sheets supported on wooden structures with false ceiling. As per CPWD norms theses type of buildings are considered as Temporary in nature. The present building has already outlived their useful life and more than 35 years old. Some of the structures are very dilapidated condition and are not safe to live. Accordingly, the new building construction cost incurred for Rs.82.02 lakhs and Electrification cost of Rs.2.35 lakhs.		
3	Electrification of newly constructed club building at Leimatak (102/001929)	2.21	The Petitioner has submitted that the Club building was capitalised during FY 2015-16 and the electrification work was done in new constructed Club building at Leimatak to come to workable condition during FY 2017-18.	Considering the fact that the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
4	Beacon make pump model 10LA4 bare shaft pump for cooling water system of PH	14.42	The Petitioner has submitted that old cooling water pumps had been installed at the generating station way back since commissioning and due to ageing, wear and tear, the discharge of these old pumps had been reduced considerably resulting in reduced efficiency in cooling of various	Considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.95 lakh for old,	14.42

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			coolers associated with generating units. To improve the cooling system of generating units, Beacon make cooling water pumps were replaced in 2017-18. Gross value of old assets is considered as Rs. 95054 and WDV is Rs.3.	replaced assets/works has been considered under 'De- capitalization' in 2016-17.	
5	PLC based online real time monitoring and recording system, MAKE: Srijon microsystems	20.09	The Petitioner has submitted that in the generating station, three Butterfly Valves are installed at Valve House (remotely located) for all three units. This PLC based remote monitoring system is purchased to monitor and control the operation of valve from Powerhouse control room, even if shut down of butterfly valves are required on account of any eventuality like rapture of Penstock.	Considering the fact that the additional capital expenditure incurred is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
6	Vertical turbine pump, 25 HP, discharge- 300 M3/HR- MAKE: WPIL, MODEL:E12 TC	6.47	The Petitioner has submitted that the new pumps have been purchased on replacement basis for dewatering and drainage purposes in Powerhouse. Old	Considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station, the same is allowed under	6.47
7	Vertical turbine pump, 30 HP, discharge- 300 M3/HR - MAKE: WPIL, MODEL:E12 TC	4.98	pumps were purchased on 1.4.1986 and their acquisition value is Rs.71289. The deletion of old pumps has already been claimed in FY 2016-17.	Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.71 lakh for old, replaced assets/works has been considered under 'Decapitalization' in 2016-17.	4.98

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
8	Laying & supplying of Delivery Pipeline from Filtration plant-old colony water storage tank, Loktak	15.04	The Petitioner has submitted that new pipeline system has been layered from Filtration Plant to Old colony water storage tank for supply of clean drinking water for employees.	Considering the fact that the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
9	Laying of OFC link from Loktak Powerhouse (Leimatak) overhead through 11KV line	24.76	The Petitioner has submitted that the OFC Link between Loktak to Leimtak is required to be replaced as the OFC in use remains delinked/ broken-down on regular basis. We have various locations in generating station like Leimtak, HOP Sectt and other supporting departments in Loktak, who has to be in touch /communication continuously for operation & maintenance of Powerhouse and other works. Frequent breakdown in OFC connectivity causes interruption of communications between the sites and head quarter, function of ERP system and Internet Service etc. The replacement of this system is very much essential for proper and smooth functioning of power station. The Gross value of Old assets is Rs.1784635 and WDV as Rs.811704.	Considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.17.85 lakh for old, replaced assets/works has been considered under 'Assumed deletions'.	24.76

SI.	Details of the	Amount	Justification submitted	Remarks on	Amount
No.	claim	claimed	by the Petitioner	admissibility	Allowed
		(Rs. in lakh)	-	-	(Rs. in lakh)
9	4 numbers	0.30	The Petitioner has	Considering the fact	0.00
	Otoscope		submitted that the	that the additional	
			generating Station has	capital expenditure	
			hospital at Loktak,	incurred is not	
			Leimatak, Ithai and	directly related to	
			dispensary at Jeevan Nagar, which requires	the efficient operation of the	
			various instruments for	generating station	
			providing treatment to	and is in the nature	
			the patients of local	of O&M expenses,	
			vicinity as well as	the additional capital	
			employee and their	expenditure claimed	
			family members. Since	is not allowed .	
			there is no hospital		
			facility near this location,		
			all the outsiders are also		
			dependent to these		
10	2 10 10 10 10 10	1.00	project hospitals.	Considering the feet	0.00
10	3 numbers Wheeled dust	1.02	The Petitioner has submitted that in terms	Considering the fact that the expenditure	0.00
	bin -660L,		of initiation of Prime	incurred is not	
	nilkamal		minister "Swatch Bharat	directly related to	
	WB660L10G		Mission Abhiyan" the 40	the operation of the	
	R		numbers wheeled	generating station	
			dustbins has been	and is in the nature	
			purchased for cleaning	of O&M expensed,	
			the environment and	the additional capital	
			remove and disposal of	expenditure claimed	
			the garbage in	is not allowed .	
			systematic manner to minimise the chronic		
			disease to people.		
11	36 numbers	3.38	The Petitioner has	Considering the fact	3.38
' '	fire	3.33	submitted that Many fire	that the additional	3.00
	extinguisher		extinguishers installed	capital expenditure	
			at different location of	incurred is	
			power stations became	necessary for the	
			obsolete and needs to	safety and security	
			be replaced. Moreover,	of the generating	
			some additional	station, the same is	
			locations are also	allowed under	
			identified for compliance of OHSAS and	Regulation 14(3)(viii) of the 2014 Tariff	
			environment policy,	Regulations. The	
			where fire extinguishers	de- capitalization	
			need to be installed.	value of Rs.2.68	
			Therefore, Fire	lakh for old,	
			extinguisher has been	replaced	
			purchased. The deletion	assets/works has	

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			of old assets has already been claimed in FY 2016-17. Gross value of old assets is Rs.267595 and WDV as Rs.112.	already been considered under 'De-capitalization' in 2016-17.	
12	Solar power plant, ongrid TYPE,3 PH, 25 KVA capacity with accessories.	78.03	The Petitioner has submitted that as per guidelines of GOI, Solar rooftop Power Plants are to be installed in the office buildings, Guest Houses and other Project arears of Central PSU's and to be connected to the Grid. Hence the Solar Power plants have been installed during the FY 2017-18.	The provisions of the 2014 Tariff Regulations do not provide for capitalisation of the additional capital expenditure claimed by the Petitioner. Moreover, such major investments should be backed by DPR, beneficiaries' consent, cost benefit analysis, etc. Accordingly, the additional capital expenditure claimed is not allowed .	0.00
13	3 numbers Thermal fogger/ defogger machine - MAKE-RALLI MODEL-RF- 02	1.82	The Petitioner has submitted that the Loktak power station falls within the rainy area and during rainy season, grasses grow very fast and different insects, snake etc. comes frequently to the working area as well as residential area. For safety of the employee and their family, it is essential to remove the insecticides periodically. Accordingly, the Thermal fogger has been purchased.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
14	3 numbers Brush Cutter & 3 numbers Lawn mover	2.54	The Petitioner has submitted that the Loktak power station falls within the rainy area and during rainy season, grasses grow very fast and different	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			insects, snake etc. comes frequently to the working area as well as residential area. For safety of the employee and their family, it is essential to remove the insecticides periodically. Accordingly, the Brush Cutter and Lawn mower have been purchased.	of O&M expense, the additional capital expenditure claimed is not allowed .	
15	28 numbers Fire extinguishers	0.45	The Petitioner has submitted that many fire extinguishers installed at different location of power stations became obsolete and needs to be replaced. Moreover, some additional locations are also identified for compliance of OHSAS and environment policy, where fire extinguishers need to be installed. Therefore, Fire extinguisher has been purchased. The deletion of old assets has already been claimed in FY 2016-17. Gross value of old assets is Rs.267595 and WDV as Rs.112.	Considering the fact that the additional capital expenditure incurred is necessary for the safety and security of the generating station, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.2.68 lakh for old, replaced assets/works has already been considered under 'De-capitalization' in 2016-17.	0.45
16	40 numbers Wheel dust bin-120L, nilkamal WB120LBLU	0.87	The Petitioner has submitted that in terms of Initiation of Prime minister "Swatch Bharat Mission Abhiyan" the 40 numbers wheeled dustbins has been purchased for cleaning the environment and remove and disposal of the garbage in systematic manner to minimise the chronic diseases to people	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed . Further, the Petitioner has not submitted any	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
17	Hospital equipment like accucheck active glucometer, pulse- oximeter, nebulizer etc.	0.69	The Petitioner has submitted that Power Station has hospital at Loktak, Leimatak, Ithai and dispensary at Jeevan Nagar, which requires various instruments for providing treatment to the patients of local vicinity as well as employee and their family members. Since there is no hospital facility near this location, all the outsiders are also dependent to these project hospitals.	documentary evidence in support of the said claim.	0.00
18	Club Building at Powerhouse Colony, Leimatak	9.76	Part amount has been capitalised for already constructed Club Building.		0.00
19	Star delta starter panel for 2 numbers Of 105hp pumps (main and standby) -automation and remote panel	3.14	The Petitioner has submitted that as per IND AS Accounting policy, spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised the new Assets were purchased during 2017-18 and the same was put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.32333 and WDV as Rs.3421.	Considering the fact that the additional capital expenditure claimed under this head is in the nature of capital spares, after the cut-off date, the same is not allowed The corresponding decapitalization on account of the same is also not allowed.	0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
20	Star delta starter panel of 25HP pumps with automation panel	1.86	The Petitioner has submitted that as per IND AS Accounting policy, spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The new Assets were purchased during 2017-18 and the same was put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.19190 and WDV as Rs.2030.		0.00
21	Star delta starter panel of 25hp pumps with automation panel	1.86	The Petitioner has submitted that as per IND AS Accounting policy, Spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The new Assets were purchased during 2016-17 and the same was put to use during 2017-18. Based on Indexation method, gross value of		0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			old assets is considered		
			as Rs.19190 and WDV		
			as Rs.2030.		
22	ACB WITH	6.37	The Petitioner has		0.00
	AMF PANEL		submitted that as per		
	FOR DG SET		IND AS Accounting		
	ACB 800A		policy, spare parts		
	415 V		procured along with		
			mother plants or		
			subsequently which		
			meet the recognition criteria are capitalised.		
			The carrying amount of		
			those spare parts that		
			are replaced is		
			derecognised when no		
			future economic benefits		
			are expected from their		
			use. Accordingly, this		
			spare is capitalised. The		
			Assets were purchased		
			during 2016-17 which		
			has been kept under		
			exclusion category at SI		
			No. 16 of Form 9D FY		
			2016-17 and put to use		
			during 2017-18. Based on Indexation method,		
			gross value of old		
			assets is considered as		
			Rs.65682 and WDV as		
			Rs.7329.		
23	3 nos.	2.48	The Petitioner has		0.00
	ANNUNCIATI		submitted that as per		
	ON WINDOW		IND AS Accounting		
	FOR UNITS		policy, Spare parts		
	PANEL,		procured along with		
	8RX8C, 64		mother plants or		
	WINDOWS,2		subsequently which		
	20V DC,		meet the recognition		
	EXTERNAL		criteria are capitalised.		
	ACK/ACCEP		The carrying amount of		
	T/RESET		those spare parts that		
	FACILITY		are replaced is		
			derecognised when no future economic benefits		
			are expected from their		
			use. Accordingly, this		
			spare is capitalised The		

SI.	Details of the	Amount	Justification submitted	Remarks on	Amount
No.	claim	claimed (Rs. in lakh)	by the Petitioner	admissibility	Allowed (Rs. in lakh)
		(NS. III IAKII)	Assets were purchased		(NS. III IAKII)
			during 2016-17 which		
			has been kept under		
			exclusion category at SI		
			No. 17 of Form 9D FY		
			2016-17 and put to use		
			during 2017-18. Based		
			on Indexation method,		
			gross value of old		
			assets is considered as		
			Rs.25596 and WDV as		
			Rs.2584.		
	8 numbers	2.95	The Petitioner has		0.00
24	ANNUNCIATI	2.00	submitted that as per		0.00
	ON WINDOW		IND AS Accounting		
	FOR		policy, spare parts		
	CONTROL		procured along with		
	DESK,		mother plants or		
	6RX4C, 24		subsequently which		
	WINDOWS,2		meet the recognition		
	20V DC,		criteria are capitalised.		
	EXTERNAL		The carrying amount of		
	ACK/ACCEP		those spare parts that		
	T/RESET		are replaced is		
	FACILITY		derecognised when no		
			future economic benefits		
			are expected from their		
			use. Accordingly, this		
			spare is capitalised. The		
			Assets has been		
			purchased during 2016-		
			17 which has been kept		
			under exclusion		
			category at Sl. No. 18 of		
			Form 9D FY 2016-17		
			and put to use during		
			2017-18. Based on		
			Indexation method,		
			gross value of old		
			assets is considered as		
			Rs.30,392 and WDV as		
			Rs.3060.		
25	2 numbers	2.57	The Petitioner has		0.00
	INDUSTRIAL		submitted that as per		
	DEWATERIN		IND AS Accounting		
	G		policy, spare parts		
	SUBMERSIB		procured along with		
	LE PUMP		mother plants or		
	4HP 3		subsequently which		

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
	PHASE		meet the recognition		
	WIRH		criteria are capitalised.		
	ACCESSORI		The carrying amount of		
	ES, MAKE:		those spare parts that		
	MODY,		are replaced is		
	MODEL: M404T		derecognised when no future economic benefits		
	1014041		are expected from their		
			use. Accordingly, this		
			spare is capitalised. Old		
			pumps purchased on		
			1.4.1978 outlived their		
			useful life and		
			accordingly, new pumps		
			have been purchased		
			during FY 2016-17, FY		
			2016-17 and the same		
			was put to use during 2017-18. Based on		
			Indexation method,		
			gross value of old		
			assets is considered as		
			Rs.13252 and WDV as		
			Rs1466.		
26	Spares of	33.74	The Petitioner has		0.00
	Digital		submitted that as per		
	Governing		IND AS Accounting		
	Systems		policy, Spare parts		
			procured along with		
			mother plants or subsequently which		
			meet the recognition		
			criteria are capitalised.		
			The carrying amount of		
			those spare parts that		
			are replaced is		
			derecognised when no		
			future economic benefits		
			are expected from their		
			use. Accordingly, this		
			spare is capitalised. The new Assets were		
			purchased during 2010-		
			11 and the same was		
			put to use during 2017-		
			18. Based on Indexation		
			method, gross value of		
			old assets is considered		
			as Rs.550535 and WDV		

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			as Rs.56648.		
	Total amount claimed	354.70			
	Total amount allowed				94.87

21. Based on the above, the total additional expenditure of Rs.125.38 lakh {Rs.30.51lakh +Rs.94.87 lakh} in 2017-18 is allowed.

2018-19

22. The details of the actual additional capital expenditure claimed by the Petitioner in 2018-19 under the various provisions of Regulation 14(3) of the 2014 Tariff Regulations are examined below:

(Rs. in lakh)

SI. No.		Regulation				
		I a a maria de la companya della companya della companya de la companya della com				
(a)	14(3)(i)	Liabilities to meet award of arbitration or for compliance of	26.28			
		the order or decree of a court of law.				
(b)	14(3)(iii)	Expenses incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Govt. Agencies of statutory authorities responsible for national/ internal security	81.67			
(C)	14(3)(viii)	Additional works/expenditure which has become necessary	225.14			
		for efficient and successful operation of plant				
	Total additional capital expenditure claimed					

(a) Additional Capital Expenditure claimed under Regulation 14(3)(I)

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
New	Items				
1	TUNNEL- Custom duty deposited to the departments against claim for imported tunnel equipment.	26.28	The Petitioner has submitted that custom department has raised the demand vide 537C(G)Proj 55/81A dated 17.5.2002 amounting of Rs.26,28,088 against NHPC. The equipment	Considering the fact that the additional capital expenditure claimed is on account of payment of Custom duty towards the imported tunnel equipment for the	26.28



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			of folding shutters and combination type transit cars was imported from a firm of Italy for Power house at Loktak during 1981-82. The payment was made on 09.10.2018 to the Custom Department, Kolkata.	power house, we allow the claim under Regulation 14(3)(iii) of the 2014 Tariff Regulations being compliance with the existing law.	
	Total amount claimed	26.28			
	Total amount al	llowed			26.28

(b) Additional Capital Expenditure claimed under Regulation 14(3)(iii)

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)		
New	New Items						
1	Providing and fixing of RBT concertina coil fencing along boundary wall at Loktak	41.04	The Petitioner has submitted that due to bad law and order in Manipur and for security reasons it is necessary to have fencing of the boundary wall at Loktak. This was not envisaged earlier during the filing of Tariff Petition.	Considering the fact that the assets/ works are necessary for the safety and security of the generating station and is in terms of the recommendations of the Central Security agency, the additional capital expenditure claimed is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.	41.04		
2	Providing of Footpath/ Patrolling track at left side of penstock area between RD 150.0M to RD 950.0M	40.63	The Petitioner has submitted The Penstock is very vulnerable structure and required regular patrolling by security personnel along with fencing. Since there is no foot tracking/ patrolling track on left side for convenience for checking the area by the security staff as well as	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00		

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
			maintenance staff. Due to bad law and order situation at Loktak, it is very essential to have regular patrolling in this area. Hence the work has been done.		
	Total amount claimed	81.67			
	Total amount	allowed			41.04

(a) Additional Capital Expenditure claimed under Regulation 14(3)(viii)

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
New	Items				
1	Permanent Electrical Store cum office building at Loktak and Electrification work of the building.	92.12	The Petitioner has submitted that the older buildings presently in use in the project were constructed in 1978-80 and are temporary in nature. The buildings constructed had no RCC foundation. The super structure was supported on wooden pillars. The walls were made up of Bamboo stick net having mud plaster on both sides. The roofing is of GI sheets supported on wooden structures with false ceiling. As per CPWD norms theses type of buildings are considered as Temporary in nature. The present building has already outlived their useful life and more than 35 years old. Some of the structures are very dilapidated condition and are not	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			safe to live. Accordingly, the new building construction cost incurred for Rs.103.07 lakhs and Electrification cost of Rs.3.35 lakhs.		
2	Motorised rolling shutter for 7000 MM X 6000 MM gate	10.37	The Petitioner has submitted that Loktak Machine Hall of power House is situated at EL-463.45 meter and various components like Generator Top Section including Excitation system, governor system, Turbine OPU system etc. are installed at Machine floor. Earlier there was an opening of 6000 X 7000 mm and no gate/shutter was installed at the entrance gate of powerhouse. Due to non-availability of any gate / shutter, rainwater entered in the machine floors especially in monsoon season. This rainwater may damage the various electric components at machine floors. Hence, the work has been carried out.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00
3	2 numbers Oil filtration /transfer unit (38LPM, filter	1.61	The Petitioner submitted that there was only one Oil transfer unit with small capacity of 10		0.00
4	rating 20micron micro-glass III WITH ELECTRIC MOTOR)	1.61	LPM and rating of 3.0 kW, 3-phase was installed at power house for transfer of turbine oil from barrels to GBOC Tank, Turbine OPU Tank, Valve OPU Tank and vice versa. Due to non-availability of higher capacity of oil transfer unit with filter, major		0.00

SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			maintenance works got delayed and sometimes creates a hasty situation. Accordingly, new oil transfer unit has been purchased.		
5	Pump with Starter 30 numbers	9.37	The Petitioner has submitted that there were very old pumps	Considering the fact that the additional capital expenditure	9.37
6	Horizontal centrifugal pump with motor (CI/ BRONZE /STEEL) + 75 KW / 4P- 5 numbers	17.91	and motors installed at Different locations of generating station and slide zones of Leimatak. These pumps were creating problem during day-to-day operations. Hence the new pumps	incurred is necessary for the safety and security of the generating station, the claim is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.92 lakh for old, replaced assets/works has	17.91
7	Pump set of Kirloskar submersible and Electrical mono-black 19 numbers	8.29	with starter have been purchased. Gross value of old assets is Rs.92039 and WDV as Rs16.		8.29
8	Pump with motor 45 KW/60 HP MODEL NO. DSM100/36 - 6 numbers	15.06		already been considered under 'De-capitalization' in 2016-17.	15.06
9	Providing of water supply line of GI pipe 25mm dia. for lamdan CRPF camp at Leimatak.	4.70	The Petitioner has submitted that due to bad law & order situation in Loktak Leimatak area, CRPF camp at Lamdan has been established. The water supply line is temporary connected from mountaineering camp and during dry season, water is not sufficient for the security personal. Accordingly, the new water supply line has been Constructed.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00



SI. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
10	Sewage treatment plant 20 KLD CAPACITY - 2 numbers for Loktak & Leimatak Colony	59.98	The Petitioner has submitted that the ministry of Power has instructed for the safe disposal of the sewage in every power station premises by setting up of sewage treatment Plants (STP) at Loktak colony and Leimatak Colony. Due to installation of STP, it has become easy to reuse the wastewater after treatment and also reducing the health hazards for the employees.		0.00
11	Different capacity Fire extinguishers - 35 numbers	3.88	The Petitioner has submitted that as per the guidelines of safety department and as per prevailing standard, the external safety audit held in past, the auditor has recommended to put additional portable fire extinguishers at various location as the earlier capacity is lesser to safeguard any mishappening. Gross value of old assets is Rs.267595 and WDV as Rs.112.	Considering the fact that the additional capital expenditure incurred is necessary for the safety and security of the generating station, the claim is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.2.68 lakh for old replaced assets/works has already been considered under 'De-capitalization' in 2016-17.	3.88
12	CCTV Camera at HOP residence and Guest Hosue	0.25	Power Station finds that the existing cameras installed at the office campus are not sufficient to monitor/cover the entire area around the HOP office. These cameras cover the main entrance gate only and leaving the open area in front of	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is not allowed .	0.00

SI. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
		(Rs. in lakh)			(Rs. in lakh)
			HOP office as well as		
			corridor of Admin Office.		
			There is regular		
			movement of outsiders/		
			locals for official		
			meeting to HOP office		
			and other division at		
			Admin Office.		
			Considering the law and		
			order situation in Loktak		
			Power Station, Manipur,		
			two nos. of CCTV		
			cameras are installed		
			for safety and security of		
			HOP office.		
	Total	225.14			
	amount				
	claimed				
	Total amount a	llowed			54.50

21. Based on the above, the total additional capital expenditure of Rs.121.83 lakh {Rs.26.28 lakh + Rs.41.04 lakh + Rs.54.50 lakh} is allowed in 2018-19.

Discharge of liabilities

23. The Petitioner has claimed the following discharge of liabilities:

		(Rs. in lakh)			
2014-15	2015-16	2016-17	2017-18	2018-19	
0.00	4.21	55.45	16.42	12.04	

24. The Petitioner has furnished the reconciliation of liabilities along with the balance sheet in the present petition. Accordingly, on prudence check, and as discussed under the head of additional capital expenditure for assets / works which are allowed, the liabilities against these assets/ items are allowed as discharge of liabilities. For those assets which are not allowed, the corresponding discharge of liabilities are not allowed. Further, there is reversal of liability on account of laying of OFC cable for Rs. 3.49 lakh which has been considered. Accordingly, the discharge of liabilities is allowed as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
0.00	0.00	50.38	7.24	10.33

25. The summary of un-discharged liabilities, corresponding to the admitted capital cost, is as under:

(Rs. in lakh)

					, , ,
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening un-discharged	0.00	0.00	50.38	11.65	14.56
liabilities (A)					
Liabilities corresponding to	0.00	50.38	11.65	10.15	6.87
additional capital expenditure					
allowed during the year (B)					
Discharges of liabilities during	0.00	0.00	50.38	7.24	10.33
the year (C)					
Reversal of liabilities during the	0.00	0.00	0.00	0.00	3.49
year (D)					
Closing un-discharged	0.00	50.38	11.65	14.56	7.61
liabilities (A+B-C-D)					

De-capitalization

26. The Petitioner has claimed de-capitalization of amounts (as per Form 9Bi) as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
De-capitalization	24.84	17.83	63.28	11.65	0.00
Assumed Deletion	79.06	44.69	19.39	49.81	0.00

27. The Petitioner has claimed de-capitalization under two heads viz., the decapitalization approved by the Commission and considered under 'assumed deletion' at the time of determining the tariff and the other as 'de-capitalization'. The de-capitalization claimed by the Petitioner has been dealt with in the relevant paragraphs relating to the additional capital expenditure claims, which have been considered and allowed for the respective years of the 2014-19 tariff period in terms of the provisions of Regulation 14(3) of the 2014 Tariff Regulations. Further, the decapitalization of assets against which capitalization are not allowed have not been considered. Accordingly, the de-capitalization in case of asset like Guide Vane lower ring assembly and 132 kV Current Transformer amounting to Rs.6.05 lakh during

2016-17 and in case of 02 numbers Generator bearing oil cooler, 02 numbers120 kV, 10 kA, class-iii, metal oxide lightning arrester and 132 kV Current Transformer amounting to Rs.16.40 lakh in 2016-17 and spare amounting to Rs.7.69 lakh in 2017-18 has not been considered for the purpose of tariff and the same is shown as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
De-capitalization claimed by the Petitioner	24.84	17.83	63.28	11.65	0.00
De-capitalization allowed	24.84	11.79	46.88	3.96	0.00

Assumed Deletions

- 28. As per consistent methodology adopted by the Commission, the expenditure on replacement of assets, if found justified, is allowed for the purpose of tariff, provided that the capitalization of the said asset is followed by de-capitalization of the original value of the old asset. However, in certain cases where de-capitalization is affected in books during the following years, to the year of capitalization of new asset, the de-capitalization of the old asset for the purpose of tariff is shifted to the very same year in which the capitalization of the new asset is allowed. Such decapitalization which is not a book entry in the year of capitalization is termed as "Assumed deletion". Further, in the 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.
- 29. It is observed that the Petitioner has claimed the asset/work such as fire extinguishers, Air Circuit breaker, Current Transformer, Potential Transformer, etc., on replacement basis. However, the Petitioner in this petition has provided the decapitalization value of the old asset/works which have been replaced which seems to be on lower side for some assets. Also, the assumed deletions for some assets have already been approved by the Commission vide its order dated 18.9.2015 in Petition

No. 228/GT/2014, the same has been considered by the Petitioner in the instant Petition and the same is considered for the purpose of tariff. However, if the assumed deletion amount calculated by Commission's consistent methodology is more than the claim of the Petitioner the same i.e. calculated by the Commission (being on higher side) is considered for the purpose of the tariff. Accordingly, based on above methodology, the assumed deletion considered for these assets/works is as under:

(Rs. in lakh)

	Assets/Works	Additions claimed for new assets/works	Assumed for old asset	or
		assets/works	Claimed	Allowed
2014	-15			
1	Lift for Powerhouse	30.16	1.59	1.59
2	Construction of one Semi permanent type-I Building having 04 numbers of quarters at Surge Shaft	59.22	3.35	3.35
3	Construction of Permanent type–II Double storied building 04 blocks having 04 quarters in each block at Loktak.	256.68	3.90	3.90
4	Replacement of LT distribution lines by underground LT Cabling at Loktak Colony	20.73	6.09	6.09
5	Replacement of 11KV line from leimatak to Loktak	69.76	38.61	38.61
6	Construction of five numbers new morcha at Ithai Barrage	12.33	1.03	1.03
7	Construction of cook house cum Kitchen for CRPF.	23.59	0.65	0.65
8	Construction of 06 Barracks for CRPF.	64.99	5.04	5.04
9	Siemens Make, Sentron Series 3WL,Air Circuit Breaker (02 numbers)	5.08	0.58	1.12
10	Air Circuit Breaker 630 Amp, 440 Volt (03 numbers)	3.69	0.42	0.81
11	2X10 KVA Online UPS System	8.60	0.00	0.00
12	CO2 Type Fire Extinguisher complete with all necessary Fittings	6.15	1.09	1.36
13	HP PROLIANT DL380E G8 SERVER- INTEL XEON E5-2407,8GB RAM,1.2TB SAS HDD,DVD RW, KEYBOARD, MOUSE,18.5TFT (04 numbers)	8.53	1.38	1.88
14	Handheld VHF device – MOTOROLA GP328 (03 numbers)	0.35	0.56	0.56
15	CVT, 132KV,4400PF (04 numbers)	13.72	1.55	3.02
16	CURRENT TRANSFORMER 132 KV, CTR 300-200/1; CLASS 5P10; BURDEN 30VA	1.10	0.12	0.24

	Assets/Works	Additions claimed for	Assumed fo	
		new assets/works	old asset	
		0.00010,1101110	Claimed	Allowed
17	132 KV/ 63.5 VOLT POTENTIAL	16.19	1.83	3.57
	TRANSFORMER (PT) (SINGLE PHASE)			
	(06 numbers)			
18	BEACON MAKE PUMP MODEL 10LA4	26.08	2.95	5.75
	BARE SHAFT PUMP FOR COOLING			
	WATER SYSTEM OF PH			
19	Generator Bearing Oil Cooler (GBOC),	-	7.96	7.96
	66C.392.368 (02 numbers)*			
	Total			86.52
2015		4= 00		
1	Replacement of LT distribution lines by	17.02	6.09	6.09
	underground LT Cabling at Powerhouse			
2	Colony.	17 EE	6 05	6.05
3	Replacement of EPABX System. Construction of Boundary Wall for CRPF	17.55 29.75	6.85 0.44	6.85 0.44
3	Camp at Valve House	29.75	0.44	0.44
4	Supply & Installation of HSD Tank &	11.38	1.14	2.39
4	Dispensing Unit at Loktak	11.30	1.14	2.39
	PS(PO10214/213)			
5	CO2 Type Fire Extinguisher Complete with	2.96	0.48	0.62
	all necessary fittings (29 numbers)		0.10	0.02
6	HANDHELD VHF DEVICE – MOTOROLA	1.82	1.11	1.11
	GP328 (11 numbers)			
7	UPGRADATION OF LAN AT LOKTAK	41.73	18.92	18.92
8	EXECUTIVE FIELD HOSTEL AT LOKTAK	180.90	5.95	37.96
	(16 Quarters)			
9	NUMERICAL GENERATOR	9.31	1.00	1.95
	PROTECTION RELAY, ABB REG 670			
10	220V DC,500AH LEAD ACID BATTERY	14.53	2.41	3.05
	BANK WITH ALL ACCESSORIES			
11	220V DC, FLOAT/FLOAT CUM BOOST	5.69		1.19
	CHARGER, THREE PHASE 415V AC,			
12	RATING 50/80 AMP SUBMERSIBLE PUMP 02 HP. MAKE-	0.00	0.29	0.29
12	MODI (02 numbers)	0.00	0.29	0.29
	Total			80.87
2016				00.07
1	Bullet Proof Scorpio (1 number)	56.59	8.38	8.38
2	Construction of 05 barracks for CRPF	69.44	6.46	6.46
3	11 KV VCB Panel for DPH, Loktak	4.48	0.62	0.90
4	Construction of 1 number Watch Tower	7.11	3.94	3.94
	near Main Gate of Transport Yard,			
	Total			19.67
2017	′-18			
1	Purchase of 02 numbers of Minibus	40.42	14.93	14.93
	against replacement			
2	OFC link between Loktak & Leimatak	24.76	17.85	17.85
	Total			32.78



*The Petitioner has not submitted any additional capital expenditure for the asset during 2014-15, however the Petitioner has de-capitalized an amount of Rs 7.96 in 2014-15. Accordingly, the decapitalization has been considered.

Exclusions

30. The following exclusions have been claimed by the Petitioner:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Exclusions in Addition	152.70	175.02	235.16	159.16	113.82
Exclusions in Deletions	12.94	0.00	42.28	11.31	14.93

Exclusions in Additions (capitalized in books but not to be considered for tariff purpose)

31. The Petitioner has submitted that the expenditure as stated in the table above is incurred on procurement/replacement of minor assets 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, by including the positive entries arising due to Inter-head adjustments. As such, the exclusion of such positive entries is allowed and has no impact on tariff. Hence, the same is in order and allowed.

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

32. The Petitioner has de-capitalized the following amounts in books of accounts and has kept the same under exclusion for the purpose of tariff:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Minor Assets de-capitalised	(-)12.94	0.00	(-)38.01	(-)11.31	0.00
Minor assets (Inter Unit Transfer) de-capitalized	0.00	0.00	(-)4.27	0.00	0.00
Tata Bus – de-capitalized	0.00	0.00	0.00	0.00	(-)14.93
Total	(-)12.94	0.00	(-)42.28	(-)11.31	(-)14.93

33. It is noticed that the above exclusion in deletions are for minor assets decapitalized, minor assets transferred out, and de-capitalization of bus. The minor assets and their inter unit transfer are not considered as capital assets and are not permitted to be capitalised after the cut-off date. Accordingly, exclusion in deletions

for minor assets/ inter unit transfer of minor assets are allowed to be excluded from deletions and are not considered for tariff purpose. As regards the exclusion claimed for Tata bus during 2018-19, it is noticed that this item has been already considered under Assumed Deletions during 2017-18. Accordingly, exclusion for same during 2018-19 is allowed. Based on above, the following exclusion in deletions are allowed and not reduced from capital cost for the purpose of tariff.

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Exclusions in Deletions allowed	(-)12.94	0.00	(-)42.28	(-)11.31	(-)14.93
(to be considered in deletion)					

Net Additional Capital Expenditure allowed

34. In view of above, the net additional capital expenditure allowed for the 2014-19 tariff period is as under:

(Rs. in lakh)

				(113.11	14111/
	2014-15	2015-16	2016-17	2017-18	2018-19
Additions allowed during the year (a)	765.96	450.66	268.70	125.38	121.83
Discharge of liabilities (b)	0.00	0.00	50.38	7.24	10.33
Deletions considered during the year (c)	111.36	92.66	66.55	36.74	0.00
Exclusions in Deletions not allowed (to be considered in deletion)	0.00	0.00	0.00	0.00	0.00
Net additional capital expenditure allowed (c)=(a)+(b)-(c)-(d)	654.60	358.00	252.52	95.88	132.16

Capital cost allowed for 2014-19 tariff period

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

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	16880.31	17534.91	17892.91	18145.43	18241.31
Net additional capital expenditure allowed	654.60	358.00	252.52	95.88	132.16
Closing Capital Cost	17534.91	17892.91	18145.43	18241.31	18373.47

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. The debt: equity ratio, prior to 1.4.2009, was considered in the ratio of 53.06:46.94 and the debt equity ratio after 1.4.2009, was considered as 70:30 in terms of Regulation 19 of the 2014 Tariff Regulations for the purpose of additional capitalization. The details of the debt: equity ratio considered is as under:

Asset	As on 1.4	1.2014	Additi Capitali during 2	zation	De-capita during 2		As on 31	1.3.2019
	Amount	%	Amount	%	Amount	%	Amount	%

Debt	9410.67	55.75	1260.33	70.00	163.06	53.06	10507.94	57.19
Equity	7469.64	44.25	540.14	30.00	144.25	46.94	7865.53	42.81
Total	16880.31	100.00	1800.47	100.00	307.31	100.00	18373.47	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 underrecovery 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. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to the beneficiaries, as the case may be, on an year to year basis. Accordingly, the grossing up of base rate has been done with the actual MAT rate of the respective financial year. In terms of Regulation 24 and Regulation 25 of the 2014 Tariff Regulations, Return on Equity, has been computed as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	7469.64	7647.16	7738.86	7803.34	7825.88
Addition due to Additional capitalization (b)	229.79	135.20	80.61	37.61	36.55
Addition due to discharge of liability (c)	0.00	0.00	15.11	2.17	3.10
De-capitalization (d)	11.66	5.53	22.01	1.86	0.00
Assumed Deletion (e)	40.61	37.96	9.23	15.38	0.00
Closing Equity $(f)=[(a)+(b)+(c)-(d)-(e)]$	7647.16	7738.86	7803.34	7825.88	7865.53
Average Equity (g)=[(a+f)/2]	7558.40	7693.01	7771.10	7814.61	7845.71
Base Rate (%) (h)	16.500	16.500	16.500	16.500	16.500
Effective Tax rate (%) (i)	20.961	21.342	21.342	21.342	21.549
Effective ROE rate (%) (j)	20.876	20.977	20.977	20.977	21.032
Return on Equity (k)=[(g)*(j)]	1577.89	1613.76	1630.14	1639.27	1650.11

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 normative loan for the project has already been repaid. The normative loan on account of the admitted additional capital expenditure, during the respective years of the tariff period has 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 2014-19 tariff period 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) alongwith 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 1.6.1983. Since the project has completed 12 years of commercial operation as on 1.6.1995, the remaining depreciable value has been spread over the balance useful life of the project in 2014-19 tariff period. Accordingly, depreciation has been computed without considering the admitted additional capital expenditure and is allowed as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (a)	16880.31	16880.31	16880.31	16880.31	16880.31
Closing Capital Cost(b)	16880.31	16880.31	16880.31	16880.31	16880.31
Average Capital Cost (c)=[(a+b)/2]	16880.31	16880.31	16880.31	16880.31	16880.31
Land Value (d)	39.89	39.89	39.89	39.89	39.89
Depreciable value(e)=[(c-d)*0.9]	15156.38	15156.38	15156.38	15156.38	15156.38
Balance life (f)	4.17	3.17	2.17	1.17	0.17
Cumulative depreciation at the	11377.63	12199.21	13061.68	13967.34	14953.78
beginning (g)					
Remaining Depreciable value	3778.75	2957.17	2094.70	1189.04	202.60
(h)=[(e)-(g)]					
Depreciation during the period	906.90	933.84	966.78	1019.18	202.60
(i)=[(h)/(f)]					
Cumulative depreciation(j)=[(g)+(i)]	12284.53	13133.05	14028.46	14986.51	15156.38
Less: Adjustment on account of de-	85.32	71.37	61.13	32.73	0.00
capitalisation (k)					
Net Cumulative Depreciation	12199.21	13061.68	13967.34	14953.78	15156.38
(l)=[(j)-(k)]					

45. In respect of admitted additional capital expenditure for the 2014-19 tariff period as above, depreciation is allowed as shown below:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (a)	0.00	654.60	1012.60	1265.12	1361.00
Admitted additional capital	654.60	358.00	252.52	95.88	132.16

	2014-15	2015-16	2016-17	2017-18	2018-19
expenditure (b)					
Closing Capital Cost (c)=[(a)+(b)]	654.60	1012.60	1265.12	1361.00	1493.16
Average Capital Cost (d)=[(a+c)/2]	327.30	833.60	1138.86	1313.06	1427.08
Land Value (e)	0.00	0.00	0.00	0.00	0.00
Depreciable value (f)=[(d-e)*0.9]	294.57	750.24	1024.97	1181.76	1284.37
Balance life (g)	25.00	24.00	23.00	22.00	21.00
Cumulative depreciation beginning	0.00	11.78	42.55	85.27	135.11
(h)					
Remaining Depreciable Value	294.57	738.46	982.42	1096.49	1149.27
(i)=[(f)-(h)]					
Depreciation during the period	11.78	30.77	42.71	49.84	54.73
(j)=[(i)/(g)]					
Cumulative depreciation (k)=[(h)+(j)]	11.78	42.55	85.27	135.11	189.83
Less: Adjustment on account of de-	0.00	0.00	0.00	0.00	0.00
capitalisation (I)					
Net Cumulative Depreciation	11.78	42.55	85.27	135.11	189.83
(m)=[(k)-(l)]					
Total Depreciation (capital cost +	918.68	964.61	1009.50	1069.02	257.32
additional capital expenditure)					

Operation & Maintenance Expenses

46. Regulation 29 (3) (a) of the 2014 Tariff Regulations, provides the O&M expenses for this generating station as under:

"29(3)(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 1.4.2014:

(Rs. in Lakh)

Loktak	2014-15	2015-16	2016-17	2017-18	2018-19
LUNIAN	9673.64	10316.36	11001.78	11732.74	12512.26

47. Since the Petitioner has claimed O&M expenses in accordance with Regulation 29(3)(a) of the 2014 Tariff Regulations, the aforesaid claim of the Petitioner is allowed.

Additional O&M Expenses

Impact of Goods and Service Tax

48. The Petitioner has also claimed reimbursement of the additional tax paid due to implementation of GST in respect of generating station, as additional O&M expenses and for this purpose, has requested for relaxation of the provisions of Regulation 29(3) of the 2014 Tariff Regulations, under Regulation 54 (power to relax)

and Regulation 55 (removal of difficulty) 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. 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 2014-19 tariff period. 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 31.12.2018)	(1.1.2019 to 31.3.2019)			
393665	1760793	(-)1902536	251922		

49. It is observed that the Commission while specifying the O&M expense norms for the 2014-19 tariff period had considered taxes to form part of the O&M expense calculations and, accordingly, had factored the same in the said norms. This is evident from paragraph 49.6 of the SOR (Statement of Objects and Reasons) to the 2014 Tariff Regulations, which is extracted hereunder:

"49.6 With regards to suggestion received on other taxes to be allowed, the Commission while approving the norms of O&M expenses has considered the taxes as part of O&M expenses while working out the norms and therefore the same has already been factored in..."

50. Further, the escalation rates considered in the O&M expense norms under the 2014 Tariff Regulations, is only after accounting for the variations during the past five years of the 2014-19 tariff period, which in our view, takes care of any variation in taxes also. It is pertinent to mention that in case of reduction of taxes or duties, no reimbursement is ordered. In this background, we find no reason to allow the prayer for grant of additional O&M expenses towards payment of GST.

Interest on Working Capital

- 51. Sub-clause (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 Hydroelectric 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 inregulation 29; and
 - (iii) Operation and maintenance expenses for one month."

Working Capital for Receivables

52. Working Capital for Receivables equivalent to two months of capacity charges has been worked as under:

			(Rs.	in lakh)
2014-15	2015-16	2016-17	2017-18	2018-19
2127.01	2254.00	2384.99	2525.25	2525.80

Working Capital for Maintenance Spares

53. Working capital for Maintenance spares @ 15% of O&M expenses are worked out and allowed as under:

			(1	Rs. in lakh)
2014-15	2015-16	2016-17	2017-18	2018-19
1451.05	1547.45	1650.27	1759.91	1876.84

Working Capital for O&M Expenses

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

			(1	Rs. in lakh)
2014-15	2015-16	2016-17	2017-18	2018-19
806.14	859.70	916.82	977.73	1042.69

55. 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."
- 56. In terms of the Regulation 28(1)(c) of the 2014 Tariff Regulations, the interest on working capital is worked out as under:

(Rs. in lakh)

(Nor III lakily			101111		
	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for					
Maintenance Spares	1451.05	1547.45	1650.27	1759.91	1876.84
(15% of O&M expenses)					
Working Capital for O&M	806.14	859.70	916.82	977.73	1042.69
expenses (one month of					
O&M expenses)					
Working Capital for	2127.01	2254.00	2384.99	2525.25	2525.80
Receivables (2 months					
of annual fixed cost)					
Total Working Capital	4384.20	4661.15	4952.07	5262.89	5445.33
Rate of interest on	13.500%	13.500%	13.500%	13.500%	13.500%
working capital (%)					
Interest on Working	591.87	629.26	668.53	710.49	735.12
Capital					

Annual Fixed Charges

57. Based on the above, the annual fixed charges approved for the generating station for the 2014-19 tariff period is summarized as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	918.68	964.61	1009.50	1069.02	257.32
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	1577.89	1613.76	1630.14	1639.27	1650.11
O&M Expenses	9673.64	10316.36	11001.78	11732.74	12512.26
Interest on WC	591.87	629.26	668.53	710.49	735.12
Total	12762.08	13523.99	14309.95	15151.52	15154.81

Normative Annual Plant Availability Factor (NAPAF)

58. The Petitioner has claimed NAPAF of 85% in terms of Regulation 37(4) of 2014 Tariff Regulations. The same has been considered for the generating station for the 2014-19 tariff period.

Design Energy

59. The Commission in its order dated 14.6.2011 in Petition No.108/2010 had approved the annual Design Energy (DE) of 448 Million Units for the period 2009-14 in respect of this generating station. However, it is noticed that the Design Energy for the generating station has been revised to 562.73 MUs vide order dated 24.7.2019 in Petition No. 248/MP/2018, subject to model study post R&M as suggested by CEA, in its report dated 24.11.2016. For this reason, the DE of 448 MUs has been considered for this generating station for the 2014-19 tariff period, and the month wise details is shown as under:

Month	Design Energy (MUs)
April	30
May	31
June	30
July	52
August	52
September	50
October	52
November	30
December	31
January	31
February	28
March	31
Total	448

- 60. The 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 2014 Tariff Regulations.
- 61. Petition No.296/GT/2020 is disposed of in terms of the above.

Sd/ Sd/ Sd/
(Pravas Kumar Singh) (I.S. Jha) (P.K.Pujari)
Member Member Chairperson