

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 146/GT/2020

Coram:

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

Date of Order: 9th May, 2022

IN THE MATTER OF

Petition for revision of tariff for the 2014-19 tariff period and determination of tariff for the 2019-24 tariff period in respect of Dulhasti Power Station (390 MW).

AND

IN THE MATTER OF

NHPC Limited
(A Govt. of India Enterprise)
NHPC Office Complex, Sector-33,
Faridabad (Haryana) - 121003.

....Petitioner

Vs

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



6. Power Development Department,
New Secretariat,
Jammu -180 001 (J&K).
7. Uttar Pradesh Power Corporation Limited,
Shakti Bhavan, 14, Ashok Marg,
Lucknow - 226 001 (Uttar Pradesh).
8. Ajmer Vidyut Vitaran Nigam Limited,
Old Powerhouse, Hatthi Bhatta, Jaipur Road,
Ajmer - 305 001 (Rajasthan).
9. Jaipur Vidyut Vitaran Nigam Limited,
Vidyut Bhawan, Janpath,
Jaipur - 302 005.
10. Jodhpur Vidyut Vitaran Nigam Limited,
New Powerhouse, Industrial Area,
Jodhpur - 342 003 (Rajasthan).
11. Uttaranchal Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun – 248 001 (Uttarakhand).
12. Engineering Department,
1st Floor, UT Secretariat, Sector 9-D,
Chandigarh – 160 009.

....Respondents

Parties Present:

Shri Rajiv Shankar Dwivedi, Advocate, NHPC
Shri M.G. Gokhale, NHPC
Shri Piyush Kumar, NHPC
Shri Raunak Jain, Advocate, TPDDL
Shri Manish Garg, UPPCL
Shri Vikram Singh, UPPCL
Shri R.B. Sharma, Advocate, BRPL
Ms. Megha Bajpeyi, BRPL
Shri Mohit Mudgal, Advocate, BYPL
Shri Sachin Dubey, Advocate, BYPL

ORDER

The Petitioner, NHPC Limited has filed this petition for truing-up of tariff of Dulhasti Power Station (390 MW) (hereinafter referred to as “the generating station”) for the 2014-19 tariff period in terms of Regulation 8 of the Central Electricity



Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (in short “the 2014 Tariff Regulations”) and for determination of tariff of the generating station for the 2019-24 tariff period, in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”).

Background

2. The generating station with a total capacity of 390 MW comprises of three units of 130 MW each. All the three units of the generating station were declared under commercial on 7.4.2007. Petition No. 231/GT/2014 was filed by the Petitioner for truing up of tariff of the generating station for the 2009-14 tariff period and for determination of tariff of the generating station for the 2014-19 tariff period. Accordingly, the capital cost and the annual fixed charges determined for the generating station for the 2014-19 tariff period vide Commission’s order dated 30.08.2016 is as under:

Capital Cost allowed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	515959.43	520125.59	520585.33	521719.95	521899.95
Admitted additional capitalization	4166.16	459.74	1134.62	180.00	673.50
Closing Capital Cost	520125.59	520585.33	521719.95	521899.95	522573.45

Annual Fixed Charges allowed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	41474.07	41474.07	41474.07	41474.07	41474.07
Interest on Loan	10700.04	8830.36	6794.34	4547.81	2189.49
Depreciation	26888.47	27008.52	27049.90	27084.02	27106.17
Interest on Working Capital	2579.28	2589.46	2597.36	2603.82	2611.24
O&M Expenses	13746.97	14660.32	15634.36	16673.10	17780.86
Total	95388.84	94562.74	93550.03	92382.82	91161.83



Present Petition

3. In terms of Regulation 8 of the 2014 Tariff Regulations, the Petitioner has filed the present petition for truing-up of tariff, based on the actual additional capital expenditure incurred for the 2014-19 tariff period. The capital cost and annual fixed charges claimed by the Petitioner in the present petition are as under:

Capital Cost claimed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	515959.43	520435.33	521021.20	522665.93	523516.88
Add: Additional during the year	714.39	818.61	1,611.19	698.22	211.35
Less: De-capitalisation during the year	56.34	242.75	1.52	16.87	2.99
Less: Reversal during the year	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year	3817.86	10.01	35.06	169.60	31.47
Closing capital cost	520435.33	521021.20	522665.93	523516.88	523756.71
Average capital cost	518197.38	520728.27	521843.57	523091.40	523636.79

Annual Fixed Charges claimed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	26889.00	27015.31	27070.79	27124.46	27347.61
Interest on Loan	10706.52	8854.21	6843.03	4634.99	2259.68
Return on Equity	41897.24	41998.56	41666.78	41968.08	42161.95
Interest on Working Capital	2589.18	2602.24	2603.40	2618.12	2634.24
O&M Expenses	13746.97	14660.32	15634.36	16673.10	17780.86
Total	95828.91	95130.63	93818.35	93018.76	92184.35

4. The matter was heard on 17.3.2021 and the Commission vide Record of Proceedings directed the Petitioner to file certain additional information. Reply to the Petition has been filed by the Respondent UPPCL, Respondent BRPL and Respondent TPDDL vide affidavits dated 1.4.2021, 3.5.2021 and 9.9.2020 respectively. The Petitioner has filed its rejoinder to the said replies vide affidavits dated 19.4.2021, 24.5.2021 and 26.5.2021 respectively. The Petitioner has also filed the additional information in compliance to the directions of the Commission vide its affidavit dated 21.6.2021. Thereafter, the Petition was heard on 27.7.2021 through



virtual conferencing and the Commission reserved its order in the petition. Based on the submissions and the documents available on record, we proceed for truing-up the tariff of the generating station for the 2014-19 tariff period as stated in the subsequent paragraphs.

Capital Cost

5. 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.”*

6. Clause (1) of Regulation 9 of the 2014 Tariff Regulations provides that the capital cost as determined by the Commission, after prudence check, in accordance with the regulation, shall form the basis of determination of tariff for existing and new projects.

7. The Petitioner has submitted that the Commission vide its order dated 30.5.2011 in Petition No. 60/2010 had allowed additional capital expenditure on account of protection works during the 2009-14 tariff period, on projection basis. It has, however, submitted that these expenditures were capitalized during the years 2012-13 and 2013-14 and were claimed in Petition No. 231/GT/2014 (related to truing up of tariff for the 2009-14 tariff period), as under:

<i>(Rs. in lakh)</i>		
Additional Capital Expenditure	Year of Capitalization	Actual expenditure claimed
Treatment of sinking zone at Dam and of approach road leading to Dam Hill slope stabilization at both bank of Dam (Protection of left bank (downstream) of Dul Dam by way of providing concrete abutment near T-	2012-13	186.72



Additional Capital Expenditure	Year of Capitalization	Actual expenditure claimed
402.		
Treatment of sinking zone at Dam and approach road leading to Dam	2013-14	6.98
Treatment of sinking zone at Tamuruchi, Dul	2013-14	12.95
Hill slope stabilization at both bank of Dam. (Construction of retaining wall for stabilization of hill slope near vent shaft.)	2013-14	4.84

8. The Petitioner has submitted that the Commission vide its order dated 30.8.2016 in Petition No. 231/GT/2014 had not considered the expenditure claimed, but has granted liberty to the Petitioner as under:

“.....However, we are of the considered view that these works are of recurring nature and the expenses towards these works shall be met from O&M expenses allowed to the generating station. Accordingly, the actual additional capital expenditure claimed is not allowed. However, in case the petitioner is not able to meet the expenses from the admissible O&M expenses, it is at liberty to approach the Commission with proper justification at the time of truing-up of tariff.”

9. The Petitioner has submitted that the above works/expenditure are of a capital nature and they have been incurred for the first time. The Petitioner has also submitted that as per accounting principle, if any work/expenditure of capital nature is incurred for the first time, the same has to be booked under capital head in the books of accounts. Also, during the life of these works, if any repair/service is required, the same will be booked under O&M expenses. The Petitioner has submitted that as the expenditure has been capitalized under ‘capital head’ in the books of accounts during the years 2012-13 and 2013-14, it may not be possible to claim these expenditure under O&M expenses. Accordingly, the Petitioner has requested to allow the above expenditure for Rs.186.72 lakh in 2012-13 and Rs.24.77 lakh in 2013-14 as additional capital expenditure. The Petitioner has pointed out that as the capital cost as on 31.3.2014 has been firmed up, the impact



of these additional capital expenditure may be allowed in the opening capital cost as on 1.4.2014 for the 2014-19 tariff period.

10. The Respondents have submitted that the Commission vide its order dated 30.8.2016 in Petition No. 231/GT/2014 had taken a considered view that additional capitalization of such expenditure is to be met from normative O&M expenses and there is no scope for any upward revision of the capital cost as on 1.4.2014.

11. The matter has been considered. It is evident from Commission's order dated 30.8.2016 in Petition No.231/GT/2014 that the additional capitalization incurred by the Petitioner on account of treatment of sinking zone and hill slope stabilization was not allowed on the ground that the same is of recurring nature and is required to be met from the O&M expenses allowed to the generating station. In the said order, liberty was granted to the Petitioner to claim the said expenditure at the time of truing up of tariff, only to the extent that the Petitioner was not able to meet the same from the O&M expenses allowed to the generating station. The Petitioner has submitted that as per accounting principle, if any work/expenditure of capital nature is incurred for the first time, the same has to be booked under capital head of books of accounts and since these expenditures had already been capitalized under capital head in books of accounts during the years 2012-13 and 2013-14, it was not possible to claim these expenditure under O&M expenses. It is evident from the submissions, that the Petitioner has not been able to justify/establish with reasons, as to why it could not meet the additional expenditure from the normative O&M expenses allowed to the generating station during the said period. In view of this, the additional expenditure claimed by the Petitioner is not allowed.



12. The Commission vide its order dated 30.8.2016 in Petition No. 231/GT/2014, had allowed the opening capital cost of Rs.515959.43 lakh as on 1.4.2014 (based on the same closing capital cost allowed as on 31.3.2014 in order dated 30.8.2016 in Petition No. 231/GT/2014). Accordingly, in terms of Regulation 9(3) of the 2014 Tariff Regulations, the capital cost of Rs.515959.43 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 of the generating station for the 2014-19 tariff period.

Additional Capital Expenditure

13. 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 undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;

(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal/lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become



necessary for successful and efficient plant operation;

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolescence 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 Modernization (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation.”

14. The projected additional capital expenditure allowed for the 2014-19 tariff period in order dated 30.8.2016 in Petition No. 231/GT/2014 and the actual additional capital expenditure claimed by the Petitioner, in this petition, are as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Projected additional capital expenditure allowed in order dated 30.8.2016 in Petition No. 231/GT/2014	4166.16	459.74	1134.62	180.00	673.50
Actual additional capital expenditure claimed	4475.90	585.87	1644.73	850.94	239.83

15. The Petitioner has submitted that there are certain capital expenditure, which were not projected earlier, but had been incurred by the Petitioner due to site specific requirements for successful and efficient operation of the generating station and the same is required to be included as part of the capital base for the purpose of tariff.



The additional capital expenditure claimed by the Petitioner, duly supported by Auditor's Certificate, for the 2014-19 tariff period, is as follows:

(Rs. in lakh)

Sl. No.	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Additions being claimed for tariff purpose					
i	Capitalization claimed against admitted items					
	Claimed under Regulation 14(3)(iii)	57.75	102.96	0.00	0.00	0.00
	Claimed under Regulation 14(3)(viii)	314.22	446.63	895.47	518.34	0.00
ii	Capitalization claimed against new items					
	Claimed under Regulation 14(3)(viii)	342.42	269.03	715.72	179.88	211.35
	Sub-total (A)	714.39	818.61	1611.19	698.22	211.35
B	Deletion					
i	Assumed deletions allowed in earlier orders	46.47	240.64	0.00	0.00	0.00
ii	Decapitalization	9.87	2.11	1.52	16.87	2.99
	Sub-total (B)	56.34	242.75	1.52	16.87	2.99
C	Discharge of undischarged Liabilities (C)	3817.86	10.01	35.06	169.60	31.47
D	Reversal of undischarged Liabilities (D)	0.00	0.00	0.00	0.00	0.00
E	Net additions claimed (E)=(A-B+C-D)	4475.90	585.87	1644.73	850.94	239.83
2	Additional capitalization not to be claimed					
i	Exclusions	484.36	842.19	786.35	180.32	1810.80
ii	FERV	0.00	0.00	0.00	0.00	0.00
iii	Inter unit transfers	0.00	0.00	0.00	0.00	0.00
	Total 2 (i+ii+iii)	484.36	842.19	786.35	180.32	1810.80
3	Deletions					
i	Exclusions	396.51	197.30	375.33	183.12	41.03
ii	FERV	0.00	0.00	0.00	0.00	0.00
iii	Inter unit transfers	0.79	1.72	0.15	0.00	0.00
	Total 3 (i+ii+iii)	397.30	199.02	375.48	183.12	41.03

16. The Respondent UPPCL and Respondent TPDDL vide their reply affidavits dated 9.9.2020 and 3.5.2021 respectively have submitted that in respect of additional capital expenditure incurred on replacement of assets, the petitioner has failed to furnish the necessary documents to substantiate its claim, like test results carried out by an independent agency in case of deterioration of the assets. The Respondents have further submitted that the requirement of documentary evidence like test results etc., carried out by an independent agency, is necessary, in case of



major assets, which have deteriorated prior to the expiry of useful life and sought to be replaced. The Respondents have further submitted that in spite of a specific direction of the Commission, the Petitioner has failed to furnish such documents to substantiate its claim. Accordingly, these Respondents have prayed that all additional capitalization claimed by the Petitioner on this count, may be rejected. The Respondent BRPL has submitted that the claim for additional capitalization under Regulation 14(3)(viii) of the 2014 Tariff Regulations can only be justified if such a claim is on account of damage caused by natural calamity or due to geographical reasons and is due to additional work necessary for successful and efficient operation of the generating station.

17. In response, the Petitioner has submitted that it has provided the Committee report / OEM certificate for items for which recommendations has been obtained before replacement. The Petitioner has also submitted that Respondent BRPL has misinterpreted Regulation 14(3)(viii) of the 2014 Tariff Regulations by trying to link the expenditure incurred due to additional work necessary for successful and efficient plant operation only on account of damages caused by natural calamities or due to geological reasons. The Petitioner has submitted that in terms of this regulation, the additional capital expenditure which has become necessary for successful and efficient operation of the plant has not been restricted to the expenditure incurred only on account of damage caused by natural calamities.

18. The matter has been considered. In our view, Regulation 14(3)(viii) of the 2014 Tariff Regulations provides for additional capitalization of expenditure which has become necessary on account of damage caused by natural calamities and due to any additional work which has become necessary for successful and efficient plant



operation. Accordingly, based on the reconciliation, the year-wise admissibility of the additional capital expenditure under various heads is discussed in the subsequent paragraphs.

Additional Capital Expenditure for 2014-15

19. The additional capital expenditure claimed by the Petitioner for 2014-15, on cash basis, are as under:

Head	Amount
Items already allowed (a)	371.97
Items additionally claimed as per actual site requirements (b)	342.42
Sub-total (c)=(a)+(b)	714.39
Discharge of liabilities (d)	3817.86
Total (c)+(d)	4532.24

(a) Items already allowed

20. The Petitioner has claimed additional capitalization of Rs.371.97 lakh in 2014-15, out of which Rs.314.22 lakh is in respect of works such as Treatment plant for drinking water and distribution system in Semna and Shalimar, Skid steer loader (45-50HP) with snow blower attachment, Fire tender-4KL, Ambulance (fully equipped), Drainage and dewatering pumps, Purchase of HP compressors, Purchase of Dry type Distribution Transformer, HV/LV panel and cables, Installation of CCTV system under Regulation 14(3)(viii) of the 2014 Tariff Regulations and Rs.57.75 lakh is in respect of works such as Construction of accommodation & Security post/pucca morcha for CISF at Chenab Nagar, Shalimar & Hasti and Construction of permanent boundary wall of Semna colony claimed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.

21. It is noticed that the additional capital expenditure claimed for above assets/works were allowed by the Commission, on projection basis, during 2014-15 vide



order dated 30.8.2016 in Petition No. 231/GT/2014. Keeping in view the submissions of the Petitioner and on prudence check, we allow the claim for additional capitation of these assets under Regulation 14(3)(iii) and Regulation 14(3)(viii) of the 2014 Tariff Regulations.

(b) Items additionally claimed as per site requirement

Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
1	Treatment of sinking by providing wire crates and retaining wall at different location at dul dam.	42.75	The expenditure was not allowed by the Commission during 2014-15 vide Order dated 30.8.2016 in Petition No. 231/GT/2014 with the following remarks "As the projected expenditure is recurring in nature, the same expenditure shall be met from the O&M expenses allowed to the generating station". Detailed studies were carried out by Geological department for finding out the remedial measures/ methodologies for treatment of the sinking zone and They had advised to carry out the protection works from time to time depending upon subsidence as and when required, Total expenditure of Rs. 314.04 Lakh has been made since 2010 on this work.	In our view, the additional capital expenditure incurred by the Petitioner does not directly relate to the operation of the generating station and are in the nature of O&M expenses. Also, these claims were dealt with and disallowed by the Commission in order dated 30.8.2016 in Petition No. 231/GT/2014. Further, the Petitioner has not also furnished any documentary evidence to substantiate its claim despite the specific directions of the Commission. Hence, the additional capital expenditure claimed is not allowed .	0.00
2	Construction of bituminous black top road in sinking zone at dul dam	31.55	Further, it is to certify that the said expenditures related to treatment of Sinking zone have not been covered under O&M expenses as the same were huge expenses incurred due to major damages in the Dam access road.		0.00
3	Development of muck disposal site by providing fencing and water supply line for plantation at hasti.	21.77	To protect the disposal site, protection work is essential. The muck disposed form the generating station should not flow in the river or other lower areas. Therefore, from environment point of view, protection wall has been constructed which does not allow the muck along with rainwater to flow in the river as well as any erosion. This		0.00
4	Reclamation of muck in u/s of old HRT Adit at hasti	56.81			0.00



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			has strengthened the area. The Petitioner further requested the Commission to allow the same. Further, the petitioner has certified that Expenditure claimed during 2014-15 for assets/work of "development of muck disposal site by providing fencing and water supply for plantation at Hasti and reclamation of muck in old HRT Adit at Hasti" were one time job and these are not done on the recurring basis.		
5	Construction of Central Store building (RCC) at powerhouse.	23.43	The Petitioner submitted that Dulhasti Power station is underground power station. Due to insufficient space within power house, the store building was built outside power house to store power house consumables and tools & tackles, small equipment's like pumps motors, required during annual maintenance and routine maintenance and day to day maintenance etc. Further, the spares are required to be kept in the vicinity of power house which shall lead in minimising the outage of generating units in case of breakdown. This enhances the machine availability to provide full capacity and generate optimally for the benefits of the beneficiaries/grid.	Considering the fact that this asset/work will facilitate the successful and efficient operation of plant, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	23.43
6	Construction of industrial shed for workshop at shalimar.	34.99	A workshop shed having all modern facilities was constructed at Shalimar to attend the repair and maintenance work of all departmental vehicles i.e. Gypsys, TATA sumos, Car, Buses, Trucks, Tippers etc and construction equipment's like JCB's, Dozers, Loaders, snow cutter's etc. The existing Workshop building was found inadequate to cater to present requirements since this workshop is looking after the repair and maintenance	Considering the fact that this asset/work will facilitate the successful and efficient operation of plant, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	34.99



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			needs of Powerhouse and Dam complex also. All these facilities such as vehicles, Equipment's or DG sets have been installed for facilitating the staff engaged in power generation work. These are essential facilities required for efficient working of the staff. Hence, essential for uninterrupted power generation. Efficient workshop and centralized power supply source are value addition to the system.		
7	Construction of Industrial shed building (tabular steel) for DG set at 132 kV substation at Dulhasti Power Station.	24.86	During the outage of power at DPS, DG sets located at Hasti were used to supply power to necessary locations of the Power Station. This station is located at remote location and staff are posted in shift duty for operation of the DG sets. We also have 132 KV Substation in the colony of the power station (Central location) where staff are posted in shift duty. As manpower is decreasing due to superannuation, it was planned to shift the DG sets to a central location which is accessible easily. Accordingly an industrial shed was constructed to house the DG set in the premises of 132 KV substation and shift duty at Hasti Substation has been closed. The facility has been provided for proper housing of the DG sets for its safe operation, which are essential for feeding to power house in case of any emergency/blackout condition as a backup measure.	Since the expenditure claimed is in the nature of O&M expenses (shifting of place of existing asset), the same is not allowed .	0.00
8	Construction of first floor of additional block of Kendriya Vidhyalaya at Dulhasti Power Station (DPS).	24.60	Kendriya Vidhyalaya (KV) of Dulhasti Power station caters to the children of DPS / CISF employees, as well as the local population. To accommodate the increasing strength of students an additional block (ground floor) was constructed in	Since the expenditure claimed is in the nature of O&M expenses and does not directly relate to the operation of the plant, the claim of the Petitioner is not allowed .	0.00



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			2012-13. The KV administration demanded class rooms at first floor over the existing block for starting a new concept i.e. smart classroom. Hence a smart classroom, a modern way of education in which learning is done by way of audio-visual and sound effects with multimedia equipment has been constructed. The KV building is asset of NHPC and KV school administration was demanding class rooms at first floor as stated earlier reply. Since, the buildings were Asset of NHPC hence cannot be covered in CSR as per the then guidelines regarding CSR expenditure.		
10	Land scaping at silt flushing outlet area at dul dam site, DPS Kishtwar.	23.34	This work was essential to protect the Silt Flushing outlet area at Dul dam site. If this work was not taken up, the discharge of silt flushing tunnel may spread to other surrounding private area which will lead to land erosion and loss of Public property. This will further lead to unnecessary payment of compensation to the landowners. Further, it is clarified that the expenditure is one time in nature.	The additional capital expenditure claimed by the Petitioner does not directly relate to the operation of the generating station and is in the nature of O&M expenses. The claim was dealt with and disallowed by the Commission in its order dated 30.8.2016 in Petition No. 231/GT/2014. Further, the Petitioner has not furnished any documentary evidence to substantiate its claim, despite the specific directions from the Commission. Hence, the additional capital expenditure claimed is not allowed .	0.00
11	Providing laying and compacting subbase and wearing coarse at surge escape gallery road, hasti	7.51	The access road to surge escape gallery was not metalled and it was always very inconvenient to travel on this road. As such this work was taken up to provide smooth access to the surge escape gallery. This shall facilitate in proper upkeep & monitoring of Power Station installation.	Since the expenditure incurred is in the nature of O&M expenses and does not directly relate to the operation of the plant, the claim of the Petitioner is not allowed	0.00
12	Software Modification-Implement-RGMO	44.04	This is a statutory requirement of CERC/ Grid code required for stabilization of the Grid by the generators. The software	Considering the fact that this asset/work was implemented in accordance with the provisions of IEGC and will facilitate the	44.04



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			of the governing system of the Units was modified to incorporate the RGMO facility. RGMO was implemented in accordance with the provisions of IEGC. It helps the grid in stability and better frequency control.	successful and efficient operation of plant, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	
13	Battery bank, 110 V, 60AH, each cell 2V, 60 AH with rack and accessories.	2.23	The battery bank has been installed at Dam site of Dulhasti, to provide DC Voltage to control system panels for the purpose of protection and monitoring of the system battery bank. DC supply from a Battery Bank is used for feeding power to the protection system of the electrical panels which are used for control and monitoring of various Gates equipment's etc installed for operation and regulation of the Dam reservoir. Healthiness of the DC supply is essential for proper functioning of the complete electrical system at Dam. Faulty protection system may cause huge loss to the components of the Dam. Hence, the investment is beneficial for the beneficiaries. The initially installed battery bank has completed its life and hence replaced. The Petitioner has claimed de-capitalization of the Battery bank for Rs. 1 as 'Assumed deletions.	The Petitioner has claimed additional capital expenditure of Rs. 2.23 lakh along with de-capitalization in 2014-15 for this asset under Regulation 14(3)(viii) of the 2014 Tariff Regulations. In justification of the same, the petitioner has submitted that additional capital expenditure has been claimed due to replacement of outlived battery bank. In our view, the efficient operation of the plant would be adversely affected due to old equipment outliving the useful life and in the event of its failure. Therefore, the additional capital expenditure claimed is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.1.59 lakh for old, replaced assets/ works has been considered as 'Assumed deletions' in this order.'	2.23
14	ECG machine 12 channel EKG, ECG 7120	0.85	Hospital equipment's required for life support and maintenance of good health of Employees. ECG machine is used to detect heart diseases in initial stages. Considering the present change in lifestyle, it is an essential equipment for checking the heart conditions of employees and thus keeping them healthy which will in turn lead to uninterrupted and efficient power generation. The ECG machine was purchased under replacement and the replacement cost was Rs	Since the additional capital expenditure incurred does not directly relate to the operation of the plant, the claim of the Petitioner is not allowed . The corresponding de-capitalization is also not allowed.	0.00
15	Oxygen concentrator (02 Nos.)	0.52			0.00
16	Nebulizer	0.52			0.00



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			0.832 lakh claimed as assumed deletion. Further, Oxygen Concentrator is a life saving device which helps a patient requiring oxygen as is seen in various lung diseases. In far flung areas where there is no option of getting oxygen cylinders, these are the only hope for such patients. Also Nebuliser is used in those patients who have lung diseases and it helps them to breathe effortlessly.		
17	SFP Module 1310 NM, 1000 Base, 40 KM Full Duplex, Tekroutes make (06 nos)	0.87	As per the recommendation of IB in 2012, it has been suggested that "CISF control room and all sentry posts should be connected with EPAX Line". This has been enhancing security vigilance around the periphery. The existing system has been upgraded with new VOIP technology which facilitated to perform project work in a better and efficient way and further this will enhance the communication which will increase the productivity. This will impact indirect benefit to the beneficiaries. These equipment's were installed in the Power Station to establish a secure and reliable communication link between Main Office and CISF Security Posts at Shalimar, where Mechanical Workshop and Stores of the Power Station are situated, for security reasons as previously no other communication link was available between Shalimar and Main office. To facilitate day to day office works/ repair and maintenance works at Shalimar site. Communication is also essential for the safety and security requirements of the area. Installation of VOIP Gateway has facilitated in achieving the required objective and accordingly it saved time and helped to	The Petitioner has claimed additional capital expenditure for these assets in a phased manner i.e. Rs. 2.63 lakh in 2014-16 and Rs. 1.68 lakh in 2016-17. The Petitioner has furnished the recommendations of IB as documentary evidence in support of its claim. In view of this, the claim of the Petitioner is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations	0.87
18	SFP module 1310 NM, 1000 Base, 20 km full duplex, Tekroutes make (08 nos)	0.58		0.58	
19	VOIP 16 PORT FXS	0.54		0.54	
20	VOIP 16 PORT FXO	0.64		0.64	



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			perform project work in a better and efficient way. The total amount of Rs 4.31 lakh was incurred for the said purchase and amount of Rs 2.63 lakh has been claimed in 2014-15 and balance amount of Rs 1.68 lakh claimed in 2016-17.		
	Total amount claimed	342.42			
	Total amount allowed				107.33

22. Based on the above, the total additional capital expenditure of Rs. 479.29 lakh {Rs.371.97lakh + Rs.107.33 lakh} in 2014-15 is allowed.

Additional Capital Expenditure for 2015-16

23. The additional capital expenditure claimed by the Petitioner for 2015-16, on cash basis, are as under:

Head	Amount
Items already allowed (a)	549.59
Items additionally claimed as per actual site requirements (b)	269.03
Sub-total (c)=(a)+(b)	818.61
Discharge of liabilities (d)	10.01
Total (c)+(d)	828.62

(a) Items already allowed

24. The Petitioner has claimed additional capitalization of Rs.549.59 lakh in 2015-16 out of which Rs.446.63 lakh is in respect of items/ works such as Purchase of Surge arrester for 400 KV GIS, Purchase of drainage and dewatering pumps, Purchase of HP compressors, Construction of mess and store for CISF 'A' Company at shalimar DPS, Providing & Installation of RO water treatment plant at Shalimar colony, Installation of RO plant building RCC water storage tank at Shalimar and Installation of CCTV system under Regulation 14(3)(viii) and Rs.102.96 lakh in respect of items /works such as, Construction of permanent boundary wall of Semna



and Shalimar colony and Construction of accommodation & security post/pucca morcha for CISF at Chenab Nagar, Shalimar and Hasti claimed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.

25. It is noticed that the additional capital expenditure claimed for above assets/works were allowed by the Commission on projection basis vide order dated 30.8.2016 in Petition No. 231/GT/2014. Keeping in view the submissions of the Petitioner and since the same were allowed vide order dated 30.8.2016, the claim of the Petitioner is allowed under this head.

(b) Items additionally claimed as per site requirement

Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
1	Treatment of Sinking zone at Dam and regarding of approach road leading to Dam	76.53	The expenditure on account of treatment of sinking zone is not allowed by the Commission during 2015-16. An amount of Rs.1000 lakhs was approved by the Commission for 2009-14 for treatment of sinking zone. Detailed studies do not reveal any clear-cut methodologies for treatment & it is advised to take corrective measure from time to time depending upon subsidence. Till March 2014 an amount of Rs.475.00 lakh had been capitalized. The area remains prone to sinking and further treatment during next five years would be required. Expenditure of Rs.85.54 lakh have been incurred during the period based on the representations received from local dwellers of the area through concerned revenue department of the state government. Since, the expenditure is of capital nature the Commission may approve the same. Total expenditure of Rs. 314.04 Lakh has been made since 2010 on this work, details has been enclosed. Further, it is to certify that the said expenditures related to treatment of Sinking zone have not been covered under O&M expenses as the same were huge expenses incurred due to major damages in the Dam access road.	In our view, the additional capital expenditure incurred does not directly relate to the operation of the generating station and is in the nature of O&M expenses. Also, the claim was dealt with and disallowed by the Commission in order dated 30.8.2016 in Petition No. 231/GT/2014. Further, the Petitioner has not furnished any documentary evidence to substantiate its claim, despite the specific directions of the Commission. Hence, the additional capital expenditure is not allowed .	0.00



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
2	Construction of first floor of Central store building at PH.	16.69	During annual maintenance of Powerhouse machines, a lot of employees including executives as well as outsourced manpower work inside the powerhouse round the clock for repair and maintenance purpose of machinery and other parts. During this period employees have to stay at night in Powerhouse. No suitable accommodation was available in powerhouse for this purpose. Therefore, this building was constructed on the first floor of the central store located near the entrance of Powerhouse. The facility has resulted in better coordination and ensuring availability of manpower during critical times in early restoration of machines during outages / complete maintenance works of machines optimally. This enhances the machine availability to provide full capacity and generate optimally for the benefits of the beneficiaries/grid.	As regards the construction of Central Store building, we are of the view that these asset/works will facilitate the successful and efficient operation of plant. Hence, the claim is allowed .	16.69
3	Draft Tube Stoplog	91.30	As per guidelines of CEA, Ref. No. CEA/TETD /MP/R/01/2010 dated 20.8.2010 clause No. 39 (8) a dedicated stoplog gate for each unit is required. There is one unit available in power station and one gate has been purchased during the 2015-16. Another one gate (3rd) will be purchased in next tariff period 2019-24. "Provision of individual hoisting mechanism for draft tube gates of each unit may be considered for quick closing. The draft tube gates shall be capable of closing under unbalanced condition of water pressure."	As regards draft Tube Stoplog, we notice that the said asset/works is based on the recommendations / guidelines of CEA and will facilitate the successful and efficient operation of plant. Hence, the claim is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	91.30
4	Control panel of feeders with VCB (11 kV), various meters and with E/F & O/C protections	10.51	Purchase of material for replacement of old and unserviceable VCB 11 KV panel. Purchase of material for replacement of old and unserviceable VCB 11 KV panel. Healthiness of the VCB 11 KV panel is essential for proper functioning of the complete electrical system at Dam. Faulty VCB 11 KV panel may cause huge loss to the components of the Electrical System. Hence, the investment is beneficial for the beneficiaries.	Considering the fact that these assets/works will facilitate the successful and efficient operation of plant, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. However, in the absence of de-capitalization of the above assets, we have considered the de-capitalization value of Rs. 7.11 lakh as 'Assumed deletion' in this order.	10.51



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
5	Remote unit for GPS based Time Synchronization with Distant view display (02 nos.)	0.79	The Petitioner has submitted that in line with minutes of 11 th Protection Sub-Committee meeting dated 23 rd April 2010, in order to carry out the post analysis all recording equipment at generating station must be time synchronised using GPS. Hence a new GPS system along with display unit was purchased with advanced features like IRGI-B and SNTP protocol. An amount of Rs. 0.79 Lakh has been capitalized in 2015-16 and amount of Rs 0.58 lakh has been capitalized 2016-17. The Petitioner has submitted the copy of minutes of 11 th Protect Sub Committee for reference.	As the expenditure incurred is on account of replacement of non-functioning assets with new asset and is considered necessary for efficient and successful operation of the plant, the claim of the Petitioner is allowed . However, in the absence of de-capitalization of the above assets, we have considered the de-capitalization value of Rs. 0.53 lakh as 'Assumed deletion' in this order.	0.79
6	Centre rotating type isolator of 33 kV, 400 A capacity with earth switch	1.86	The Petitioner has submitted that these electrical equipment's were purchased for shifting of 33/11 kV Sub Station at Hasti to 132/33 kV Sub Station Chenab Nagar. Hasti substation was constructed in 1985 and its equipment's had become old and obsolete and were not functioning properly. Therefore, new equipment were purchased for smooth operation of Power Supply system. The shifting of 33/11 kV Sub Station Hasti to 132/33 KV Sub Station Chenab Nagar Semna has also helped in optimum utilization of manpower as the round the clock shift duty at Hasti substation has been closed now. An amount of Rs. 27.02 lakh has been capitalized during 2015-16. The substation provides the power supply to Powerhouse and colony of chenab nagar.	As the expenditure incurred is on account of replacement of assets due to obsolescence and is considered necessary for efficient and successful operation of the plant and hence the same is allowed . However, in the absence of amount of de-capitalization of the above assets, the Commission has considered the de-capitalization value of Rs. 18.29 lakh as 'Assumed deletion' in this order.	1.86
7	Indoor type 33kVC&R panel 800A, 3Ph out type 33kV VCBMot. Spring CH., ABB.	5.59	The earlier installed electrical equipment had become obsolete and have rendered their useful life. Moreover, due to obsolescence, there is non-availability of spares. Substation has to be maintained in efficient manner so as to ensure uninterrupted power supply to powerhouse.		5.59
8	HTVCBPanel-2 inc. & 2 out. 11 kV, 1250 A, 50 Hz indoor type, ABB,	19.57			19.57
10	Motorola VHF handheld synthesised transceiver with GM338 Radio, Model GP-338 (80 nos.)	14.54	The Petitioner has submitted that the capitalization of this asset is based on the requirement of CISF for wireless communication system at DPS Kishtwar demanded by CISF vide letter no. PR 15022/CISF/DHEP/Misc/Mgt./QM/12-2868, dated 25.7.2012 and PR 15022/CISF/DHEP/Misc/Mgt./QM/13-	As the expenditure incurred by the Petitioner is based on CISF letter dated 10.6.2013, for providing the wireless equipment's like walkie talkie or Motorola VHF handheld synthesised trans receiver, the same	14.54



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			1550, dated 10.06.2013.	is allowed .	
11	Accelerograph system along with all accessories including building.	29.32	An accelerograph can be referred to as a strong-motion instrument or seismograph, or simply an earthquake accelerometer. They are usually constructed as a self-contained box, which previously included a paper or film recorder (an analogue instrument) but now they often record directly on digital media and then the data is transmitted via the Internet. The system has been installed at Dam site to collect / monitor the real time online data of seismic activities of Dam area. These accelerographs collect/ monitor the real time online data of the seismic activities near Dam area and transmits the data to Geo-Physics department control room at NHPC Corporate office for its analysis and study by the experts for providing remedial measures if any for the Dam Safety. For Dam safety it is essential to study the effect of the earthquakes on Dam and other vital installations.	Since the additional capital expenditure incurred is on account of need for higher security and safety of the generating station, the same is allowed .	29.32
12	Door Frame and Metal Detector (DFMD) (02 nos.)	2.33	The Petitioner based on IB recommendation to strengthen the security system of power station, purchased new metal frame detector.	Since the expenditure incurred by the Petitioner is based on the recommendations of IB, the same is allowed	2.33
	Total amount claimed	269.03			
	Total amount allowed				192.49

26. Based on the above, the total additional capital expenditure of Rs.742.08 lakh {Rs.549.59 lakh + Rs.192.49 lakh} in 2015-16 is allowed.

Additional Capital Expenditure for 2016-17

27. The additional capital expenditure claimed by the Petitioner for 2016-17, on cash basis, are as under:

Head	Amount
Item already allowed (a)	895.47
Items additionally claimed as per actual site requirements (b)	715.72
Sub-total (c)=(a)+(b)	1611.19
Discharge of liabilities (d)	35.06
Total (c)+(d)	1646.25



(a) Items already allowed

28. The Petitioner has claimed additional capitalization of Rs.895.47 lakh in 2016-17 in respect of items/works such as Wheel dozer of 300 HP class, Construction of sewerage treatment plant at Semna & Shalimar colony, Construction of Treatment plant for drinking water and distribution system in Semna and Shalimar, Purchase of TRT gate in single piece with dedicated hoist, Installation of CCTV system, Construction of mess and store for CISF 'A' Company at Shalimar DPS and Purchase of Dry type Distribution Transformer, HV/LV panel and cables under Regulations 14(3)(viii).

29. It is noticed that the additional capital expenditure claimed for above assets/works were allowed by the Commission on projection basis vide order dated 30.8.2016 in Petition No. 231/GT/2014. Keeping in view the submissions of the Petitioner and since the same was allowed vide order dated 30.8.2016, the claim of the Petitioner is allowed under this head.

(b) Items additionally claimed as per site requirement

Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
1	Treatment of sinking zone of dul dam	110.64	The expenditure is not allowed by the Commission during 2014-15 vide Order dated 30.8.2016 in Petition No. 231/GT/2014 with the following remarks "As the projected expenditure is recurring in nature, the same expenditure shall be met from the O&M expenses allowed to the generating station". Detailed studies were carried out by Geological department for finding out the remedial measures/ methodologies for treatment of the sinking zone and They have advised to carry out the protection works from time to time depending upon subsidence as and	The additional capital expenditure incurred by the Petitioner does not directly relate to the operation of the generating station and is in the nature of O&M expenses. Also, the claim was dealt with and disallowed by the Commission in order dated 30.8.2016 in Petition No. 231/GT/2014. Further, the Petitioner has not furnished any documentary evidence to substantiate its claim despite the specific directions of the Commission. Hence, the additional capital expenditure is not allowed .	0.00



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			when required, Total expenditure of Rs. 314.04 Lakh has been made since 2010 on this work. Further, it is to certify that the said expenditures related to treatment of Sinking zone have not been covered under O&M expenses as the same were huge expenses incurred due to major damages in the Dam access road.		
2	Construction of toilet block for CISF personnel behind new line barrack at DPS	6.37	The Petitioner has submitted that earlier, the CISF personnel residing behind new line Barrack were using the toilets of the adjoining Barrack as no toilet was available for their barrack. As the toilets are basic and essential need therefore, new toilets were constructed for providing healthy and hygienic environment to the CISF personnel. This will improve the efficiency of the security system hence beneficial to the beneficiaries.	Since the expenditure incurred by the Petitioner is in the nature of O&M expenses and does not directly relate to the operation of the plant, the claim of the Petitioner are not allowed.	0.00
3	Construction & raising of permanent boundary wall in semna among outer periphery of KV school	20.22	Due to low height of the boundary wall unwanted people used to enter the school campus and cause nuisance. CISF has also observed it as a security threat for the power station. By enhancing the height of the boundary wall the security threat was mitigated thus increasing the efficiency of the system hence, beneficial to the beneficiaries.		0.00
4	Construction of Permanent Boundary Wall along Shalimar nallah side shalimar DPS Kishtwar	41.59	These works are taken up as and when requirement of CISF is received based on the security survey. Barbed wire fencing at several locations have been planned to be replaced with permanent boundary wall based on the requirement of CISF and security survey. These works are large in volume hence planned to be taken up in phase manner.		0.00
5	Construction & raising boundary wall in Semna & DSB colony	10.76	The Petitioner submitted that Dulhasti Power station is underground power station. Due to insufficient space		0.00

