

**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 trueing-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 | 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. | | 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 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---------|--|----------------|---|---|----------------|
| | | | within power house, the store building was built at 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. | | |
| 6 | 11/400 kV Generator step up transformer, 48.33 MVA | 505.23 | <p>The case for procurement of the extra spare 11/400 KV GSU transformer was initiated on the basis of the following points,</p> <p>i) In October 2012, B phase transformer of Unit no 3 tripped on Bucholz protection and the same was replaced with the available spare transformer. The spare transformer was sent to M/s BHEL, Jhansi for repair of the faulty transformer and M/s BHEL had given six months time for the repairing of the same.</p> <p>ii) Also during this period rising trend in the DGA of the three number transformers (B phase of Unit# 1 , Y phase of Unit # 2 and Y phase of Unit # 3 were observed and the possibility of failure of the GSU transformer was high and due to non availability of the healthy spare transformer huge generation loss was anticipated if any of the transformer failed during monsoon season. Keeping in view of the above mentioned facts one number additional transformer was purchased to meet out any eventuality due to sudden failure of the GSU transformer.</p> <p>iii) The lead time of repair of</p> | The additional capital expenditure incurred by the Petitioner is in the nature of capital spares. Also, no capital spares are allowed to be capitalized after the cut-off date. Hence, the additional expenditure claimed is not allowed . | 0.00 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---------|---|----------------|---|--|----------------|
| | | | 11/400 KV GSU transformer is around six months and the same needs to be transported from the manufacturer site to the Dulhasti Power station and this also takes time due to weight of the material and the terrain of the Dulhasti Power station. The faulty transformer was repaired from the M/s BHEL and the same was installed in Unit no 1, R phase to avail the Warranty of the repaired GSU Transformer and Two number Transformers are kept at Transformer cavern as Healthy spare to meet out any eventuality due to failure of any transformer. Moreover, since PLF of Dulhasti power station is more than 65%, it is advantageous to have 2 nos. spare transformers so that generation / capacity loss is minimal during exigencies. Due to availability of additional transformer the chances of power loss has reduced a lot. | | |
| 7 | Remote Unit for GPS based Time Synchronization with distant view display (02 nos) | 0.58 | 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 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 11th Protect Sub Committee for reference. | As the expenditure incurred is on account of replacement of non-functioning assets with new assets and is considered necessary for efficient and successful operation of the plant, the same is allowed . However, in the absence of de-capitalization amount of the above assets, we have considered the de-capitalization value of Rs. 0.37 lakh as 'Assumed deletion' in this order. | 0.58 |
| 8 | VOIP GATEWAY WITH 16 and 08 PORT FXS | 1.68 | 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 | It is noticed that 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 | 1.68 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---------|--|----------------|--|--|----------------|
| | | | 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 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. | 2016-17. The Petitioner has also 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. | |
| 10 | Biometric Machine (20 no's) – supply, installation & commissioning | 18.65 | Biometric attendance System has been installed in the Power Station in compliance to Order No. 64/2014, dated 21.11.2014 to monitor the attendance of all employees through Biometric Attendance System. | Since the expenditure has been approved vide its order dated 21.11.2014 in Petition No. 64/2014, the same is allowed . | 18.65 |
| | Total amount claimed | 715.72 | | | |
| | Total amount allowed | | | | 20.91 |



30. Based on the above, the total additional capital expenditure of Rs.916.38 lakh {Rs.895.47 lakh + Rs.20.91 lakh} in 2016-17 is allowed.

Additional Capital Expenditure for 2017-18

31. The additional capital expenditure claimed by the Petitioner for 2017-18, on cash basis, are as under:

| Head | Amount |
|--|---------------|
| Item already allowed (a) | 518.34 |
| Items additionally claimed as per actual site requirements (b) | 179.88 |
| Sub-total (c)=(a)+(b) | 698.22 |
| Discharge of liabilities (d) | 169.60 |
| Total (c)+(d) | 867.82 |

(a) Items already allowed

32. The Petitioner has claimed additional capitalization of Rs.518.34 lakh in 2017-18 in respect of works such as Construction of permanent boundary wall of Semna and Shalimar colony, Construction of accommodation and Security post/pucca morcha for CISF at Chenab Nagar, Shalimar and Hasti, Construction of sewerage treatment plant for Shalimar colony and Hill slope stabilization work at dam site under Regulation 14(3)(viii).

33. It is noticed that the additional capital expenditure claimed for above assets/works were allowed on projection basis vide order dated 30.8.2016 in Petition No. 231/GT/2014, except for Hill slope stabilization at Dam site. The Commission vide its order dated 30.8.2016 had disallowed the additional expenditure on account of 'Hill slope stabilization at dam site' stating that these works are of recurring in nature and the expenses towards these works shall be met from O&M expenses allowed to the generating station. Therefore, the total additional capitalization of Rs.120.54 lakh as



claimed above (except the claim for Hill slope stabilization) are allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations as claimed by the Petitioner.

(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 | Electric operated siren, horizontal double mounting, 3-ph, 50 Hz 7.5 hp, range-11 km, Kheraj (HDT-1100) | 3.47 | As per Dam operation and safety norms before release of water from the Dam, it is essential to alert the public residing in the downstream area of the Dam for avoiding any untoward incident, which may lead to payment of unnecessary compensations. Siren is essential media for alerting the public. Earlier Public announcement were used to be made for alerting the people in Downstream area but this Siren system is better as it can be operated remotely from Dam control room. It is submitted that in recent incidence of Larji Power Station, Kullu, HP, where 24 Engineering Students were flown/killed due to sudden flow of dam water in the river Beas. So avoid such incidence, sirens may be a good alerting mechanism. | Since the additional capital expenditure incurred is necessary for safe operation of the generating station, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. | 3.47 |
| 2 | Treatment of sinking zone by providing protection wall and backfill concrete in right bank drift at dam. | 24.51 | 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 when required, Total expenditure of Rs. 314.04 | 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 of the specific directions from 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 |
|---------|---|----------------|---|--|----------------|
| | | | 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. | | |
| 3 | Construction of boundary wall at tamruchi colony at dul dam | 17.39 | The Petitioner has submitted that as per IB report, June 20/21-2014 point No.7 of fresh recommendation, the area of project as well as dam site is a thorough fare which could be accessed from any side. Construction of masonry surrounding wall from 6' to 8' with 2' concertina wire overhang is required to check illegal entries/land encroachers. | Considering the fact that these assets were earlier allowed by the Commission in order dated 30.8.2016 in Petition No. 231/GT/2014, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. | 17.39 |
| 4 | Battery bank 110V and battery charger 24VDC,100AH, each cell 2V,100AH, tubular type, along with accessories | 2.42 | The battery bank has been installed at Dam site of Dulhasti, to provide the DC Voltage to control system panels for the purpose of protection and monitoring of the system battery bank was required. 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 his lifetime 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. 6.04 lakh along with de-capitalization of Rs.1 in 2017-18 for this asset under Regulation 14(3)(vii) 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 in the event of its failure. In view of this, the additional capital expenditure incurred is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. However, the Petitioner has claimed de-capitalization of old asset as Rs. 1 which is on the lower side and hence not justifiable. Therefore, the de-capitalization value of Rs. 3.71 lakh has been considered as 'assumed deletion' for this asset in this order. | 2.42 |
| 5 | 110V,20A float cum boost charger suitable for 100 AH battery bank | 3.62 | | | 3.62 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---------|--|----------------|--|--|----------------|
| 6 | Acoustic Enclosure for 1275,640, 350 and 80 KVA DG SET | 24.68 | <p>The DG Sets installed in the Colony were not having any enclosures as required under the Environment Protection Act(1986), Noise Limit for Generator Sets run with Diesel were notified by Environment (Protection) second Amendment Rules vide GSR 371(E), dated 17th May 2002 at serial no.94 and its amendments vide GSR No 520(E) dated 1st July 2003; GSR 448(E), dated 12th July 2004; GSR 315(E) dated 16th May 2005; GSR 464(E) dated 7th August 2006; GSR 566(E) dated 29th August 2007 and GSR 752(E) dated 24th October 2008; G.S.R. 215 (E), dated 15th March, 2011 under the Environment (Protection) Act, 1986).</p> <p>1. The DG sets caters the electric supply to powerhouse/Dam in case of emergency condition and its safe operation under statutory requirements is very much essential.</p> <p>2. The DG sets were installed in nineties without acoustic enclosures. The acoustic enclosures are required to keep the noise level under the limits as per the statutory guidelines laid in Environment (Protection) Act, 1986 and their amendments issued by CPCB (Ministry of Environment & Forest, Govt. of India) for Noise Limit for Generator Sets run with Diesel. Accordingly, acoustics enclosures were provided for DG sets.</p> | The additional capital expenditure incurred is required in terms of the Environment Protection Act, 1986 and subsequent amendments. It is also observed that the pollution norms were notified by the J&K Pollution Control Board during 2007. In this background, the claim of the Petitioner is allowed under Regulation 14(3) (ii) of the 2014 Tariff Regulations. | 24.68 |
| 7 | Ground plane VHF antenna with UHF female connector for GM-338 radio | 0.91 | These are the equipment's (HF/VHF Kit) required by CISF for wireless communication at DPS. | Since the expenditure incurred is necessary for safe operation of the generating station the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations | 0.91 |
| 8 | Dipole antenna (30 MHz.) and ground plane VHF antenna for kenwood make TK 80 HF set inclusive of all | 3.81 | | | 3.81 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---------|--|----------------|--|--|----------------|
| | accessories. | | | | |
| 10 | Upgradation of elevator at PH | 11.76 | The only elevator installed in Powerhouse was not functional for the last 2 years and was required to be made functional for safe and efficient movement of man and material of power house. Safe movement of Dignitaries visiting the Power House from time to time was also an issue. The elevator at powerhouse is required for efficient functioning and movement of manpower / material during operation and maintenance of the powerhouse. Functioning of the elevator improves the movement and reduces fatigue of the manpower increasing efficiency. The same elevator is also used for movement of materials among floors during maintenance, reducing the down time of the units. | 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 |
| 11 | 50 kWp ground based energy efficient solar pv grid connected power plant | 34.41 | As per Govt. Of India, Ministry of Power initiative vide letter no.16/78/2014-Admin-III, 12.04.2016, to achieve India's target of 40,000 MW Solar roof top under National Solar Mission. No grant has been received from MNRE for installation of Roof Top Solar PV Grid Connected Power Plant. The date of Commissioning of plant is 12.10.2017 and the total Energy generated as on 14.05.2021: 147766 units. | The provisions of the 2014 Tariff Regulations do not provide for capitalisation of additional expenditure incurred by the Petitioner for this asset/work. Moreover, such major investments should be backed by DPR, the beneficiaries' consent, the cost-benefit analysis, etc. Accordingly, the additional capital expenditure claimed is not allowed . | 0.00 |
| 12 | 4 port and 40 extension EPABX | 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 | It is noticed that 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 also furnished the recommendations of IB 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 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed | | |
|---------|-----------------------------------|----------------|---|--|----------------|--|--------------|
| | | | 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 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. | | | | |
| 13 | Building for R&M of machinery | 3.65 | As per the corporate office approval the assets of generating station have been handover to CVPPL on sale basis in FY 2012-13 and deletion also claimed serial no 1 to 9 and 16 under 9A (E)-Capital assets deleted during FY 2012-13 for the tariff period 2009-14. It is further intimated that, the said assets have been returned to the generating station in FY 2017-18 as per the approval of Corporate office for Rent basis instead of sale basis. | Since the expenditure incurred are 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 | | |
| 14 | Nishan shed | 0.36 | | | 0.00 | | |
| 15 | Store shed | 0.66 | | | 0.00 | | |
| 16 | Store shed | 3.46 | | | 0.00 | | |
| 17 | Nishan shed semi circular Truseer | 5.66 | | | 0.00 | | |
| 18 | A type quarter | 11.10 | | | 0.00 | | |
| 19 | Residence 149-56 | 5.27 | | | 0.00 | | |
| 20 | S type quarters | 11.47 | | | 0.00 | | |
| 21 | Timber huts double room | 3.11 | | | 0.00 | | |
| 22 | 400 kVA transformer | 7.27 | | | 0.00 | | |
| | Total amount claimed | 179.88 | | | | | |
| | Total amount allowed | | | | | | 57.17 |



34. Based on the above, the total additional capital expenditure of Rs.177.70 lakh {Rs.120.54 lakh + Rs.57.17 lakh} in 2017-18 is allowed.

Additional Capital Expenditure for 2018-19

35. The additional capital expenditure claimed by the Petitioner, on cash basis, are as under:

| Head | Amount |
|--|---------------|
| Items additionally claimed as per actual site requirements (a) | 211.35 |
| Discharge of liabilities (b) | 31.47 |
| Total (a)+(b) | 242.82 |

(a) 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 | Installation of incinerator along with construction of CGI shed for incinerator for Power House, DPS, Kishtwar. | 4.56 | As per the guidelines/norms issued by Central/J&K State Pollution Control Board in a proper and environmentally friendly manner though without causing any deterioration to the existing environment. The CTO of the generating station has been granted in the Red category. As such to comply with the above-mentioned norms incinerator of capacity 30kg/hr which is a pollution control device has been installed for handling of Solid Waste as per Solid Waste handling and management rules 2016. After installation, all the solid waste generated from power house shall be properly disposed off instead of dumping in open area. An amount of Rs. 4.56 Lakh has been capitalised in FY 2018-19 for construction of CGI Shed and a P.O. for Rs. 20.48 Lakh was placed on 10.1.2018 for supply and installation of incinerator, which has been kept as an add cap in 2019-20. | In our view, the directions / orders of SPCB require compliance by the Petitioner. Since the expenditure incurred is for the benefit of the employees working in remote areas of the project, which in turn facilitates successful and efficient operation of the generating station, the expenditure is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. | 4.56 |
| 2 | S Type Quarter D Block | 7.01 | The contractor has claimed Rs. 45.00 lakh on account of work "construction of single room hutments including | As the expenditure incurred is based on the directions of the Hon'ble High court, the same is allowed under | 7.01 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---------|--|----------------|---|---|----------------|
| | | | sanitary fittings at Semna" (102units) awarded vide letter No DHP/M/CDC/89/6087-93 dated 1.3.1989. The Hon'ble High Court on dated 27.7.2017 decided the case in favour of Sh. Abdul Qayyum Sheikh and directed that the amount of Rs 775000 /-be paid along with interest 6% of Rs 1175399 /-. During 2018-19 amount of Rs 7.01 lakh has been capitalized and full and final payment has been released in the month of march 2019. | Regulation 14(3)(i) of the 2014 Tariff Regulations. | |
| 3 | Construction of chain link boundary wall at left bank of Shalimar nallah | 23.74 | Construction of permanent boundary wall is required in this area to protect the encroachment of NHPC Land and to avoid free passage to local people for safety and security purpose and recommendations of IB. | Considering the fact that this asset was allowed by the Commission in Order dated 30.8.2016 in Petition No. 231/GT/2014, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. | 23.74 |
| 4 | Centralized UPS 10 KVA Online | 4.23 | The Petitioner has submitted that the item purchased along with 10 KVA online UPS for uninterrupted power supply in the Office complex. Individual standalone UPSs were providing power backup to computer systems & various network devices. As per IT policy of the corporation, life of UPS (others) is 5 years. Most of these UPSs had utilized their useful life. These UPSs required more repair and maintenance work as well as more inventory management. Centralized UPS requires less maintenance and monitoring which enhance the efficiency of system instead of repetitive repair & maintenance of standalone UPS. Therefore, it was proposed to purchase centralized UPSs. This had impact indirect benefit to the beneficiaries. | 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 |
| 5 | Fire detection cum alarm system | 7.79 | The work of Fire detection and alarm system for Admin Building and 132 /33 KV Substation has been capitalized in 2018-19 in compliance to the Monthly check list of Safety Division | Considering the fact that the expenditure for asset/work claimed is for successful and efficient operation of plant, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. | 7.79 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---------|--|----------------|--|---|----------------|
| | | | point no. 20 as well as point no. 5 of internal audit conducted by Fire and Safety Division, Corporate Office during 9-10 June 2017. As per safety policy/monthly checklist point no. 11 fire detection system is required to be provided. | | |
| 6 | Otoscope, Ophthalmoscope, Incubator, Alpine 12X12X12 and Micropipette with Thermo 10-100µL | 0.84 | Hospital equipments required for life support and to maintain the health of employees. Ophthalmoscope and Otoscope are used to detect eye and ear diseases whereas the rest of the items are used in laboratory to conduct routine blood tests. All these items are very valuable to diagnose and monitor the health conditions of the employees. Keeping the employees healthy will in turn lead to uninterrupted and efficient power generation. | 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 |
| 7 | Door Frame Metal Detector - Neelgiri NT-6Z with handheld metal detector - Neelgiri NT-HM1 | 1.75 | The Petitioner based on IB recommendation to strengthen the security system of power station, new metal frame detector were purchased. | As the expenditure incurred by the Petitioner is based on the recommendations of IB and is required for safety and security of the plant, the same is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. | 1.75 |
| 8 | 250 kWp ground based energy efficient solar pv grid connected power plant | 145.58 | As per Govt. Of India, Ministry of Power initiative vide letter no.16/78/2014-Admin-III, 12.04.2016, to achieve India's target of 40,000 MW Solar roof top under National Solar Mission. An amount of Rs. 34.41 Lakh has been capitalized in 2017-18 also. No grant has been received from MNRE. Date of Commissioning is 15.01.2019 and units generated till date is 693493 units. | The provisions of the 2014 Tariff Regulations do not provide for capitalisation of additional expenditure incurred by the Petitioner for this asset/work. Moreover, such major investments should be backed by DPR, the beneficiaries' consent, the cost benefit analysis, etc. Accordingly, the additional capital expenditure claimed is not allowed . | 0.00 |
| 10 | Up-gradation of elevator at PH | 2.74 | The Petitioner has submitted that the awarded amount for the work is Rs. 14.70 Lakh. The work was to be completed by 18.9.2014, whereas the actual date of completion is 6.5.2017. 80% payment after deducting LD has already been made. Balance payment amounting to Rs. 2.74 Lakh after | 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 |



| Sl. No. | Details of the claim | Amount claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---------|--|----------------|--|---|----------------|
| | | | deducting Rs. 20,000/- on account of non-supply of elevator sheave from balance 20% has been made to the firm in 2018-19. Rs. 11.76 Lakh has been capitalised in 2017-18 on this account. | | |
| 11 | Fully Managed L2 Switch, HP 2530-24G (24X 10/100/1000 Ethernet + 4 SFP Ports) with POE Injector, Make: Aruba Model: PD-9001GR-AC, 8-PORT 10/100/1000 BASE-T With 2 Combo 1000 Base-T/MINI-GBIC Ports L2 Managed Switch and Wireless Access Point, MAKE: Aruba, Model:205 | 12.33 | NHPC is required to transit to IPv6 (Dual Stack) network in compliance of directives of Department of Telecommunication as intimated vide letter no. NH/IT&C/1/9/2/16, dated 8.2.2017, supply order issued vide No. NH/DPS/Proc/PR-1681/SO-901/2017/2955 dated 29.3.2018 for Supply Installation and Commissioning of IPv6 compatible Network devices with completion period of two months. | As the expenditure incurred is based on the recommendations of Department of Telecommunications, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. | 12.33 |
| 12 | Star Delta Starter For 20 HP Submersible Pump-Make: L&T, MODEL: MU-G20H | 0.77 | Purchase of material for replacement of old and unserviceable Star Delta Starter for 20 hp submersible pump. healthiness of the star delta starter for 20 hp submersible pump is essential for proper functioning of pumps at dam. faulty star delta starter for 20 hp submersible pump may cause flooding in Dam Gallery. Hence, the investment is beneficial for the beneficiaries. The items are purchase under replacement and the replacement cost is Rs.0.58 lakh. | Considering the fact that these 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. The deletion of Rs. 0.58 lakh is considered as de-capitalization. | 0.77 |
| | Total amount claimed | 211.35 | | | |
| | Total amount allowed | | | | 57.96 |

36. Based on the above, the total additional capital expenditure of Rs.57.96 lakh in 2018-19 is allowed.

Discharge of liabilities

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



| <i>(Rs. in lakh)</i> | | | | |
|----------------------|---------|---------|---------|---------|
| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 3817.86 | 10.01 | 35.06 | 169.60 | 31.47 |

38. The Commission vide RoP of the hearing dated 17.3.2021 had directed the Petitioner to submit the Auditor's Certificate in respect to liability flow statement for the 2014-19 tariff period as in Form 16. In response, the Petitioner vide affidavit dated 21.6.2021, has furnished the asset-wise un-discharged liabilities and the liabilities discharged along with Form 16, duly certified by independent practicing chartered accountant. Accordingly, on prudence check, the assets / items which are allowed and for which the liabilities are yet to be discharged are allowed and for those assets which are not allowed, the corresponding discharge of liabilities are also not allowed. Accordingly, the discharge of liabilities in 2014-19 tariff period is allowed as shown under:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|---------|---------|---------|---------|
| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 3817.86 | 5.64 | 31.05 | 169.60 | 31.47 |

De-capitalization

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

"In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of de-capitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised."

40. The Commission vide ROP of the hearing dated 17.3.2021 had also directed the Petitioner to submit details of the items de-capitalized like Drainage and Dewatering pump in 2014-15 and Surge arrestor for 400kV GIS, Dewatering Pump and HP Compressor in 2015-16, along with the original value of capitalization and the year in which they were put to use. In response, the Petitioner has submitted that these



assets were put to use as a part of main plant package on 7.4.2007. It has submitted that the new drainage pump was replaced on 28.2.2015, Surge arrestor on 18.4.2017, drainage and dewatering pump on 4.6.2015 and HP Compressor on 30.12.2015 and the cost for 'assumed deletions' has been worked out on the basis of indexation formula based on the cost of new asset as per IND AS. Accordingly, the cost of item, has been derived by the Petitioner, taking into account the current price of item and reinstating the value, considering the income tax price indexation, applicable for the year of 2007, based on which depreciation has been worked out. The Petitioner has claimed de-capitalization as under:

(Rs. in lakh)

| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---------|---------|---------|---------|---------|
| 9.87 | 2.11 | 1.52 | 16.87 | 2.99 |

41. 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, de-capitalization of assets is not considered against which capitalization are not allowed. Accordingly, the de-capitalization, in case of assets like treatment of sinking zone of Dul dam amounting to Rs. 0.39 lakh in 2016-17 and in case of ECG machine amounting to Rs. 0.60 lakh in 2017-18 has not been considered for the purpose of tariff as shown below:

(Rs. in lakh)

| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|----------------------------------|-------------|-------------|-------------|--------------|-------------|
| De-capitalization claimed | 9.87 | 2.11 | 1.52 | 16.87 | 2.99 |
| De-capitalization allowed | 9.87 | 2.11 | 1.13 | 16.27 | 2.99 |



Assumed Deletions

42. As per consistent methodology adopted by the Commission in its orders, 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 gross value of the old asset. However, in certain cases, where the de-capitalization is proposed to be effected during the future years to the year of capitalization of the new asset, the de-capitalization of the old asset for the purpose of tariff, is shifted to the very same year in which the capitalization of the new asset is allowed. Such de-capitalization which is not a book entry in the year of capitalization is termed as "Assumed Deletions".

43. The methodology of arriving at the fair value of the de-capitalized asset, i.e. de-escalation rate of 5% per annum from the COD has been considered in order to arrive at the gross value of old asset in comparison to the cost of new asset. In the present petition, the COD year of the generating station is during 2007-08. We have considered the value of asset under consideration, as on COD as 100 and de-escalated it @5% till the year during which additional capital expenditure is claimed against replacement of the same. The amount claimed for additional capital expenditure against this asset is multiplied by the derived ratio from above two values i.e. value in COD year divided by value in additional capitalized year to work out the de-capitalization amount.

44. The Petitioner has claimed additional capital expenditure for certain assets/works but has not furnished the de-capitalized value of the old, replaced assets/works. In this regard, the Commission in its order dated 26.5.2016 in Petition No. 264/GT/2014 has adopted the following methodology:



“It is observed that the petitioner has claimed Rs. 396.50 lakh against the capitalization for Installation of instrumentation system for Dam& Power house, Sliding Ring & Sealing Ring insert along with other accessories for Shaft Seal System, electrical drives for EOT Cranes and encoders for Radial Gates, Up gradation of Air gap and vibration monitoring system, Up gradation of protection system including replacement of numerical/ Electromagnetic relay for power house, Up-gradation of Software of automation i.e. CS-7 system and Up gradation of ARMAC System on replacement basis, during the period 2014-19. The petitioner has not indicated the gross value of the old assets replaced. Therefore, the methodology of arriving at the fair value of the de-capitalized asset, i.e. escalation rate of 5 % per annum from the COD has been considered in order to arrive at the gross value of old assets in comparison to the cost of new assets. Gross value of the old assets considered for the purpose of tariff in respect of the admitted assets/works has been indicated against individual assets, as in para 15 above. However, the petitioner is granted liberty to furnish the actual gross value of replaced assets at the time of truing up exercise and the same will be considered in accordance with law.”

45. It is observed that the Petitioner, in the present petition, has not furnished the justified de-capitalization value for some of the assets/works as mentioned in the table below for the years 2014-15, 2015-16, 2016-17 and 2017-18 respectively. Accordingly, in terms of the above methodology, the value of ‘assumed deletions’ considered for the replaced asset for the purpose of tariff is detailed as under:

(Rs. in lakh)

| Sl. No. | Details | Additions claimed for new asset on replacement | De-capitalization on value of old asset claimed | Assumed Deletions for old asset allowed |
|----------------|--|---|--|--|
| 2014-15 | | | | |
| 1 | Purchase of drainage and dewatering pumps | 42.70 | 23.51 | 0.00 |
| 2 | Purchase of HP compressors | 22.56 | 22.13 | 0.00 |
| 3 | Battery Bank, 110V, 60AH, each cell 2V, 60AH with rack and accessories | 2.23 | 0.00 | 1.59 |
| | Total | 67.49 | 45.64 | 1.59 |
| 2015-16 | | | | |
| 1 | Purchase of Surge arrestor for 400 KV GIS | 260.73 | 200.00 | 0.00 |
| 2 | Purchase of drainage and dewatering pumps. | 41.61 | 23.51 | 0.00 |
| 3 | Purchase of HP compressors | 20.97 | 17.13 | 0.00 |
| 4 | Control Panel of feeders with VCB (11 | 10.51 | - | 7.11 |



| Sl. No. | Details | Additions claimed for new asset on replacement | De-capitalization on value of old asset claimed | Assumed Deletions for old asset allowed |
|----------------|--|--|---|---|
| | kV), various meters and with E/F and O/C protection. | | | |
| 5 | Remote GPS | 0.79 | | 0.53 |
| 6 | Centre Rotating type isolator of 33 KV, 400A Capacity with earth switch | 1.86 | | 1.26 |
| 7 | Indoor type 33 KV C&R Panel 800A, 3PH out type 33KV VCB Mot. Spring CH., ABB, DRG. NO. YN1M200760-CAA | 5.59 | | 3.78 |
| 8 | HT VCB PANEL-2 INC. & 2 OUT. 11 KV, 1250 A, 50 HZ INDOOR TYPE, ABB, DRG. NO. YN1V300013-KA-IC | 19.57 | | 13.25 |
| | Total | 361.63 | 240.64 | 25.94 |
| 2016-17 | | | | |
| 1. | Remote GPS | 0.58 | - | 0.37 |
| | Total | 0.58 | - | 0.37 |
| 2017-18 | | | | |
| 1 | Battery bank 110V and battery charger 24V DC, 100AH, each cell 2V, 100AH, tubular type, along with accessories | 2.42 | 0.00 | 1.49 |
| 2 | 110V, 20A float cum boost charger suitable for 100 AH battery bank | 3.62 | 0.00 | 2.22 |
| | Total | 6.04 | 0.00 | 3.71 |
| 2018-19 | | | | |
| 1 | Star Delta Starter for 20 HP submersible pump-make: L&T, Model: MU-G20H | 0.77 | 0.58 | 0.00 |
| | Total | 0.77 | 0.58 | 0.00 |

Exclusions

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



| | <i>(Rs. in lakh)</i> | | | | |
|-------------------------------|----------------------|---------------|---------------|-----------------|----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Exclusions in Additions | 484.36 | 842.19 | 786.35 | 180.32 | 1810.80 |
| Exclusions in Deletions | (-) 397.30 | (-) 199.02 | (-) 375.48 | (-) 183.12 | (-) 41.03 |
| Net Exclusions claimed | 87.06 | 643.17 | 410.87 | (-) 2.80 | 1769.77 |

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

47. The Petitioner has submitted that the expenditure as shown above has been 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)

48. The Petitioner has de-capitalized following amounts in books of accounts pertaining to capital spares, minor assets such as computers, office equipment, furniture, ladders, pumps, etc., as these are not in use on account of their becoming unserviceable/obsolete and also deletion on account of inter-unit transfer of minor assets, as under:

| | <i>(Rs. in lakh)</i> | | | | |
|---|----------------------|---------------|---------------|---------------|--------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Consumption of capital spares (deletion to not be claimed/Under exclusion category) | 331.98 | 0.00 | 0.00 | 0.00 | 0.00 |
| Additions kept under Exclusions | 62.47 | 196.29 | 22.52 | 10.42 | 38.26 |
| Deletion under exclusion category (deletion for minor assets /tools /tackles etc. which are not considered for additional capitalization) | 2.07 | 0.02 | 352.81 | 171.76 | 2.76 |
| IUT Transfer | 0.79 | 1.72 | 0.15 | 0.93 | 0.00 |
| Inter head adjustments | 0.00 | 0.99 | 0.00 | 0.00 | 0.00 |
| Total | 397.30 | 199.02 | 375.48 | 183.12 | 41.03 |



49. It is observed that the expenditure on capital spares are not allowed to be capitalized after the cut-off date in terms of the 2014 Tariff Regulations. While the recovery of expenditure on capital spares is allowed through O&M expenses on consumption, the recovery of additional expenditure, on minor assets beyond the cut-off date is neither allowed to be capitalized nor is permissible under O&M expenses. Accordingly, the claim of the Petitioner for exclusion of negative entries arising out of de-capitalization of capital spares is justifiable, provided that the de-capitalized spares are the ones which were not considered in the capital base for the purpose of tariff in the year of capitalization. On verification of the details in the petition filed by the Petitioner in this petition, it is observed that capital spares de-capitalized in books during the period 2014-19, are the ones which were not allowed in the capital cost for the purpose of tariff. In other words, positive entries arising out of their purchase were also excluded/ ignored for the purpose of tariff. In view of the above discussion, the amounts have been allowed to be excluded/ ignored for the purpose of tariff. The exclusion of negative entries arising due to inter-head adjustments is also allowed as the positive adjustments have also been excluded/ ignored. Similarly, the exclusion of negative entries arising due to inter unit transfer of minor assets are allowed, as the capitalization of these minor assets are not allowed after the cut-off date. The Petitioner has linked the details of the items claimed under exclusions and the same are in order.

50. Based on the above, the exclusion in deletions allowed for the purpose of tariff is as under:

(Rs. in lakh)

| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------|-----------|-----------|-----------|----------|
| (-)397.30 | (-)199.02 | (-)375.48 | (-)183.12 | (-)41.03 |



Additional capital expenditure (Net) allowed for the 2014-19 period

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

| | <i>(Rs. in lakh)</i> | | | | |
|---|----------------------|---------------|---------------|---------------|--------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Capitalization against works projected and allowed for additional capital expenditure | 371.97 | 549.59 | 895.47 | 120.54 | 0.00 |
| Not projected/not allowed but capitalized due to actual site requirements | 107.33 | 192.49 | 20.91 | 57.17 | 57.96 |
| Total additions allowed (a) | 479.29 | 742.08 | 916.38 | 177.70 | 57.96 |
| Deletions allowed (b) | (-)9.87 | (-)2.11 | (-)1.13 | (-)16.27 | (-)2.99 |
| Assumed deletions considered (c) | (-)47.22 | (-)266.58 | (-)0.37 | (-)3.71 | (-)0.59 |
| Total additional capital expenditure allowed (d)=(a)+(b)+(c) | 422.20 | 473.39 | 914.88 | 157.72 | 54.38 |
| Exclusions adjustment (e) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Add: Liability discharged during the year (f) | 3817.86 | 5.64 | 31.05 | 169.60 | 31.47 |
| Additional capital expenditure allowed (g)=(d)+(e)+(f) | 4240.06 | 479.03 | 945.92 | 327.32 | 85.85 |

Capital cost allowed for the 2014-19 tariff period

52. The Commission vide order dated 30.8.2016 in Petition No.231/GT/2014 had allowed the opening capital cost of Rs. 515959.43 lakh as on 31.3.2014. The same is considered as the opening capital cost as on 1.4.2014. Accordingly, the capital cost allowed for the 2014-19 tariff period is as under:

| | <i>(Rs. in lakh)</i> | | | | |
|--|----------------------|------------------|------------------|------------------|------------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Opening capital cost (a) | 515959.43 | 520199.49 | 520678.52 | 521624.44 | 521951.76 |
| Net additional capital expenditure allowed during the year/ period (b) | 4240.06 | 479.03 | 945.92 | 327.32 | 85.85 |
| Closing Capital Cost (a)+(b) | 520199.49 | 520678.52 | 521624.44 | 521951.76 | 522037.61 |

Debt Equity Ratio

53. 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.”

54. The Commission, in its order dated 9.3.2010 in Petition No. 204/2009 relating to revision of tariff based on additional capital expenditure incurred for the period 2007-09, had observed as under:

“24. The petitioner has stated that the additional capital expenditure has been financed through internal resources. As per the approved revised cost estimate (RCE-II) of the Govt. of India letter dated 22.8.2008, corresponding to an approved capital cost of ₹522849.00 lakh, the equity was frozen at ₹198668.67 lakh. The Commission in its order dated 30.11.2009 in Petition No. 72/2009 had allowed the equity of ₹198668.67 lakh on the date of commercial operation for the purpose of tariff. Accordingly, any additional capital expenditure incurred after the date of commercial operation, till the admitted capital cost becomes ₹522849.00 lakh, is to be considered as debt. After consideration of the admitted additional capital



expenditure of ₹3188.55 lakh and ₹567.58 lakh during the year 2007-08 and 2008-09 respectively, the admitted capital cost works out to ₹511037.92 lakh and ₹511605.50 lakh for the year 2007-08 and 2008-09 respectively, which is below the admitted capital cost of ₹522849.00 lakh. Accordingly, the admitted additional capital expenditure has been considered as debt for the purpose of tariff.”

55. In line with the above decision, the entire additional capital expenditure has been considered as debt, since the total estimated cost of completion is lesser than the approved Revised Cost Estimate (RCE) of Rs. 522849.00 lakh.

Return on Equity

56. 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.”

57. 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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under- recovery or over recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/DICs as the case may be on year to year basis.”

58. Accordingly, the base rate of ROE has been grossed up, based on the actual tax paid by the Petitioner for the 2014-19 period. Accordingly, in terms of the above regulations, ROE has been computed as under:

| | (Rs. in lakh) | | | | |
|---|----------------------|----------------|----------------|----------------|----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Opening Equity (A) | 198668.67 | 198668.67 | 198668.67 | 198668.67 | 198668.67 |
| Addition due to additional capitalization (B) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Addition due to un-discharged liability (C) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: Assumed Deletion (D) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Closing Equity (E)=[(A)+(B)+(C)-(D)] | 198668.67 | 198668.67 | 198668.67 | 198668.67 | 198668.67 |
| Average Equity (F)=[(A+E)/2] | 198668.67 | 198668.67 | 198668.67 | 198668.67 | 198668.67 |
| Base Rate (%) (G) | 16.500% | 16.500% | 16.500% | 16.500% | 16.500% |



| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| Effective Tax Rate (%) (H) | 20.9605% | 21.3416% | 21.3416% | 21.3416% | 21.5488% |
| Effective ROE Rate (%) (I) | 20.876% | 20.977% | 20.977% | 20.977% | 21.032% |
| Return on Equity (J)= [(F)*(I)] | 41474.07 | 41674.73 | 41674.73 | 41674.73 | 41783.99 |

Interest on Loan

59. 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.”

60. Regulation 26(5) of the 2014 Tariff Regulations provides for consideration of actual loan portfolio at the beginning of each year for computation of weighted average rate of interest. Accordingly, the weighted average rate of interest has been worked out on the basis of the actual loan portfolio of the respective year applicable to the project. The repayment for the 2014-19 tariff period has been considered equal to the depreciation allowed for the respective years. Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest. Accordingly, Interest on loan is worked out as under:

| | (Rs. in lakh) | | | | |
|---|----------------------|----------------|----------------|----------------|----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Gross Normative Loan (A) | 317290.76 | 321530.82 | 322009.85 | 322955.77 | 323283.09 |
| Cumulative repayment of loan up to previous year (B) | 172626.01 | 199487.00 | 226370.42 | 253404.58 | 280450.72 |
| Net Loan Opening (C)=(A)-(B) | 144664.75 | 122043.82 | 95639.42 | 69551.19 | 42832.37 |
| Repayment during the year (D)=Depreciation | 26882.89 | 27000.30 | 27034.89 | 27056.88 | 27261.85 |
| Cumulative repayment adjustment on a/c of de-capitalization (E) | 21.90 | 116.88 | 0.73 | 10.74 | 2.11 |
| Net Repayment (F)=(D)-(E) | 26860.99 | 26883.43 | 27034.16 | 27046.14 | 27259.74 |
| Addition due to additional capital expenditure (G) | 4240.06 | 479.03 | 945.92 | 327.32 | 85.85 |
| Net Loan Closing (H)= (C+G-F) | 122043.82 | 95639.42 | 69551.19 | 42832.37 | 15658.48 |
| Average Loan(I)=[(C+H)/2] | 133354.28 | 108841.62 | 82595.31 | 56191.78 | 29245.42 |
| Weighted Average Rate of Interest of loan (J) | 8.02 | 8.12 | 8.23 | 8.11 | 7.45 |
| Interest on Loan (K)=(I*J) | 10698.18 | 8838.35 | 6800.72 | 4556.55 | 2178.72 |

Depreciation

61. 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 up to 31.3.2014 from the gross depreciable value of the assets.

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

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



62. The weighted average rate of depreciation has been calculated by the Petitioner in accordance with Regulation 27 of the 2014 Tariff Regulations. The calculation of WAROD is enclosed as Annexure-I to this order. Accordingly, depreciation has been worked out as under:

| | (Rs. in lakh) | | | | |
|---|------------------|------------------|------------------|------------------|------------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Opening Gross block (A) | 515959.43 | 520199.49 | 520678.52 | 521624.44 | 521951.76 |
| Net Additional capital expenditure during 2014-19 (B) | 4240.06 | 479.03 | 945.92 | 327.32 | 85.85 |
| Closing gross block (C)=(A+B) | 520199.49 | 520678.52 | 521624.44 | 521951.76 | 522037.61 |
| Average gross block (D)=[(A+C)/2] | 518079.46 | 520439.00 | 521151.48 | 521788.10 | 521994.69 |
| Depreciable Value (E)=(D*90%) | 466271.51 | 468395.10 | 469036.33 | 469609.29 | 469795.22 |
| Remaining Depreciable Value at the beginning of the year (F)=[(E)-(Cum Dep at 'L' at the end of previous year)] | 293646.50 | 268909.10 | 242666.91 | 216205.71 | 189345.50 |
| Rate of Depreciation (G) | 5.1890% | 5.1880% | 5.1875% | 5.1854% | 5.2226% |
| Balance useful Life (H) | 27.01 | 26.01 | 25.01 | 24.01 | 23.01 |
| Depreciation (I)=(D*G) | 26882.89 | 27000.30 | 27034.89 | 27056.88 | 27261.85 |
| Cumulative Depreciation at the end of the year (J)=[(I)+(Cum Dep at 'L' at the end of previous year)] | 199507.90 | 226486.30 | 253404.31 | 280460.46 | 307711.57 |
| Less: Depreciation adjustment on account of de-capitalization (K) | 21.90 | 116.88 | 0.73 | 10.74 | 2.11 |
| Cumulative Depreciation at the end of the year (L)* | 199486.00 | 226369.42 | 253403.58 | 280449.72 | 307709.47 |

*Cumulative Depreciation as on 31.3.2014 is 172625.01

Operation & Maintenance Expenses

63. Regulation 29(3)(a) of the 2014 Tariff Regulations provides 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) | | | | |
|---------------|----------|----------|----------|----------|
| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 13746.97 | 14660.32 | 15634.36 | 16673.10 | 17780.86 |



64. The generating station is in operation for three or more years as on 1.4.2014. Accordingly, the year-wise O&M expenses is allowed in terms of Regulation 29(3)(a) of the 2014 Tariff Regulations.

Additional O&M expenses

Impact of Goods & Services Tax

65. The Petitioner has also claimed reimbursement of additional tax paid due to implementation of GST in respect of generating station as additional O&M expenses and for this purpose, it has prayed for relaxation of the provisions of Regulation 29(3) in exercise of the powers under Regulation 54 and Regulation 55 of the 2014 Tariff Regulations. The Petitioner has further submitted that the implementation of GST is a “Change in law” event and the impact of the same should be passed through in tariff. As such, the tax paid in O&M expenses of plants (service portion) is claimed over and above the O&M expenses of the respective power stations. The Petitioner has submitted that it had filed Petition No. 133/MP/2019, which was disposed of by the Commission vide its order dated 22.8.2019, granting liberty to the Petitioner to raise the claim for reimbursement of additional tax on O&M expenses due to implementation of GST Act, 2017 along with the truing up petition for the 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 (01.04.2018 to 31.12.2018) | 2018-19 (01.01.2019 to 31.03.2019) | Total |
| 47066620 | 61543940 | 24104832 | 132715392 |

66. The matter has been considered. 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...”

67. 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.

Impact of Wage revision

68. Since the Petitioners claim for recovery of impact of wage revision of the Petitioners employees and deputed employees of Kendriya Vidyalaya (KV) / Dayanand Anglo Vedic (DAV) & Central Industrial Security Force (CISF) in respect of this generating station for the period from 1.1.2016 to 31.3.2019 has been considered and disposed of by the Commission in its order dated 13.11.2021 in Petition No. 221/MP/2019, the same has not been considered in this order.

Capital Spares

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

“Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance or special allowance or claimed as a



part of additional capitalization or consumption of stores and spares and renovation and modernization”.

70. In terms of the above proviso, capital spares consumed are admissible separately, at the time of truing up of tariff, based on the details furnished by the Petitioner. The capital spares (not forming part of capital cost) claimed by the Petitioner are as under:

| <i>(Rs. in lakh)</i> | | | |
|----------------------|----------------|----------------|----------------|
| 2014-15 | 2015-16 | 2016-17 | 2017-18 |
| 336.60 | 221.92 | 97.56 | 203.11 |

71. The Respondent BRPL and Respondent TPDDL have submitted that, there is no provision to capitalize the capital spares in respect of hydro power stations in the 2014 Tariff Regulations and therefore, the claim of the Petitioner has no basis. The Respondent, UPPCL has submitted that the Petitioner has failed to submit the necessary details, substantiating that the same are not part of repair and maintenance expenditure of the power station. In response, the Petitioner has submitted that the Commission had not considered capital spares as part of O&M expenses, while notifying O&M norms for the period 2014-19 and hence the consumption of capital spares has been claimed.

72. We have examined the list of spares furnished by the Petitioner. It is pertinent to mention that the term ‘capital spares’ has not been defined in the 2014 Tariff Regulations. The term capital spares, in our view, is a piece of equipment, or a spare part, of significant cost that is maintained in inventory for use in the event that a similar piece of critical equipment fails or must be rebuilt. Keeping in view the principle of materiality and to ensure standardized practices in respect of earmarking and treatment of capital spares, the value of capital spares exceeding Rs.1.00 lakh, on prudence check of the details furnished by the Petitioner in the Petition, has been



considered for the purpose of tariff. Based on this, the details of capital spares consumption allowed for the 2014-19 tariff period is summarized as under:

| | <i>(Rs. in lakh)</i> | | | |
|---|----------------------|----------------|----------------|----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
| Total capital spares consumed claimed | 336.60 | 221.92 | 97.56 | 203.11 |
| Less: Value of capital spares below Rs.1.00 lakh disallowed on individual basis | 15.86 | 6.31 | 5.59 | 3.39 |
| Net total value of capital spares considered | 320.74 | 215.61 | 91.97 | 199.73 |

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

| | <i>(Rs. in lakh)</i> | | | |
|--|----------------------|----------------|----------------|----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
| Net total value of capital spares considered | 320.74 | 215.61 | 91.97 | 199.73 |
| Less: Salvage value @ 10% | 32.07 | 21.56 | 9.20 | 19.97 |
| Net capital spares allowed | 288.67 | 194.05 | 82.77 | 179.75 |

Interest on Working Capital

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

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



Working capital for Receivables

75. Accordingly, the Receivable component of working capital has been worked out on the basis of two months of fixed cost as under:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|----------|----------|----------|----------|
| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 15896.87 | 15794.63 | 15624.41 | 15428.21 | 15271.19 |

Working capital for Maintenance Spares

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

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|---------|---------|---------|---------|
| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 2062.05 | 2199.05 | 2345.15 | 2500.97 | 2667.13 |

Working capital for O&M Expenses

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

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|---------|---------|---------|---------|
| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 1145.58 | 1221.69 | 1302.86 | 1389.43 | 1481.74 |

Rate of Interest on Working Capital

78. 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.”

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

| <i>(Rs. in lakh)</i> | | | | | |
|---|----------|----------|----------|----------|----------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Working capital for O&M Expenses (one month) | 1145.58 | 1221.69 | 1302.86 | 1389.43 | 1481.74 |
| Working capital for Maintenance Spares @15% of O&M expenses | 2062.05 | 2199.05 | 2345.15 | 2500.97 | 2667.13 |
| Working capital for Receivables | 15896.87 | 15794.63 | 15624.41 | 15428.21 | 15271.19 |



| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|----------------|----------------|----------------|----------------|----------------|
| Total working capital | 19104.50 | 19215.37 | 19272.43 | 19318.60 | 19420.06 |
| Rate of Interest on Working Capital (%) | 13.50 | 13.50 | 13.50 | 13.50 | 13.50 |
| Interest on Working Capital | 2579.11 | 2594.07 | 2601.78 | 2608.01 | 2621.71 |

Annual Fixed Charges

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

| | <i>(Rs. in lakh)</i> | | | | |
|-----------------------------|----------------------|-----------------|-----------------|-----------------|-----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 26882.89 | 27000.30 | 27034.89 | 27056.88 | 27261.85 |
| Interest on Loan | 10698.18 | 8838.35 | 6800.72 | 4556.55 | 2178.72 |
| Return on Equity | 41474.07 | 41674.73 | 41674.73 | 41674.73 | 41783.99 |
| O&M Expenses | 13746.97 | 14660.32 | 15634.36 | 16673.10 | 17780.86 |
| Interest on Working Capital | 2579.11 | 2594.07 | 2601.78 | 2608.01 | 2621.71 |
| Total | 95381.22 | 94767.77 | 93746.47 | 92569.27 | 91627.14 |

Normative Annual Plant Availability Factor (NAPAF)

81. Since NAPAF of 90% as claimed by the Petitioner is in accordance with Regulation 37(4) of the 2014 Tariff Regulations, the same is allowed.

Design Energy (DE)

82. The Commission in its order dated 30.5.2011 in Petition No.60/2010 had approved the annual Design Energy (DE) of 1907 Million units for the period 2009-14 in respect of this generating station. This DE has been considered for this generating station for the period 2014-19 as per month-wise details as under:

| Months | Design Energy (MU) |
|-----------|--------------------|
| April | 110.7 |
| May | 230.3 |
| June | 266.7 |
| July | 275.6 |
| August | 275.6 |
| September | 261.3 |
| October | 134.5 |
| November | 84.0 |
| December | 73.4 |
| January | 64.3 |



| Months | Design Energy (MU) |
|--------------|--------------------|
| February | 55.6 |
| March | 74.6 |
| Total | 1907 |

83. The difference between the annual fixed charges recovered by the Petitioner in terms of order dated 30.8.2016 in Petition No. 231/GT/2014 and the annual fixed charges determined by this order shall be adjusted in terms of the provisions of Regulation 8 (13) of the 2014 Tariff Regulations.

DETERMINATION OF TARIFF FOR THE 2019-24 TARIFF PERIOD

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

Annual Fixed Charges claimed

| | <i>(Rs. in lakh)</i> | | | | |
|------------------|----------------------|-----------------|-----------------|-----------------|-----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Depreciation | 27417.04 | 5081.44 | 5096.61 | 5115.71 | 5134.28 |
| Interest on Loan | 593.83 | 0.00 | 0.00 | 0.00 | 0.00 |
| Return on Equity | 39798.71 | 39827.92 | 39839.84 | 39855.25 | 39870.43 |
| O&M Expenses | 21718.63 | 22753.96 | 23838.65 | 24975.06 | 26165.63 |
| Interest on WC | 2116.73 | 1818.00 | 1872.34 | 1929.37 | 1989.08 |
| Total | 91644.94 | 69481.33 | 70647.44 | 71875.39 | 73159.42 |

Capital Cost

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

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;



(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of renovation and modernization as admitted by this Commission in accordance with these regulations;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries....”

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

| | <i>(Rs. in lakh)</i> | | | | |
|--|----------------------|------------------|------------------|------------------|------------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Opening Capital Cost | 523756.71 | 524630.46 | 524960.79 | 525379.13 | 525954.13 |
| Add: Addition during the year / Period | 1302.75 | 413.76 | 465.32 | 575.00 | 452.00 |
| Less: De-capitalisation during the year/period | 473.62 | 88.95 | 46.98 | 0.00 | 36.05 |
| Add: Discharges during the period | 44.63 | 5.53 | 0.00 | 0.00 | 0.00 |
| Closing Capital Cost | 524630.46 | 524960.79 | 525379.13 | 525954.13 | 526370.08 |

87. The Commission in paragraph 52 of this order had allowed the closing capital cost of Rs.522037.61 lakh, as on 31.3.2019. Accordingly, in terms of Regulation 19(3) of the 2019 Tariff Regulations, the capital cost of Rs.522037.61 lakh, as on 31.3.2019, has been considered as the opening capital cost as on 1.4.2019, for the purpose of determination of tariff for the 2019 tariff period.

Discharge of liabilities

88. The Petitioner has claimed following discharge of liabilities during the tariff period 2019-24:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|----------------|----------------|----------------|----------------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 44.63 | 5.53 | 0.00 | 0.00 | 0.00 |



89. The year-wise discharge of liabilities as claimed in Form-16 has been allowed. However, the Petitioner is directed to submit the reconciliation statement, showing details of such liabilities as per balance sheet for the 2019-24 tariff period, duly certified by auditor, and also furnish the break-up of discharges included in the liabilities discharged within the original scope of work or other than within the original scope of work of the project, at the time of true-up of tariff.

Additional Capital Expenditure

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

91. Regulation 25 of the 2019 Tariff Regulations provides as under:

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

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

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

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the



Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) *The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*

(b) *The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*

(c) *The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*

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

92. Regulation 26 of the 2014 Tariff Regulations provides as under:

26. Additional Capitalization beyond the original scope

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

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

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

(c) Force Majeure events;

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

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

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

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

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

93. The Petitioner has submitted that the projected additional capital expenditure has been claimed under various provisions of Regulation 25 and Regulation 26 of the 2019 Tariff Regulations, wherein, some admitted capital works have spilled over



from the 2014-19 tariff period. Based on this, the details of additional capital expenditure claimed by the Petitioner are as under:

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|----------------|---------------|---------------|---------------|---------------|
| Gross Capital Cost as on 31.3.2019: Rs.523756.71 | | | | | |
| Opening cumulative capitalized expenditure projected at the beginning of respective years | 523756.71 | 524630.46 | 524960.79 | 525379.13 | 525954.13 |
| Regulation 25(1)(a) | 0.00 | 0.00 | 0.00 | 375.00 | 0.00 |
| Regulation 25 (2)(a) | 21.43 | 166.22 | 99.58 | 0.00 | 75.00 |
| Regulation 25(2)(b) | 0.00 | 0.00 | 10.00 | 0.00 | 0.00 |
| Regulation 25(2)(c) | 1147.41 | 46.56 | 8.67 | 0.00 | 20.00 |
| Regulation 25(2)(d) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Regulation 26(1)(a) | 0.00 | 30.00 | 0.00 | 0.00 | 0.00 |
| Regulation 26(1)(b) | 20.48 | 0.00 | 170.00 | 70.00 | 0.00 |
| Regulation 26(1)(d) | 113.43 | 192.98 | 177.07 | 130.00 | 357.00 |
| Total projected additional capital expenditure to be incurred | 1302.76 | 435.76 | 465.32 | 575.00 | 452.00 |

94. We examine the additional capital expenditure claimed by the Petitioner, on prudence check, as stated in the subsequent paragraphs.

Additional Capital Expenditure for 2019-20

95. The Petitioner has claimed total projected additional capital expenditure of Rs.1302.76 lakh in 2019-20 under the provisions of Regulation 25 and Regulation 26 of the 2019 Tariff Regulations which are discussed below:

(Rs. in lakh)

| Sl. No. | Regulation | | 2019-20 |
|---------|--|---|----------------|
| 1 | 25(2)(a) | The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations | 21.43 |
| 2 | 25(2)(c) | The replacement of such asset or equipment is necessary on account of obsolescence of technology | 1147.41 |
| 3 | 26(1)(b) | Change in law or compliance of any existing law | 20.48 |
| 4 | 26(1)(d) | Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security | 113.43 |
| 5 | Total projected additional capital expenditure as per Form 9A | | 1302.76 |



(a) Claims under Regulation 25(2)(a) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on Admissibility | Amount Allowed |
|--|---|--|--|----------------|
| Purchase of Pump & Motors for water supply | 8.84 | The Petitioner has claimed this item as replacement item. The Power Station has set up a water lift supply system of 310 Meter head with 100 Cubic Meter/Hour water pumping capacity to cater the need of water supply for office and residential purpose. This item was purchased and capitalized in 2010-11. The use is to lift the drinking water from old HRT site to Colony of Power Station at Chenab Nagar. The existing item was got repaired and but still giving trouble and not functioning properly and is now beyond economic repair. As Drinking water is essential requirement the employees cannot work efficiently if water supply to their houses are improper. So, this motor pump set is required to be replaced with new one for efficient and effective functioning. Now after replacement the new pump will cater the need of water supply to residential and official purpose efficiently and without any trouble. P.O. placed on 20.9.2018 for Rs. 8.84 lakh with 6 Months delivery period. The pump and motor so purchased, has been installed at Stage-III of lift water scheme. The actual date of 'put-to-use' is 1.4.2019. The gross value of existing asset is not available. Derived original value of the asset is Rs 3.95 lakh considering the de-accelerate rate @6% p.a. | 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 |
| Supply Installation and Commissioning of EPABX System for Dulhasti Power Station | 12.59 | The Petitioner has submitted that the existing telephone exchange was acquired on 9.3.1988 (CG Make) and it is not functional as its support service is not available in the market due to which we are not able to get it repaired. For internal communication of Power Station components such as Main Office, Powerhouse, Dam, Store and with security agency CISF, its very important and effective communication medium. During the recent ban on mobile phone communication by Govt. of India in J&K, its need was felt at the most. | The Petitioner has submitted that the additional capital expenditure claimed is towards the replacement of the existing asset, which was deployed under the original scope of the Project. It has stated that the old asset has completed its useful life and as | 12.59 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on Admissibility | Amount Allowed |
|-----------------------------|---|---|--|-------------------|
| | | After replacement with new Telephone Exchange, Power Station will have an effective internal communication medium for smooth operation of Power Station. S.O. has been placed on 28.11.2018 and is likely to be capitalized in 2019-20, The present gross block amount is Rs. 5.39 lakh only. | such the additional capitalization claimed is for the replacement of the said asset. The Petitioner has further submitted that it has claimed de-capitalisation of Rs.5.39 lakh for this asset, which have been considered under 'De-capitalization' in paragraph 105 of this order. In view of this, the additional capital expenditure claimed is allowed | |
| Total mount claimed | 21.43 | | | |
| Total amount allowed | | | | 12.59 |

(b) Claims under Regulation 25(2)(c) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on Admissibility | Amount allowed |
|--|---|--|---|-------------------|
| Renovation/ upgradation of SCADA and Controller System and excitation system | 1108.20 | The software uploading interface of the controllers is a floppy based console which has become obsolete. The technical service support for the system is not available from the OEM. Black start of the power station is not possible in the present system. Also Power system stabilizer (PSS) feature and N+1 thyristor bridge configuration in line with the Commissions Regulations are not available in excitation system. In addition the present SCADA system either malfunctions or hangs now & then, subsequently leading to tripping of the units. The For this following P.O.s have been placed:- 1.NH/Conts(E&M)-1/Dul-10 /PR10915/177/SO-7/2017/154, dated 14.3.2017, supply completed, work in progress and is likely to be capitalized in 2019-20. | The Petitioner has submitted that the existing asset has now become obsolete, and no service support is available from OEM. Considering the fact that the Petitioner has claimed the expenditure for replacement of asset on account of obsolescence of technology, the additional capital expenditure claimed is allowed under Regulation 25(2)(c) of the 2019 Tariff | 1108.20 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on Admissibility | Amount allowed |
|---|---|---|--|-------------------|
| | | <p>2. Modification in Programming, setting and Tuning of existing Governor of each Unit for interfacing with new SCADA, awarded on 10.12.2018 (Rs. 56.45 Lakh). Work in progress and is likely to be capitalized in 2019-20. Additional Information</p> <p>1. The work of upgradation of SCADA, Controller System and excitation system" was started in the year 2018-19 during annual maintenance and completed & capitalised in the year 2019-20 on 03.02.2020. There was some technical problem witnessed in Unit # 3, therefore the work in Unit#1 & 2 was taken up in the next year during annual maintenance (2019-20).</p> <p>2. The installation of the Control and monitoring (SCADA) system was completed on 03.02.2020. and the tuning of governor with new SCADA system was completed on 20.02.2020. The total capitalized value of the work is Rs. 105477415/- (Rs.100134903/- for SCADA, protection and Excitation system and Rs. 5342511/- for modification in programming, setting and tuning of existing governor with new SCADA system.</p> <p>3. The installation shall result in more efficient operation, monitoring of generating assets to ensure optimum operation. Moreover, upgraded systems is envisaged to give protection from cyber threats, firmware malfunction etc. Since the work involves with operation and maintenance of generating units and asset management, it is beneficial to the beneficiaries. The value of old asset is Rs 446.97 lakhs.</p> | <p>Regulations on replacement basis. The Petitioner has submitted the de-capitalisation value of Rs.446.97 lakh for old asset against which the expenditure is claimed. Accordingly, the same has been considered under 'De-capitalization' in paragraph 105 of this order. The Petitioner is, however directed to submit management certificate of competent authority with regard to certification for obsolescence of old asset at the time of truing up of tariff.</p> | |
| Replacement of Control panel for Fire alarm system of Power House | 15.93 | The existing Fire Fighting system being old hangs & mal-operates and giving false signals to the operator creating panic. sometimes it may also cause unwanted outage of GSU transformers leading to generation loss. To avoid this type of unwanted problems as well as any generation loss, the existing Fire Fighting system has proposed to be replaced | It is evident from the Petitioner's submission that the claim is for replacement of equipment as considered necessary for the functioning of plant. In view of this, the | 15.93 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on Admissibility | Amount allowed |
|---|---|---|--|-------------------|
| | | with the modern firefighting system. The P.O. for the same has been placed on 28.2.2019 for Rs. 15.93 Lakh and is likely to be capitalized in FY 2019-20. The gross value of existing assets is not available. Derived original value of the asset is Rs 7.11 lacs considering the de-accelerate rate @6% p.a. | additional capital expenditure claimed is allowed . Further the Petitioner has also submitted gross block of the asset as Rs. 7.11 lakh and the same has been considered as de-capitalization. | |
| Penstock discharge Measurement system for turbine units | 23.28 | The existing penstock discharge measurement system which was capitalized along with commissioning of the Power Station in 2007, is not working due to choking of embedded pressure taps and not possible to repair the embedded pressure taps. Therefore, installation of discharge measurement instruments/flow meter is proposed in all generating units of penstock i.e. upstream of MIV for providing discharge through units as per flow meter data. This discharge measuring system will be utilized for monitoring / improvement of efficiency of the Power station/Units. The work is proposed in a phased manner. The gross value of existing asset is not available. Derived original value of the asset is Rs 10.20 lakh considering the de-accelerate rate @6% p.a for unit-1 only. | It is evident from the Petitioner's submission that the claim is for replacement of equipment as considered necessary for the functioning of plant. In view of this, the additional capital expenditure claimed is allowed . Further, the Petitioner has also submitted gross block of the asset as Rs. 10.20 lakh and the same has been considered as de-capitalization. | 23.28 |
| Total mount claimed | 1147.41 | | | |
| Total amount allowed | | | | 1147.41 |

(c) Claims under Regulation 26(1)(b) of the 2019 Tariff Regulations

(Rs in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|--|---|-------------------|
| Installation of incinerator along with construction of CGI shed for incinerator for Power House, DPS, Kishtwar. | 20.48 | As per the guidelines/norms issued by Central/J&K State Pollution Control Board in a proper and environmentally friendly manner through without causing any deterioration to the existing environment. The CTO of Dulhasti Power Station has been granted in | The Petitioner has claimed the installation of incinerator under change in law and has provided the documentary evidence in support | 20.48 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|--|---|-------------------|
| | | the Red category. As such to comply with the above-mentioned norms incinerator of capacity 30kg/hr which is a pollution control device has been installed for handling of Solid Waste as per Solid Waste handling and management rules 2016. After installation, all the solid waste generated from power house shall be properly disposed off instead of dumping in open area. P.O. for Rs. 20.483 Lakh was placed on 10.1.2018. An amount of Rs.4.56 Lakh has been capitalised in FY 2018-19 for construction of CGI Shed. | of the same. Since the requirement of incinerator is in accordance with the norms/guidelines of the J&K Pollution control Board, the expenditure for the same is allowed | |
| Total amount claimed | 20.48 | | | |
| Total amount allowed | | | | 20.48 |

(d) Claims under Regulation 26(1)(d) of the 2019 Tariff Regulations

(Rs in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Admissibility on admissibility | Amount Allowed |
|---|---|--|---|-------------------|
| P/F of CGI sheets/Ceiling in MAT (Main Access Tunnel) and Ventilation Tunnel at Power House | 23.43 | Dulhasti Power Station being an underground Powerhouse, has a Main Access Tunnel (MAT) and Ventilation Tunnel to enter the Powerhouse. The tunnel has developed cracks and loose rocks are also falling as well as water is also seeping from the roof. Therefore, for safety of powerhouse as well as safety of staff and visitors using the tunnel and to channelize the seepage water, work has been awarded on 6.3.2019. The MAT is used for movement of all the manpower and materials into the powerhouse. The ventilation tunnel is used for movement of materials, draft tube operation as well as escape route for emergency powerhouse evacuation. Falling loose rocks may cause accident leading to damage of life / property. This has been pointed out and advised by the Safety Officer of the Power Station as well as the Security Agency CISF from time to time as their staff is also posted | Since the expenditure claimed is in the nature of O&M expenses and the Petitioner has also not furnished any documentary evidence in support of the claim. In view of this, the expenditure claimed is not allowed . | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Admissibility on admissibility | Amount Allowed |
|--|---|--|--|-------------------|
| | | inside the tunnel. CGI sheets has been installed as a safety measure. | | |
| Construction of permanent boundary wall of Semna and Shalimar colony | 40.00 | It is submitted that an amount of Rs. 288.78 has been capitalized during the 2014-19. However the complete area could be covered and there are still some places where security wall is required for which an amount of Rs.80 lakh has been proposed. Barbered 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. Boundary walls are required as per recommendations of security agency . In this head following works has been awarded so far:- 1.Construction of boundary wall right bank near timber hut and CISF observation post and A-Coy area at Shalimar for Rs.35.42 lakh awarded on 13.11.2018 with 6 months completion period. Work is in progress. 2.Construction of permanent boundary wall on right bank of nallah from back side of club to STP at Shalimar, DPS Kishtwar, work awarded for Rs. 30.62 Lakh. 3.Boundary wall around Hospital Building and increasing the height with concertina coil for security and installation of steel gate at main entry of Shalimar Colony, Parking area, DPS Kishtwar for Rs.11.73 Lakh awarded on 15.03.2019. | It is noticed that the additional capital expenditure claimed for the asset/ work was earlier allowed vide order dated 30.8.2016 in Petition No. 231/GT / 2014 for Rs. 27.04 lakh and Rs. 90.00 lakh during 2014-15 and 2015-16 respectively based on the recommendations of IB. Further, the Commission had approved Rs. 150 lakh during the period 2009-14. As the Commission had already allowed additional capital expenditure claimed for this asset/works during the earlier tariff periods as stated above, we find no reason to allow the additional expenditure claimed by the Petitioner. | 0.00 |
| Security Gadgets- Tyre Killer, Binoculars Day / Night Vision, Baggage X-Ray Machine etc. | 50.00 | As per the record of discussion held on the meeting taken by Joint Secretary & CVO, MoP with IG (NS), CISF in the presence of CMD NHPC regarding security of vital installations of NHPC located in J&K on 15.4.2019, Security gadgets are required for CISF unit, DPS. Taking into account the security scenario of J&k , a proposal for purchase of security gadgets amounting to Rs 100 lacs has been prepared. | The expenditure is related to the security and safety of the generating station as advised by CISF and the Petitioner has also furnished relevant documentary evidence in support of the same. In view of this, the expenditure claimed is allowed | 50.00 |
| Total amount claimed | 113.43 | | | |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Admissibility on admissibility | Amount Allowed |
|-----------------------------|---|--|-----------------------------------|-------------------|
| Total amount allowed | | | | 50.00 |

96. Based on the above, the total additional expenditure of Rs.1230.49 lakh (Rs.12.59 lakh +Rs.1147.41 lakh + Rs.20.48 lakh + Rs.50.00 lakh) in 2019-20 is allowed.

Additional Capital Expenditure for 2020-21

97. The Petitioner has claimed projected additional capital expenditure of Rs.435.76 lakh in 2020-21 under the provisions of Regulation 25 and Regulation 26 of the 2019 Tariff Regulations which are discussed under:

(Rs. in lakh)

| Sl. No. | Regulations | | 2020-21 |
|---------|--|---|---------------|
| 1 | 25(2)(a) | The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations | 166.22 |
| 2 | 25(2)(c) | The replacement of such asset or equipment is necessary on account of obsolescence of technology | 46.56 |
| 3 | 26(1)(a) | Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law; | 30.00 |
| 4 | 26(1)(d) | Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security | 192.98 |
| 5 | Total additional capital expenditure claimed as per Form 9A | | 435.76 |

(a) Claims under Regulation 25(2)(a) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|----------------------------|---|---|---|-------------------|
| Car-Innova | 22.00 | The existing Bullet proof Car was purchased 1998-99 and has completed its useful life. Based on the operational requirement, it has been proposed to purchase a Innova car with estimated cost of Rs. 22.00 lac against the replacement of bullet proof car having gross block of Rs.10 lakh. | Since the capitalization of additional capital expenditure incurred is necessary for the successful and efficient operation of the plant, the same is allowed on | 22.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|--|---|----------------|
| | | | replacement basis. The de-capitalization value of the old car is considered as Rs. 10.00 lakh as submitted by the Petitioner. | |
| Purchase of 110V,1100 AH lead acid Battery bank for Dulhasti Power Station | 38.62 | The existing battery bank of Powerhouse was capitalized during the commissioning of Power plant in 2007 and it has completed its useful life, copy of certificate in this regard has been enclosed. It is used for control, protection and operation purpose of 3X130 MW Generating Units and 400 KV GIS System. To perform the above functions properly and effectively and to avoid any forced outage of plant, replacement is necessary. The new battery bank will be beneficial for smooth and effective functioning of Powerhouse System to avoid any forced outage and also will increase the reliability and longevity of the system. The gross value of existing assets is not available. Derived original value of the asset is Rs 13.78 lakh considering the de-accelerate rate @6% p.a. | The Petitioner has submitted that the additional capital expenditure claimed is for replacement of the existing asset, which was deployed within the original scope of the Project. It has stated that the old asset has completed its useful life and as such, the additional capitalization claimed is for the replacement of the said asset. The Petitioner has further submitted that it has claimed de-capitalisation of Rs. 13.78 lakh for this asset, which has been considered under 'De-capitalization'. In view of this, the additional capital expenditure claimed is allowed | 38.62 |
| Purchase of submersible pumps and Control Panels for drainage, dewatering & flooding system. | 105.60 | The existing pumps are becoming old and unserviceable and keeping in view of the recent flood incidence in one of the NHPC Power Stations, pumps are required to be replaced for safety of Powerhouse due to flooding. These pumps and control panels are proposed to strengthen the dewatering capacity to avoid any flooding in powerhouse. Technical bid of the NIT opened on 20.4.2019, under evaluation stage (Rs. 105.60 Lakh). The gross value of existing asset is not available. Derived original value of the asset is Rs 45.26 lacs considering the de-accelerate rate @6% p.a. | The Petitioner has submitted that the additional capital expenditure claimed is for replacement of the existing asset, which was deployed within the original scope of the Project. It has stated that the old asset has completed its useful life and as such, the additional capitalization claimed is for the replacement of the said asset. The Petitioner has further submitted that it has claimed de-capitalisation of | 105.60 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|---|--|----------------|
| | | | Rs.45.26 lakh for this asset, which have been considered under 'De-capitalization. ' In view of this, the additional capital expenditure claimed is allowed . | |
| Total amount claimed | 166.22 | | | |
| Total amount allowed | | | | 166.22 |

(b) Claims under Regulation 25(2)(c) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|---|---|----------------|
| Penstock discharge Measurement system for turbine units | 46.56 | The existing penstock discharge measurement system which was capitalized along with commissioning of the Power Station in 2007, is not working due to choking of embedded pressure taps and not possible to repair the embedded pressure taps. Therefore, installation of discharge measurement instruments/flow meter is proposed in all generating units of penstock i.e. upstream of MIV for providing discharge through units as per flow meter data. This discharge measuring system will be utilized for monitoring / improvement of efficiency of the Power station/Units. The work is proposed in a phased manner. The gross value of existing asset is not available. Derived original value of the asset is Rs 19.91 lakh considering the de-accelerate rate @6% p.a for two units. | It is evident from the Petitioner's submission that the expenditure claimed is for replacement of equipment as considered necessary for the functioning of plant. In view of this, the additional capital expenditure claimed is allowed . Further the Petitioner has also submitted the gross block of the asset as Rs. 19.91 lakh and the same has been considered as de-capitalization. | 46.56 |
| Total amount claimed | 46.56 | | | |
| Total amount allowed | | | | 46.56 |



(c) Claims under Regulation 26(1)(a) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|--|---|----------------|
| Purchase of Mobile truck mounted hydraulic scissor lift / work platform | 30.00 | The Petitioner has submitted that the Commission vide its Order dated 30.8.2016 in Petition No. 231/GT/2014 (at Sl. No.9, Page No. 49) has approved the additional capital expenditure. The purchase could not be materialised due change in the norms of BS-IV vehicles for adherence of pollution norms. Maintenance of Outdoor Street lights, Transmission lines and Pot head yard equipment's require access at height with mobility. The vehicle has been purchased in 2019 and hydraulic platform has been installed and the same has been capitalized on 25.03.2021. In view of above this item may be allowed by CERC. | It is noticed that the Commission vide order dated 30.8.2016 in Petition No. 231/GT/2014 had allowed additional capitalisation of Rs.55 lakh for this asset/work. Keeping in view that there has been change in pollution norms with regard to vehicle, we allow the additional capital expenditure within the limits allowed by the Commission. The Petitioner is however, directed to furnish the reasons for spill over at the time of truing of tariff, failing which the expenditure may not be considered. | 30.00 |
| Capitalisation against other than admitted items | | | | |
| Total amount claimed | 30.00 | | | |
| Total amount allowed | | | | 30.00 |

(d) Claims under Regulation 26(1)(d) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|--|--|----------------|
| Actual additional capitalization against admitted items | | | | |
| Installation of CCTV system | 62.81 | The expenditure has already been allowed by Commission during 2016-17. Earlier case was processed for kote / Qtr. Guard as per CISF requirement intimated vide letter no. IC-11026/(2)/CISF/DHEP/CIW/NHPC/EPABX/2016-1561 dated 08.07.2016. But later on as per the recommendation of IB, a centralized integrated CCTV monitoring system was proposed | It is noticed that the Commission vide its order dated 30.8.2016 in Petition No. 231/GT/2014 had allowed the additional capital expenditure for this asset/work for Rs. 20.00 lakh. However, the claim of the Petitioner is beyond | 62.81 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|--|--|----------------|
| | | by CISF vide letter no. PR-15016/CISF/DHEP/VP/MGT/18-2820 dated 07.06.2018. In view of above, a re-survey was conducted at all locations of Power Station and requirement was finalized for CISF, DAM, PH & various other location of Power Station. Final requirement sheet of 39 CCTV Camera is attached for reference. Hence, projected expenditure has been increased from Rs 20 Lakh. All required 39 Camera has been installed. Work has been completed on 10.11.2020 for Rs 62.81 Lakh. | the amount approved vide order dated 30.8.2016. The Petitioner has clarified that the projected additional capital expenditure claimed/ allowed earlier was based on the preliminary estimates. However, the additional capital expenditure claimed is based on the actual expenditure incurred, after following the requisite public procurement process. In view of the justification and since the additional capitalisation is in respect of work which has been spilled over, the claim of the Petitioner is allowed . | |
| Construction of Security Gates at Dam site | 7.17 | There was no gate at the entry point of Dam at Tam Ruchi, only barrier is existing. Now due to start of works of Pakal Dul of CVPPL, the movement of people and vehicles has increased for which this security gate has been required by the security agency CISF. Similarly, another gate is also required at Dam gallery. This has been demanded by the security agency CISF also vide letter no. PR-15022/CISF/DHEP/A&A/QM/2019-656, dated 16.04.2019. The case is in tendering stage. | The expenditure incurred is related to the security and safety of the generating station as advised by CISF. The Petitioner has also furnished documentary evidence in support of the claim. In view of this, the expenditure claimed is allowed . | 7.17 |
| Purchase of MOTORIZED RETRACTABLE GATE Size 6 M (W) X 2 M (H) at Power House (MAT) DPS, Kishtwar. | 8.00 | There is no gate in front of the Main Access Tunnel of the Powerhouse, only a barrier is there. Therefore, for proper security of Power House Tunnel, a gate is proposed to be installed there. This item has also been advised by the security agency IB. In view of the above this amount may be allowed by Commission. | The expenditure incurred is related to the security and safety of the generating station as advised by IB. The Petitioner has also furnished documentary evidence in support of the claim. In view | 8.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|---|--|----------------|
| | | | of this, the expenditure claimed is allowed . | |
| Construction of permanent boundary wall of Semna and Shalimar colony | 35.00 | The Petitioner has submitted that 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. It is submitted that an amount of Rs. 288.78 has been capitalized during the 2014-19. However the complete area could not be covered and there are still places where security wall is required as per recommendations of the security agency following are the areas where the security wall needs to be developed:- 1. Construction of boundary wall right bank near timber hut and CISF observation post and A-Coy area at Shalimar. 2. Construction of permanent boundary wall on right bank of nallah from back side of club to STP at Shalimar, DPS Kishtwar. 3. Boundary wall around Hospital Building and increasing the height with concertina coil for security and installation of steel gate at main entry of Shalimar Colony 4. Strengthening and raising of boundary wall on back side and construction of permanent boundary wall on left side of DSB Colony 5. Peripheral development work of 250 KWp Solar plant area near OM Mehta Gate no.2 etc. 6. Strengthening and raising of boundary wall on periphery of Type-C, backside of type-B quarter and Construction of permanent boundary wall alongwith C-0 type quarter, in front of CVPP office . | It is noticed that the additional capital expenditure for the asset/ work was allowed vide order dated 30.8.2016 in Petition No. 231/GT/2014 for Rs. 27.04 lakh and Rs. 90.00 lakh during 2014-15 and 2015-16 based on the recommendation of IB. Further, the Commission has approved Rs. 150 lakh during the period 2009-14. As the Commission had already allowed the additional capital expenditure claimed for this asset/works during the earlier tariff periods as stated above, we find no reason to allow the additional expenditure claimed by the Petitioner. | 0.00 |
| Construction of accommodation & security post/pucca morcha for CISF | 20.00 | Dulhasti Power Station being located in militancy prone area. CISF put up its requirements for the new security post/ morcha on the basis of the recommendations | The expenditure incurred is related to the security and safety of the generating station as | 20.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|--|---|----------------|
| at Chenab Nagar, Shalimar & Tamruchi Dam site. | | coming up from the security survey by the security agencies . The work is taken up as and when requirement from CISF is received, hence as per the requirement/recommendations of security agency, for providing proper security to all the installations, following works have been awarded and are likely to be capitalized in FY 2020-21: 1.Construction of 02 No. Pucca morcha with toilet for CISF at Dam site DPS Kishtwar (Rs. 11.32 Lakh). Work awarded on 30.01.2019 2.Construction of security Morcha near RO Plant DSB Colony, DSP Kishtwar, awarded on 1.01.2019 for Rs. 2.99 lakh, Following works are in tendering stage and are likely to be capitalized in FY 2021-22:- 1. Pucca Morcha at Chenab Nagar for Rs. 16.00 Lakh, 2. Pucca Morcha at Dul Dam site for Rs. 10.5 Lakh. | advised by CISF. The Petitioner has also furnished documentary evidence in support of the claim. In view of this, the expenditure claimed is allowed . | |
| Security Gadgets- Tyre Killer, Binoculars Day / Night Vision, Baggage X-Ray Machine etc. | 50.00 | As per the record of discussion held on the meeting taken by Joint Secretary & CVO, MoP with IG (NS), CISF in the presence of CMD NHPC regarding security of vital installations of NHPC located in J&K on 15.4.2019, Security gadgets are required for CISF unit, DPS. Taking into account the security scenario of J&K , a proposal for purchase of security gadgets amounting to Rs 100 lacs has been prepared. | | 50.00 |
| Automatic External Deflator(AED) for Hospital | 102.63 | Automated External Defibrillator is a battery-operated device that checks the heart's rhythm and in case there is any irregularity, a shock is sent through it to the heart to restore a normal rhythm. The device is used to revive people having sudden cardiac arrest. It was purchased in accordance with an official order from Corporate Office, NHPC Ltd., Faridabad. This equipment is an essential requirement for all projects wherein the precious lives of employees and other staff | Since the additional capital expenditure claimed is not related to the operation of the plant, the same is not allowed . | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|--|--------------------------|----------------|
| | | members can be saved easily till the patient is admitted to hospital for further management. | | |
| Total amount claimed | 192.98 | | | |
| Total amount allowed | | | | 147.98 |

98. Based on the above, the total additional expenditure of Rs.390.76 lakh (Rs.166.22 lakh + Rs.46.56 lakh + Rs.30.00 lakh + Rs.147.98 lakh) in 2020-21 is allowed.

Additional Capital Expenditure for 2021-22

99. The additional capital expenditure claimed under various provisions of Regulation 25 and Regulation 26 of the 2019 Tariff Regulations for Rs.465.32 lakh in 2021-22 is discussed as under:

| Sl. No. | Regulations | | 2021-22 |
|---------|--|---|---------------|
| 1 | 25(2)(a) | The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations | 99.58 |
| 2 | 25(2)(b) | The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions | 10.00 |
| 3 | 25(2)(c) | The replacement of such asset or equipment is necessary on account of obsolescence of technology | 8.67 |
| 4 | 26(1)(b) | Change in law or compliance of any existing law | 170.00 |
| 5 | 26(1)(d) | Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security | 177.07 |
| 6 | Total additional capital expenditure claimed as per Form 9A | | 465.32 |

(a) Claims under Regulation 25(2)(a) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|---|--|----------------|
| Purchase of Pump & Motors for water supply | 8.84 | This is a replacement item. Power Station has set up a water lift supply system of 310 Meter head with 100 Cubic Meter/Hour water pumping | Since the expenditure claimed is in the nature of O&M expenses and | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|--|--|-------------------|
| | | capacity to cater the need of water supply for office and residential purpose. This item was purchased and capitalized in 2010-11. The use is to lift the drinking water from old HRT site to Colony of Power Station at Chenab Nagar. The existing item was got repaired and but still giving trouble and not functioning properly and is now beyond economic repair. So this motor pump set is required to be replaced with new one for efficient and effective functioning. Now after replacement the new pump will cater the need of water supply to residential and official purpose efficiently and without any trouble. P.O. placed on 20.9.2018 for Rs. 8.84 Lakh with 6 Months delivery period. The gross value of existing asset is not available. Derived original value of the asset is Rs 3.62 lakh considering the de-accelerate rate @6% p.a. | does not directly relate to the operation of the plant, the claim of the Petitioner is not allowed. | |
| Supply & installation of Pipeline for firefighting system from pump to Tank | 90.74 | This is a replacement item. The existing pipeline from pump to tank is used for supplying water for fire-fighting system of Powerhouse. It was capitalized in 2007 along with commissioning of the Power Station. This pipeline has got punctured at several locations due to rusting, silty water and continues use leading to leakage of water. Therefore, requires replacement. The new pipeline will be beneficial in terms of reliability and strengthening of fire-fighting system of Powerhouse as well as will arrest the wastage of water due to leakage. The item being part of mother asset, the old value will be derived after capitalization. The gross value of existing assets is not available. Derived original value of the asset is Rs 37.16 lakh considering the de-accelerate rate @6% p.a.. | It is evident from the Petitioner's submission that the claim is for replacement of equipment as considered necessary for the functioning of plant. In view of this, the additional capital expenditure claimed is allowed. Further the Petitioner has also submitted gross block of the asset as Rs. 37.16 lakh and the same has been considered as de-capitalization. | 90.74 |
| Total amount claimed | 99.58 | | | |
| Total amount allowed | | | | 90.74 |



(b) Claims under Regulation 25(2)(b) of the 2019 Tariff Regulations*(Rs. in lakh)*

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|---|---|----------------|
| Purchase of Dry Type 500 KVA Transformer at Dam | 10.00 | As per regulation 44(2)(vii) of CEA, 2010 dry type transformer is required to placed inside a building/ indoor to avoid any fire hazards. This point has been raised by the safety audit conducted by National Institute of Industrial Safety during 29.01.2019 to 1.2.2019 (refer point no. 4 of 2of Dam site of audit report) as well as IMS Audit. Hence to replace the existing oil type transformer this item is proposed to procure and capitalized in 2021-22. | It is evident that the additional capital expenditure claimed is in compliance to the existing law (CEA Regulations, 2010), the additional capital expenditure claimed is allowed . The de-capitalization of Rs. 2.18 lakh as submitted by the Petitioner has been considered. | 10.00 |
| Total amount claimed | 10.00 | | | |
| Total amount allowed | | | | 10.00 |

(c) Claims under Regulation 25(2)(c) of the 2019 Tariff Regulations*(Rs. in lakh)*

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|--|--|----------------|
| Inverter, Capacity-10 kVA, Input - 110VDC, Output - 240V AC, Single Phase, 50HZ | 7.67 | This is a replacement item. The existing item was capitalized during 2007 along with commissioning of 390 MW power Plant. Two no. Inverters were provided for supplying un-interrupted Power Supply to the SCADA (Supervisor Control and Data Acquisition) System of Power house. Presently one inverter is not in working condition. Item being of foreign origin, its spare parts are not available in India, hence its beyond economical repair, so needs to be replaced with new one. After replacement with new one, the Power Station will have two inverters for supplying un-interrupted power supply to the SCADA System which will increase the reliability and smooth function of Power Plant. The gross value of existing asset is not available. Derived original value of the asset is Rs 3.14 lakh considering the de-accelerate rate @6% p.a . | It is evident from the Petitioner's submission that the claim is for replacement of equipment as considered necessary for functioning of plant. In view of this, the additional capital expenditure claimed is allowed . Further the Petitioner has also submitted gross block of the asset as Rs. 3.14 lakh and the same has been considered as de-capitalization. | 7.67 |



| | | | |
|----------------------|------|--|------|
| Total amount claimed | 7.67 | | |
| Total amount allowed | | | 7.67 |

(d) Claims under Regulation 26(1)(b) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|---|---|----------------|
| Construction of Treatment plant for drinking water and distribution system in Semna and Shalimar colony | 100.00 | The expenditure has already been allowed by the Commission during 2018-19. The delay in execution is due to the time taken for testing of water samples and firming up the technical specification of LOA. | It is noticed that the additional capital expenditure with respect to construction of Treatment Plant for drinking water & distribution system and Construction of sewerage treatment plant in Semna and Shalimar colony were allowed during 2014-19 tariff period vide order dated 30.8.2016 in Petition No. 231/GT/2014 based on the reason that these expenditure were allowed during 2009-14 tariff period vide order dated 30.5.2011 in Petition No. 60/2010. As the Commission had already allowed additional capital expenditure claimed for these assets/works during two tariff periods as stated above, we find no reason to allow the additional expenditure claimed by the Petitioner. | 0.00 |
| Construction of sewerage treatment plant at Semna & Shalimar colony | 70.00 | The expenditure has already been allowed by Commission during 2016-17 and 2018-19. Total Expenditure allowed by Hon'ble Commission under this head in 2014-19 period was Rs 500 lakhs (Rs 180 lakhs in 16-17 and Rs 320 lakhs in 2018-19). An amount of Rs 420.93 lakhs has been capitalized in 2016-17 (Refer Item no 3 of Form 9A) and 2017-18 (Refer item no 5 of form 9A). The work could not be completed in the stipulated time period. Now the following works have been taken up which are in the tendering stage:- (i) Construction of plant building for installation of STP of 80 KLD near Hospital and laying of sewerage pipeline for collection of savage in Chenab Nagar Sector-II & III, DPS Kishtwar (Rs. 58.82 Lakh), (ii) Providing, installation and commissioning of Sewage Treatment Plant capacity 80 KLD near Hospital, DPS Kishtwar (Rs. 36.96 Lakh). (iii). Providing, installation and commissioning of Sewage Treatment Plant capacity 20 KLD at Tamruchi (Dam site), DPS Kishtwar (Rs. 14.45 Lakh) (iv) Civil construction of works of STP 20 KLD capacity, building, tank etc. and laying sewerage pipeline upto STP building, DPS Kishtwar. (Rs. 26.95 Lakh) | | 0.00 |
| Total amount claimed | 170.00 | | | |
| Total amount allowed | | | | 0.00 |



(e) Claims under Regulation 26(1)(d) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|---|--|----------------|
| Construction of quarter guard for CISF Unit at Semna | 100.07 | It is intimated that Quarter is a major component of security system in every CISF Unit which is a central Armoury/Store of Arms, Ammunition and other ordinance items. The existing quarter guard is located very near to the National Highway, Shalimar Colony which is not a safe location for security point of view. The security agency CISF has demanded time and again to relocate the same to a safe location. Therefore, by considering reports of security agencies a new quarter guard is proposed at Semna Colony which a quiet safe location. After vacating the existing quarter guard, it will be used as bachelor accommodation/transit camp for CISF. The work of this item was awarded on 10.4.2019 for Rs. 100.07 Lakh and is expected to be capitalised in FY 2021-22. | 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 |
| Construction of permanent boundary wall of Semna and Shalimar colony | 40.00 | The Petitioner has submitted that Barbered 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 It is submitted that an amount of Rs. 288.78 has been capitalized during the 2014-19. However the complete area could not be covered and there are still places where security wall is required as per recommendations of the security agency following are the areas where the security wall needs to be developed:- 1. Construction of boundary wall right bank near timber hut and CISF observation post and A-Coy area at Shalimar. 2. Construction of permanent boundary wall on right bank of nallah from back side of club to STP at Shalimar, DPS Kishtwar. 3. Boundary wall around Hospital Building and increasing the height with concertina coil for security and installation of steel gate at main entry | It is noticed that the additional capital expenditure for the asset/ work was allowed vide order dated 30.8.2016 in Petition No. 231/GT/2014 for Rs. 27.04 lakh and Rs. 90.00 lakh during 2014-15 and 2015-16 based on the recommendation of IB. Further the Commission has approved expenditure of Rs. 150 lakh during 2009-14 for this asset/work. As the Commission had already allowed additional capital expenditure claimed for this asset/works during the earlier tariff periods as stated | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|--|---|----------------|
| | | of Shalimar Colony 4.Strengthening and raising of boundary wall on back side and construction of permanent boundary wall on left side of DSB Colony . 5.Peripheral development work of 250 KWp Solar plant area near OM Mehta Gate no.2 etc. 6.Strengthening and raising of boundary wall on periphery of Type-C, backside of type-B quarter and Construction of permanent boundary wall alongwith C-0 type quarter, in front of CVPP office . | above, we find no reason to allow the additional expenditure claimed by the Petitioner. | |
| Construction of accommodation & security post/pucca morcha for CISF at Chenab Nagar, Shalimar & Tamruchi Dam site. | 20.00 | Dulhasti Power Station being located in militancy prone area. CISF put up its requirements for the new security post/ morcha on the basis of the recommendations coming up from the security survey by the security agencies . The work is taken up as and when requirement from CISF is received, hence as per the requirement/recommendations of security agency, for providing proper security to all the installations, following works have been awarded and are likely to be capitalized in FY 2020-21: 1.Construction of 02 No. Pucca morcha with toilet for CISF at Dam site DPS Kishtwar (Rs. 11.32 Lakh). Work awarded on 30.01.2019. 2.Construction of security Morcha near RO Plant DSB Colony, DSP Kishtwar, awarded on 1.01.2019 for Rs. 2.99 lakh, Following works are in tendering stage and are likely to be capitalized in FY 2021-22:- 1. Pucca Morcha at Chenab Nagar for Rs. 16.00 Lakh, 2. Pucca Morcha at Dul Dam site for Rs. 10.5 Lakh. | The expenditure incurred is related to the security and safety of the generating station as advised by CISF. The Petitioner has also furnished documentary evidence in support of the claim. In view of this, the expenditure claimed is allowed . | 20.00 |
| Construction of toilet blocks at Chenab Nagar, Shalimar & Tamruchi Dam site | 17.00 | Various barriers and security posts have been developed for security of DPS and security personnel operate in shift duty approximately 8 hours, there is no toilets for them, therefore new toilets are proposed to be constructed there. These toilets are essential for cleanliness and avoiding security lapse. | 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 |
| Total amount | 177.07 | | | |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|---|--------------------------|----------------|
| claimed | | | | |
| Total amount allowed | | | | 20.00 |

100. Based on the above, the total additional expenditure of Rs.128.41 lakh (Rs. 90.74 lakh + Rs.10.00 lakh +Rs.7.67 lakh + Rs.20.00 lakh) in 2021-22 is allowed.

Additional Capital Expenditure for 2022-23

101. The additional capital expenditure claimed under the provisions of Regulation 25 and Regulation 26 of the 2019 Tariff Regulations for Rs.575.00 lakh in 2022-23 is discussed below:

| | | | <i>(Rs. in lakh)</i> |
|---------|--|---|----------------------|
| Sl. No. | Regulations | | 2022-23 |
| 1 | 25(1)(a) | Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law | 375.00 |
| 2 | 26(1)(b) | Change in law or compliance of any existing law | 70.00 |
| 3 | 26(1)(d) | Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security | 130.00 |
| 4 | Total additional capital expenditure claimed as per Form 9A | | 575.00 |

(a) Claims under Regulation 25(1)(a) of the 2019 Tariff Regulations

| <i>(Rs. in lakh)</i> | | | | |
|------------------------------|---|---|---|----------------|
| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
| Payment of land compensation | 375.00 | The expenditure has already been allowed by Commission during 2017-18 at Land acquisition case for acquisition of land measuring 213 Kanal 13 marlas falling in Village Kavar Tanji for reservoir is under process wherein tentative compensation to the tune of Rs.258 .00 lakh has been assessed. Accordingly, provision for payment of actual compensation has been made. ii) Compensation of land measuring 20 kanal 01 marlas | The expenditure relates to R&R works of the generating station and is in compliance to the directions of the Court. The Petitioner has submitted that process of claim and objections are still going on. Since the process of claim and objection is in process, the expenditure on this | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|---|--|----------------|
| | | transferred from Horticulture Department is yet to be paid. Accordingly, provision of tentative compensation of 60.00 lacs has been made. iii) An amount of Rs.24.60 lakh is unpaid on account of cost of Government/ Shamhat land (Un-claimed/disputed cases) Accordingly provision for payment of compensation of unpaid amount has been made. In addition to above provision for payment of compensation in unforeseen cases has also been made. An amount of Rs. 350 lakh already deposited in 2015-16 on account of compensation against the total expected expenditure of Rs. 375 Lakh. Remaining payment will be made during 2022-23 will be capitalized in 2022-23. The matter has been taken up with the Collector (Land Acquisition / Assistant Commissioner (Revenue) Kishtwar to provide the details about utilization of the amount deposited. Last Letter in this regard was written on 27.4.2019 & 19.5.2019. The final award is yet to be issued by Collector, LA. The matter is being pursued regularly. | account is not allowed , pending finalisation/disposal of the matter. The Petitioner shall furnish documentary evidence/ final orders of court, if any, for consideration at the time of truing-up of tariff. | |
| Total amount claimed | 375.00 | | | |
| Total amount allowed | | | | 0.00 |

(b) Claims under Regulation 26(1)(b) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|---|---|----------------|
| Construction of sewerage treatment plant at Semna & Shalimar colony | 70.00 | The expenditure has already been allowed by Commission during 2016-17 and 2018-19 (Refer item no.3, page no.52 and item no 1, page 59 of order dtd. 30.8.2016 in petition no. 231/GT/2014. Total Expenditure allowed by Hon'ble Commission under this head in 2014-19 period was Rs 500 lakhs | It is noticed that the additional capital expenditure with respect to Construction of sewerage treatment plant in Semna and Shalimar colony was allowed during 2014-19 tariff period vide order | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|--|--|----------------|
| | | (Rs 180 lakhs in 16-17 and Rs 320 lakhs in 2018-19).An amount of Rs 420.93 lakhs has been capitalized in 2016-17 (Refer Item no 3 of Form 9A) and 2017-18 (Refer item no 5 of form 9A). The work could not be completed in the stipulated time period. Now the following works have been taken up which are in the tendering stage:- (i) Construction of plant building for installation of STP of 80 KLD near Hospital and laying of sewerage pipeline for collection of sewage in Chenab Nagar Sector-II & III,DPS Kishtwar (Rs. 58.82 Lakh), (ii) Providing, installation and commissioning of Sewage Treatment Plant capacity 80 KLD near Hospital , DPS Kishtwar (Rs. 36.96 Lakh). (iii).Providing , installation and commissioning of Sewage Treatment Plant capacity 20 KLD at Tamruchi (Dam site), DPS Kishtwar (Rs. 14.45 Lakh) (iv) Civil construction of works of STP 20 KLD capacity, building, tank etc. and laying sewerage pipeline upto STP building, DPS Kishtwar. (Rs. 26.95 Lakh) | dated 30.8.2016 in Petition No. 231/GT/2014 based on the reason that this expenditure was allowed during 2009-14 tariff period vide order dated 30.5.2011 in Petition No. 60/2010. As the Commission had already allowed additional capital expenditure claimed for this asset/work during two tariff periods as stated above, we find no reason to allow the additional expenditure claimed by the Petitioner. | |
| Total amount claimed | 70.00 | | | |
| Total amount allowed | | | | 0.00 |

(c) Claims under Regulation 26(1)(d) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|--|---|----------------|
| Actual additional capitalization against admitted items | | | | |
| Construction of permanent boundary wall of Semna and Shalimar colony | 100.00 | The Petitioner has submitted that Barbered 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 | It is noticed that the additional capital expenditure for the asset/work was allowed vide order dated 30.8.2016 in Petition No. 231/GT/2014 for Rs. 27.04 lakh and Rs. 90.00 lakh during 2014-15 and 2015-16 based on the | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|--|---|---|--|-------------------|
| | | <p>manner It is submitted that an amount of Rs. 288.78 has been capitalized during the 2014-19. However the complete area could not be covered and there are still places where security wall is required as per recommendations of the security agency following are the areas where the security wall needs to be developed:-</p> <ol style="list-style-type: none"> 1. Construction of boundary wall right bank near timber hut and CISF observation post and A-Coy area at Shalimar. 2. Construction of permanent boundary wall on right bank of nallah from back side of club to STP at Shalimar, DPS Kishtwar. 3. Boundary wall around Hospital Building and increasing the height with concertina coil for security and installation of steel gate at main entry of Shalimar Colony 4. Strengthening and raising of boundary wall on back side and construction of permanent boundary wall on left side of DSB Colony . 5. Peripheral development work of 250 KWp Solar plant area near OM Mehta Gate no.2 etc. 6. Strengthening and raising of boundary wall on periphery of Type-C, backside of type-B quarter and Construction of permanent boundary wall alongwith C-0 type quarter, in front of CVPP office . | <p>recommendation of IB. Further the Commission had approved Rs. 150 lakh during 2009-14. As the Commission had already allowed the additional capital expenditure claimed for this asset/works during the earlier tariff periods as stated above, we find no reason to allow the additional expenditure claimed by the Petitioner.</p> | |
| Construction of accommodation & security post/pucca morcha for CISF at Chenab Nagar, Shalimar & Tamruchi Dam site. | 30.00 | Dulhasti Power Station being located in militancy prone area. CISF put up its requirements for the new security post/ morcha on the basis of the recommendations coming up from the security survey by the security agencies . The work is taken up as and when requirement from CISF is received, hence as per the requirement/recommendations of security agency, for providing proper security to all the installations, following works | The expenditure incurred is related to the security and safety of the generating station as advised by CISF. In view of this, the expenditure claimed is allowed . | 30.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|--|-----------------------------|-------------------|
| | | have been awarded and are likely to be capitalized in FY 2020-21: 1.Construction of 02 No. Pucca morcha with toilet for CISF at Dam site DPS Kishtwar (Rs. 11.32 Lakh). Work awarded on 30.01.2019 2.Construction of security Morcha near RO Plant DSB Colony, DSP Kishtwar, awarded on 1.01.2019 for Rs. 2.99 lakh, Following works are in tendering stage and are likely to be capitalized in FY 2021-22:- 1. Pucca Morcha at Chenab Nagar for Rs. 16.00 Lakh, 2. Pucca Morcha at Dul Dam site for Rs. 10.5 Lakh. | | |
| Total amount claimed | 130.00 | | | |
| Total amount allowed | | | | 30.00 |

102. Based on the above, the total additional expenditure of Rs.30.00 lakh in 2022-23 is allowed.

Additional Capital Expenditure for 2023-24

103. The additional capital expenditure claimed under the provisions of Regulation 25 and Regulation 26 of the 2019 Tariff Regulations for Rs.452.00 lakh is discussed below:

(Rs in lakh)

| Sl. No. | Regulations | | 2023-24 |
|---------|----------------------|---|---------------|
| 1 | 25(2)(a) | The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations | 75.00 |
| 2 | 25(2)(c) | The replacement of such asset or equipment is necessary on account of obsolescence of technology | 20.00 |
| 3 | 26(1)(d) | Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security | 357.00 |
| 4 | Total Claimed | | 452.00 |



(a) Claims under Regulation 25(2)(a) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|---|--|----------------|
| Replacement of water supply distribution line at Shalimar & Semna | 75.00 | Shalimar and Semna water supply pipeline project has been installed at the time of commission. Due to continuous use pipeline often gets damaged. This leads to heavy loss of water. This requires the installation of a new pipeline. By reducing the above loss, water supply can be facilitated. The replacement value will be made available after award of work and de-capitalization of the old item. The gross value of existing assets is not available. Derived original value of the asset is Rs 28.46 lacs considering the de-accelerate rate @6% p.a. | It is evident from the Petitioner's submission that the claim is for replacement of equipment is considered necessary for the functioning of plant. As the old asset has completed its useful life, the additional capitalization is for replacement of the old asset. In view of this, the additional capital expenditure claimed is allowed . | 75.00 |
| Total amount claimed | 75.00 | | | |
| Total amount allowed | | | | 75.00 |

(b) Claims under Regulation 25(2)(c) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|---|---|--|--|----------------|
| Purchase of Control Panel for SFT Gates | 20.00 | The existing panel is used for control, protection and operation of Silt Flushing Tunnel Gates as and when required, mostly during monsoon season to flushout the silt from the Desilting Chamber of Dam. The item was capitalized during 2007 along with commissioning of Power Plant. Presently its remote and automatic control functions are out of order due to heavy moisture inside the Silt Flushing Tunnel, only the local manual operation mode is functional, hence requires replacement for effective functioning. The new control panel will be beneficial in terms of automatic and remote operation of the SFT Gates in efficient and smooth operation. | It is evident from the Petitioner's submission that the claim is for replacement of equipment as considered necessary for the functioning of plant. As the old asset has completed its useful life, the additional capitalization is for replacement of the old asset. In view of this, the additional capital expenditure claimed is allowed . This is, however, subject to the Petitioner furnishing management certificate/ OEM certificate for obsolescence in support of its claim at the time of truing-up of tariff, failing which the expenditure will not be considered. Further | 20.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification submitted by the Petitioner | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|--|--|----------------|
| | | The gross value of existing assets is not available. Derived original value of the asset is Rs 7.59 lakh considering the de-accelerate rate @6% p.a. | the Petitioner has also submitted gross block of the asset as Rs. 7.59 lakh and the corresponding De-capitalization of Rs. 6.13 lakh which have been considered. | |
| Total amount claimed | 20.00 | | | 20.00 |
| Total amount allowed | | | | |

(c) Claims under Regulation 26(1)(d) of the 2019 Tariff Regulations

(Rs. in lakh)

| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification | Remarks on admissibility | Amount Allowed |
|--|---|---|--|----------------|
| Actual additional capitalization against admitted items | | | | |
| Construction of permanent boundary wall of Semna and Shalimar colony | 70.00 | The Petitioner has submitted that 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 It is submitted that an amount of Rs. 288.78 has been capitalized during the 2014-19. However the complete area could not be covered and there are still places where security wall is required as per recommendations of the security agency following are the areas where the security wall needs to be developed:- 1. Construction of boundary wall right bank near timber hut and CISF observation post and A-Coy area at Shalimar. 2. Construction of permanent boundary wall on right bank of nallah from back side of club to STP at Shalimar, DPS Kishtwar. 3. Boundary wall around Hospital Building and increasing the height with concertina coil for security and installation of steel gate at main entry of Shalimar Colony 4. Strengthening and raising of | It is noticed that the additional capital expenditure for the asset/work was allowed vide order dated 30.8.2016 in Petition No. 231/GT/2014 for Rs. 27.04 lakh and Rs. 90.00 lakh during 2014-15 and 2015-16 based on the recommendation of IB. Further the Commission has approved Rs. 150 lakh during 2009-14. As the additional capital expenditure claimed by the Petitioner is exceeds the expenditure limit of allowed vide order dated 30.8.2016 the same is not allowed . | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification | Remarks on admissibility | Amount Allowed |
|--|---|--|--|-------------------|
| | | boundary wall on back side and construction of permanent boundary wall on left side of DSB Colony . 5.Peripheral development work of 250 KWp Solar plant area near OM Mehta Gate no.2 etc. 6.Strengthening and raising of boundary wall on periphery of Type-C, backside of type-B quarter and Construction of permanent boundary wall alongwith C-0 type quarter, in front of CVPP office . | | |
| Construction of accommodation & security post/pucca morcha for CISF at Chenab Nagar, Shalimar & Tamruchi Dam site. | 32.00 | Dulhasti Power Station being located in militancy prone area. CISF put up its requirements for the new security post/ morcha on the basis of the recommendations coming up from the security survey by the security agencies . The work is taken up as and when requirement from CISF is received, hence as per the requirement/recommendations of security agency, for providing proper security to all the installations, following works have been awarded and are likely to be capitalized in FY 2020-21: 1.Construction of 02 No. Pucca morcha with toilet for CISF at Dam site DPS Kishtwar (Rs. 11.32 Lakh). Work awarded on 30.01.2019 2.Construction of security Morcha near RO Plant DSB Colony, DSP Kishtwar, awarded on 1.01.2019 for Rs. 2.99 lakh, Following works are in tendering stage and are likely to be capitalized in FY 2021-22:- 1. Pucca Morcha at Chenab Nagar for Rs. 16.00 Lakh, 2. Pucca Morcha at Dul Dam site for Rs. 10.5 Lakh. | The expenditure incurred is related to the security and safety of the generating station as advised by CISF. In view of this, the expenditure claimed is allowed . | 32.00 |
| Construction of footpath bridge on D/s of Dul Dam. | 255.00 | At present the local people of village Chandri which is situated on the right bank of the Dam are crossing from top of the Dam and this has been pointed out by security agency CISF/ IB for security reasons. IB Team on | Since the capitalization of additional capital expenditure is not related to the operation of the plant, the same is not allowed . The expenditure on account of this item may be | 0.00 |



| Head of Work/ Equipment | Actual additional capital expenditure claimed | Justification | Remarks on admissibility | Amount Allowed |
|-----------------------------|---|---|--------------------------|-------------------|
| | | their visit to NHPC project on 20/21-06-2014 suggested for alternate path for local people of Chandri village. Therefore to provide alternate path to the local villagers this bridge is proposed in the downstream of Dul Dam. With start of Pakkal Dul HE Project near Dul Dam, an alternate motorable path shall be constructed shortly up to the Surge Shaft of Pakal HEP which is closed to Chandri Village. | met from CSR . | |
| Total amount claimed | 357.00 | | | |
| Total amount allowed | | | | 32.00 |

104. Based on the above, the total additional expenditure of Rs.127 lakh (Rs.75.00 lakh + Rs.20.00 lakh + Rs.32.00 lakh) is allowed in 2023-24.

De-capitalization

105. The Petitioner has claimed the de-capitalization, as per Form 9Bi, as under:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|---------|---------|---------|---------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 473.62 | 88.95 | 46.98 | 0.00 | 36.05 |

106. The Petitioner has submitted the year of 'put to use' of the de-capitalized assets and accordingly, the de-capitalization value of the assets has been calculated. The total de-capitalization considered and allowed for the assets/works during the 2019-24 tariff period, as dealt with in the relevant paragraphs relating to the additional capital expenditure allowed as above, are summarized below:

| <i>(Rs in lakh)</i> | | | | |
|---------------------|---------|---------|---------|---------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 473.62 | 88.95 | 46.98 | 0.00 | 36.05 |

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

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



| | (Rs. in lakh) | | | | |
|---|---------------|---------------|--------------|--------------|--------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Additional capital expenditure allowed (a) | 1230.49 | 390.76 | 128.41 | 30.00 | 127.00 |
| Less: De-capitalisation considered (b) | 473.62 | 88.95 | 46.98 | 0.00 | 36.05 |
| Net additional capital expenditure allowed (c)=(a)-(b) | 756.87 | 301.81 | 81.43 | 30.00 | 90.95 |

Capital cost allowed

108. Accordingly, the capital cost allowed for the purpose of tariff for the 2019-24 tariff period is as under:

| | (Rs. in lakh) | | | | |
|--|------------------|------------------|------------------|------------------|------------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Opening Capital Cost | 522037.61 | 522794.48 | 523096.28 | 523177.71 | 523207.71 |
| Net Additional capital expenditure allowed during the year/ period | 756.87 | 301.81 | 81.43 | 30.00 | 90.95 |
| Closing Capital Cost | 522794.48 | 523096.28 | 523177.71 | 523207.71 | 523298.66 |

Debt-Equity Ratio

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

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

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

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in



support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt:equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

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

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

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

110. The Commission in its order dated 9.3.2010 in Petition No. 204/2009 relating to revision of tariff based on additional capital expenditure for the period 2007-09, had observed as under:

“24. The petitioner has stated that the additional capital expenditure has been financed through internal resources. As per the approved revised cost estimate (RCE-II) of the Govt. of India letter dated 22.8.2008, corresponding to an approved capital cost of ₹522849.00 lakh, the equity was frozen at ₹198668.67 lakh. The Commission in its order dated 30.11.2009 in Petition No. 72/2009 had allowed the equity of ₹198668.67 lakh on the date of commercial operation for the purpose of tariff. Accordingly, any additional capital expenditure incurred after the date of commercial operation, till the admitted capital cost becomes ₹522849.00 lakh, is to be considered as debt. After consideration of the admitted additional capital expenditure of ₹3188.55 lakh and ₹567.58 lakh during the year 2007-08 and 2008-09 respectively, the admitted capital cost for works out to ₹511037.92 lakh and ₹511605.50 lakh for the year 2007-08 and 2008-09 respectively, which is below the admitted capital cost of ₹522849.00 lakh. Accordingly, the admitted additional capital expenditure has been considered as debt for the purpose of tariff.”

111. In line with the above decision, the additional capital expenditure has been considered as debt up to RCE cost of Rs.522849.00 lakh. Further, the additional



capital expenditure beyond the RCE cost of Rs.522849.00 is considered in the normative debt equity ratio of 70:30.

Return on Equity

112. Regulations 30 and 31 of the 2019 tariff Regulations provide as under:

“30. Return on Equity

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

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

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

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

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

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

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

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

31. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the



transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess: Rate of return on equity = $15.50 / (1 - 0.2155) = 19.758\%$

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

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

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

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

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

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

113. The Return on Equity (ROE) for the existing asset base and additional capital expenditure allowed in this order for asset/work, within the original scope of work has been calculated by grossing up of base RoE at MAT rate of 17.472% as submitted by the Petitioner. Further, based on the additional capital expenditure which are beyond the original scope and allowed in this order, ROE has been calculated,



considering the weighted average rate of interest of the relevant year. Accordingly,

RoE has been worked out and allowed as under:

| | (Rs. in lakh) | | | | |
|--|------------------|------------------|------------------|------------------|------------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Opening Equity (A) | 198668.67 | 198668.67 | 198742.86 | 198761.28 | 198761.28 |
| Total addition due to Capitalization (B) | 0.00 | 100.87 | 38.52 | 9.00 | 38.10 |
| Addition due to additional capitalization within the original scope of work (C) | 0.00 | 100.87 | 32.52 | 0.00 | 28.50 |
| Addition due to de-capitalization (D) | 0.00 | 26.69 | 14.09 | 0.00 | 10.82 |
| Closing Equity (E)=[(A)+(C)-(D)] | 198668.67 | 198742.86 | 198761.28 | 198761.28 | 198778.97 |
| Average Equity (F)=[(A+E)/2] | 198668.67 | 198705.76 | 198752.07 | 198761.28 | 198770.13 |
| Base rate (%) (G) | 16.500% | 16.500% | 16.500% | 16.500% | 16.500% |
| Effective Tax rate (%) (H) | 17.472% | 17.472% | 17.472% | 17.472% | 17.472% |
| Effective ROE rate (%) (I) | 19.993% | 19.993% | 19.993% | 19.993% | 19.993% |
| Return on Equity within the original scope of work (J)=[(F)*(I)] | 39719.83 | 39727.24 | 39736.50 | 39738.34 | 39740.11 |
| Addition due to additional capitalization beyond original scope of work | | | | | |
| Opening Equity (J) | 0.00 | 0.00 | 0.00 | 6.00 | 15.00 |
| Addition due to Capitalization beyond scope of work (k)=[(B)-(C)] | 0.00 | 0.00 | 6.00 | 9.00 | 9.60 |
| Closing Equity (L)=[(J)+(K)] | 0.00 | 0.00 | 6.00 | 15.00 | 24.60 |
| Average Equity (M)=[(J+L)/2] | 0.00 | 0.00 | 3.00 | 10.50 | 19.80 |
| Rate of return for additional capitalization beyond original scope (i.e. weighted average rate of interest approved by the Commission) (%) (N) | 7.09% | 5.20% | 5.20% | 5.20% | 5.20% |
| Return on equity for additional capitalization beyond original scope (O)=[(M)*(N)] | 0.00 | 0.00 | 0.16 | 0.55 | 1.03 |
| Total Return on Equity (P)=[(O)+(I)] | 39719.83 | 39727.24 | 39736.66 | 39738.89 | 39741.14 |

Interest on Loan

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

“32. Interest on loan capital:

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



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

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

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

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered; Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest

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

115. The salient features for computation of interest on loan are summarized below:

- a) The gross normative loan has been considered as on 1.4.2019;
- b) Cumulative repayment as on 31.3.2019 has been considered;
- c) The repayment for the year of the 2019-24 tariff period has been considered equal to the depreciation allowed for that year;
- d) Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest as claimed by the Petitioner.

116. Accordingly, Interest on loan has been worked out as under:

| | <i>(Rs in lakh)</i> | | | | |
|--|---------------------|----------------|----------------|----------------|----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Gross opening loan (A) | 323368.94 | 324125.81 | 324353.43 | 324410.43 | 324431.43 |
| Cumulative repayment of loan up to previous year (B) | 307710.47 | 335032.82 | 340052.65 | 345079.11 | 350107.57 |
| Net Loan Opening (C)=[(A)-(B)] | 15658.48 | 0.00 | 0.00 | 0.00 | 0.00 |
| Repayment during the year (D) | 27322.36 | 227.62 | 57.00 | 21.00 | 63.67 |



| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|---------------|-------------|-------------|-------------|-------------|
| Cumulative repayment adjustment on a/c of de-capitalization (E)* | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Repayment (F)=[(D)-(E)] | 27322.36 | 227.62 | 57.00 | 21.00 | 63.67 |
| Addition due to additional capital expenditure (G) | 756.87 | 227.62 | 57.00 | 21.00 | 63.67 |
| Net Loan Closing (H)= (C+G-F) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Loan (I)=[(C+H)/2] | 7829.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| Weighted Average Rate of Interest of loan (J) | 7.09% | 5.20% | 5.20% | 5.20% | 5.20% |
| Interest on Loan (K)=(I*J) | 555.46 | 0.00 | 0.00 | 0.00 | 0.00 |

**The adjustment on account of de-capitalization shall be taken at the time of true up when the additional capitalization and de-capitalization gets firmed up.*

Depreciation

117. Regulation 33 of the 2019 Tariff Regulations provides as under:

“33. Depreciation:

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

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

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

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

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



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

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

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the assets.

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

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

118. Accordingly, the cumulative depreciation amounting to Rs.307709.47 lakh as on 31.3.2019, has been considered for the purpose of tariff. The COD of the generating station is 7.4.2007. The project has completed 12 years of commercial operation in 2019-20 and the remaining depreciable value has been spread over the balance useful life of the generating station from 2020-21 onwards. In terms of the 2014 Tariff Regulations, the useful life of a hydro generating station was 35 years. However, the 2019 Tariff Regulations stipulates that the useful life of a hydro generating station is 40 years. Accordingly, the balance useful life of the generating station as on 1.4.2019 has been considered as 28.02 years in line with the 2019 Tariff Regulations. Accordingly, depreciation has been computed as under:



(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|------------------|------------------|------------------|------------------|------------------|
| Opening Gross block (A) | 522037.61 | 522794.48 | 523096.28 | 523177.71 | 523207.71 |
| Net Additional capital expenditure during 2019-24 (B) | 756.87 | 301.81 | 81.43 | 30.00 | 90.95 |
| Closing gross block (C)=(A+B) | 522794.48 | 523096.28 | 523177.71 | 523207.71 | 523298.66 |
| Average gross block (D)=[(A+C)/2] | 522416.05 | 522945.38 | 523137.00 | 523192.71 | 523253.19 |
| Depreciable Value (E)=(D*90%) | 470174.44 | 470650.84 | 470823.30 | 470873.44 | 470927.87 |
| Remaining Depreciable Value at the beginning of the year (F)=[(E)-(Cum Dep at 'K' at the end of previous year)] | 162464.98 | 135619.02 | 130771.65 | 125795.33 | 120821.30 |
| Rate of Depreciation (G) | 5.23% | 0.96% | 0.96% | 0.96% | 0.96% |
| Balance useful Life (H) | 28.02 | 27.02 | 26.02 | 25.02 | 24.02 |
| Depreciation (I)=(D*G) | 27322.36 | 5019.83 | 5026.46 | 5028.46 | 5030.73 |
| Cumulative Depreciation at the end of the year (J)=[(I)+ (Cum Dep at 'K' at the end of previous year)]** | 335031.82 | 340051.65 | 345078.11 | 350106.57 | 355137.30 |
| Cumulative Depreciation at the end of the year (K)* | 335031.82 | 340051.65 | 345078.11 | 350106.57 | 355137.30 |

*Cumulative Depreciation as on 31.3.2019 is Rs. 307709.47 lakh

** The adjustment on account of de-capitalization shall be taken at the time of true up when the additional capitalization and de-capitalization gets firmed up.

Operation & Maintenance Expenses

119. Regulation 35(2)(a) of the 2019 Tariff Regulations provides as under:

(2) Hydro Generating Station: (a) Following operations and maintenance expense norms shall be applicable for hydro generating stations which have been operational for three or more years as on 1.4.2019:

(Rs. in lakh)

| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|-------------|----------|----------|----------|----------|----------|
| Dulhasti | 18563.04 | 19447.85 | 20374.84 | 21346.02 | 22363.49 |

xxxxxx"

120. The Petitioner has claimed O&M expenses for 2019-24 Tariff period as given below:

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|----------|----------|----------|----------|----------|
| Normative O&M expenses Regulation 35(2)(a) of the 2019 Tariff Regulations (a) | 18563.04 | 19447.85 | 20374.84 | 21346.02 | 22363.49 |
| Impact of pay revision of NHPC staff (b) | 2236.56 | 2343.24 | 2455.02 | 2572.12 | 2694.81 |
| Impact of pay revision of | 21.69 | 22.72 | 23.80 | 24.94 | 26.13 |



| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| KV Staff (c) | | | | | |
| Impact of Goods & Service Tax (d) | 897.34 | 940.15 | 984.99 | 1031.97 | 1081.20 |
| Total additional O&M Expenses (a+b+c+d) | 21718.63 | 22753.96 | 23838.65 | 24975.06 | 26165.63 |

121. As the Petitioner has claimed normative O&M expenses in accordance with Regulation 35(2)(a) of the 2019 Tariff Regulations as above, the same is allowed. However, as per note under Regulation 35(2)(a) of the 2019 Tariff Regulations impact in respect of revision of pay/wage and GST is also required to be considered at the time of determination of tariff for the 2019-24 tariff period. As per Para 10.7.4 of the Statement of Reasons to the 2019 Tariff Regulations, in case of hydro generating stations, the O&M expenses norms are provided for each of the generating stations in absolute terms, i.e. Rs.in lakh for each year. As it was not practicable to derive a common impact for all the hydro generating stations on account of employees pay revision, escalation in minimum wages and GST, it was decided that the impact on O&M expenses due to these components shall be considered for each hydro generating station separately at the time of their tariff petition for the 2019-24 tariff period. Accordingly, the allowable impact of pay revision and GST in addition to normative O&M expenses in accordance with Regulation 35(2)(a) of the 2019 Tariff Regulations are dealt in the following paragraphs.

Additional O&M expenses

122. The Petitioner has claimed additional O&M expenses on account of the impact of pay revision of NHPC staff and KV staff and impact of GST as under:



| Period | <i>(Rs. in lakh)</i> | | | | |
|--|----------------------|---------|---------|---------|---------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Impact of pay revision of NHPC staff (a) | 2236.56 | 2343.24 | 2455.02 | 2572.12 | 2694.81 |
| Impact of pay revision of KV Staff (b) | 21.69 | 22.72 | 23.80 | 24.94 | 26.13 |
| Impact of Goods & Service Tax (c) | 897.34 | 940.15 | 984.99 | 1031.97 | 1081.20 |

Impact of pay revision NHPC staff

123. The Petitioner has claimed Rs.2236.56 lakh in 2019-20 as additional O&M expenses due pay revision of the Petitioners staff, based on impact of pay revision of Petitioners staff during 2018-19. In this regard, it is pertinent to mention that in Petition No. 221/MP/2019 filed by the Petitioner seeking recovery of the additional O&M expenses for the generating station due to impact of wage/ pay revision for the 2014-19 tariff period, the Commission vide its order dated 13.11.2021 had allowed an amount of Rs. 2135.00 lakh as impact of wage revision during 2018-19. As such, the impact of wage revision in 2019-20 (after escalating @ 4.77% the above amount allowed in 2018-19) works out to Rs. 2236.84 lakh, which is almost same to the claim of the Petitioner in 2019-20. Accordingly, the claim of the Petitioner (for Rs 2236.56 lakh in 2019-20 is considered (being lower) and is thereafter escalated @4.77% per annum during the relevant years of the 2019-24 tariff period and allowed as additional O&M expenses due to pay revision of the Petitioner's staff.

Impact of pay revision of KV staff

124. As regards the claim of Petitioner towards the impact of pay revision of KV staff, it is pertinent to mention that the Commission in its order dated 13.11.2021 in Petition No. 221/MP/2019 (as stated above) had allowed an amount of Rs. 23.00 lakh as impact of wage revision of KV staff in 2018-19. As such, the impact of wage revision in 2019-20 (after escalating @ 4.77% on the above allowed amount in 2018-19) works out to Rs.24.10 lakh, which is more than the claim of the Petitioner in



2019-20. Accordingly, the claim of the Petitioner for Rs 23.00 lakh in 2019-20 is considered (being lower) and the same is thereafter escalated @4.77% per annum for the relevant years of the 2019-24 tariff period and is allowed as additional O&M expenses due to pay revision of KV staff.

Impact of Goods & Service Tax

125. The Petitioner has claimed impact of GST for the period 2019-24 on the basis of the actual impact of GST during 2018-19. The Petitioner has submitted the total GST amount of Rs.1327.15 lakh for the period from 1.7.2017 to 31.3.2019, based on actual audited accounts for 21 months (Rs.470.66 lakh in 2017-18 and Rs.856.49 lakh in 2018-19). On scrutiny of above of the details it is noticed that the claim of Petitioner includes impact of GST on security expenses. As per Regulation 35(2)(d) of the 2019 Tariff Regulations, security expenses shall be allowed separately after prudence check. As such, based on the actual audited GST for the period from 1.7.2017 to 31.3.2019, the same has been normalized (excluding impact on security expenses of Rs.1031.91 lakh) and amount of Rs.176.76 lakh has been worked out for 2019-20 (after escalating @ 4.77%). Accordingly, the base value of 2019-20 has been escalated @4.77% and GST impact has been worked out and allowed for the 2019-24 tariff period, as per note under Regulation 35(2)(a) of the 2019 Tariff Regulations as under:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|----------------|----------------|----------------|----------------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 176.76 | 185.19 | 194.02 | 203.27 | 212.97 |

Security Expenses

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

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

Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses, the details of year-wise actual capital



spares consumed at the time of truing up with appropriate justification.”

127. The Petitioner has also claimed Security expenses as part of O&M expenses in terms of clause 35(2)(d) of the 2019 Tariff Regulations. Further, the Petitioner has submitted that based on the actual security expenses incurred during 2018-19, year-wise escalation rate of 4.77% has been considered to arrive at the security expenses for the 2019-24 tariff period. Accordingly, the estimated security expenses claimed by the Petitioner are as under:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|----------------|----------------|----------------|----------------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 4469.83 | 4683.04 | 4906.42 | 5140.46 | 5385.66 |

128. The Petitioner has claimed actual security expenses of Rs.4266.33 lakh in 2018-19 and has escalated the same at the rate of 4.77% to work out the projected security expenses from 2019-20 onwards. Considering the security requirements of the generating station, we allow the projected security expenses as claimed by the Petitioner for the 2019-24 tariff period. The Petitioner is however, directed to submit the actual security expenses incurred, duly audited, at the time of truing up of tariff. Accordingly, the estimated security expenses allowed during 2019-24 has been allowed as under:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|----------------|----------------|----------------|----------------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 4469.83 | 4683.04 | 4906.42 | 5140.46 | 5385.66 |

Capital Spares

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



130. Accordingly, based on above the O&M expenses allowed for the generating station are as under:

| | (Rs. in lakh) | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Normative O&M expenses Regulation 35(2)(a) of the 2019 Tariff Regulations (a) | 18563.04 | 19447.85 | 20374.84 | 21346.02 | 22363.49 |
| Impact of pay revision of NHPC staff (b) | 2236.56 | 2343.24 | 2455.02 | 2572.12 | 2694.81 |
| Impact of pay revision of KV Staff (c) | 21.69 | 22.72 | 23.80 | 24.94 | 26.13 |
| Impact of Goods & Service Tax (d) | 176.76 | 185.19 | 194.02 | 203.27 | 212.97 |
| Total O&M Expenses allowed (a+b+c+d) | 20998.05 | 21999.00 | 23047.68 | 24146.35 | 25297.40 |
| Security Expenses allowed separately | 4469.83 | 4683.04 | 4906.42 | 5140.46 | 5385.66 |

Interest on Working Capital

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

“34. Interest on Working Capital: (1) The working capital shall cover

(c) For Hydro generating station (Including Pumped Storage Hydro Generating Station) and transmission system:

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expense including security expenses; and

(iii) Operation and maintenance expenses including security expenses for one month”

Working capital for Receivables

132. Receivable component of working capital has been worked out and allowed on the basis of 45 days of fixed cost as under:

| (Rs. in lakh) | | | | |
|---------------|---------|---------|---------|---------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 11703.92 | 9017.75 | 9168.26 | 9339.33 | 9492.21 |

Working capital for Maintenance Spares

133. Maintenance spares component of Working Capital has been worked out on the basis of 15% of annual O&M expenses and allowed as under:



| (Rs. in lakh) | | | | |
|---------------|---------|---------|---------|---------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 3820.18 | 4002.31 | 4193.12 | 4393.02 | 4602.46 |

Working capital for O&M expenses

134. O&M expenses component of Working Capital has been worked out on the basis of one month of O&M expenses including security expenses and allowed as under:

| (Rs. in lakh) | | | | |
|---------------|---------|---------|---------|---------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 2122.32 | 2223.50 | 2329.51 | 2440.57 | 2556.92 |

Rate of Interest of working Capital

135. Regulation 34(3) of the 2019 Tariff Regulations provides as under:

“34(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.” Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.”

136. In accordance with Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital considered on projection basis, for the 2019-24 tariff period is 12.05% (i.e. 1-year SBI MCLR of 8.55% as on 1.4.2019 + 350 basis points). As the tariff of the generating station for 2019-24 tariff period is being determined during 2022-23, SBI MCLR as on 1.4.2020 (7.75%) and as on 1.4.2021 (7.00%) is also available which is lower in comparison to the same, as on 1.4.2019 (8.55%). Since the rate of interest on working capital is subject to revision at the time of truing-up of tariff, based on the bank rate as on 1st April of each financial year, we find it prudent to allow the rate of interest as on 1.4.2020 and 1.4.2021, for the subsequent financial years. Accordingly, the rate of interest for the year 2019-20 is 12.05%, 2020-21 is 11.25% and for the subsequent years the rate of interest of 10.50% has



been considered (i.e. 1 year SBI MCLR of 7.75% as on 1.4.2020 + 350 basis points and 1 year SBI MCLR of 7.00% as on 1.4.2021 + 350 basis points).

137. Accordingly, Interest on working capital is allowed as under:

| | <i>(Rs. in lakh)</i> | | | | |
|--|----------------------|-----------------|-----------------|-----------------|-----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Working capital for O&M expenses (one month) | 2122.32 | 2223.50 | 2329.51 | 2440.57 | 2556.92 |
| Working capital for Maintenance Spares | 3820.18 | 4002.31 | 4193.12 | 4393.02 | 4602.46 |
| Working capital for Receivables | 11703.92 | 9017.75 | 9168.26 | 9339.33 | 9492.21 |
| Total Working capital | 17646.43 | 15243.56 | 15690.88 | 16172.92 | 16651.60 |
| Rate of interest (%) | 12.050 | 11.250 | 10.500 | 10.500 | 10.500 |
| Interest on Working capital for | 2126.39 | 1714.90 | 1647.54 | 1698.16 | 1748.42 |

Annual Fixed Charges

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

| | <i>(Rs. in lakh)</i> | | | | |
|-----------------------------|----------------------|-----------------|-----------------|-----------------|-----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Depreciation | 27322.36 | 5019.83 | 5026.46 | 5028.46 | 5030.73 |
| Interest on loan | 555.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| Return on Equity | 39719.83 | 39727.24 | 39736.66 | 39738.89 | 39741.14 |
| O&M Expenses | 20998.05 | 21999.00 | 23047.68 | 24146.35 | 25297.40 |
| Security Expenses | 4469.83 | 4683.04 | 4906.42 | 5140.46 | 5385.66 |
| Interest on Working capital | 2126.39 | 1714.90 | 1647.54 | 1698.16 | 1748.42 |
| Total | 95191.92 | 73144.01 | 74364.76 | 75752.32 | 77203.35 |

Normative Annual Plant Availability Factor (NAPAF)

139. Since NAPAF of 90% as claimed by the Petitioner is in accordance with Regulation 37(4) of the 2014 Tariff Regulations, the same is allowed.

Design Energy (DE)

140. The Commission in its order dated 30.5.2011 in Petition No.60/2010 had approved the annual Design Energy (DE) of 1907 Million units for the period 2009-14 in respect of this generating station. This DE has been considered for this generating station for the period 2019-24 as per month-wise details as under:



| Months | Design Energy (MU) |
|---------------|---------------------------|
| April | 110.7 |
| May | 230.3 |
| June | 266.7 |
| July | 275.6 |
| August | 275.6 |
| September | 261.3 |
| October | 134.5 |
| November | 84.0 |
| December | 73.4 |
| January | 64.3 |
| February | 55.6 |
| March | 74.6 |
| Total | 1907 |

Application Fee and Publication Expenses

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

142. Similarly, RLDC fees & charges paid by the Petitioner in terms of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch Centre and other related matters) Regulations, 2015, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled recovery of statutory taxes, levies, duties, cess etc. levied by the statutory authorities in accordance with the 2014 Tariff Regulations.

Summary

143. The annual fixed charges claimed and allowed for the 2014-19 tariff period are summarized below:



| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------------------|----------------|----------------|----------------|----------------|----------------|
| Annual fixed charges claimed | 95828.91 | 95130.63 | 93818.35 | 93018.76 | 92184.35 |
| Annual fixed charges allowed | 95381.22 | 94767.77 | 93746.47 | 92569.27 | 91627.14 |

144. The annual fixed charges claimed and allowed for the 2019-24 tariff period are summarized below:

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|
| Annual fixed charges claimed* | 91644.94 | 69481.33 | 70647.44 | 71875.39 | 73159.42 |
| Annual fixed charges allowed | 95191.92 | 73144.01 | 74364.76 | 75752.32 | 77203.35 |

**Security Expenses not included in above claim, however the same have been claimed and allowed separately, so the same is included in the Annual fixed charges allowed amount indicated in the above table.*

145. Annexure-I and Annexure-II attached herewith form part of this order.

146. Petition No. 146/GT/2020 is disposed of in terms of the above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I. S. Jha)
Member

Sd/-
(P. K. Pujari)
Chairperson



Annexure I: Weighted average rate of Depreciation for the period 2014-19

| Sl. No. | Name of the Assets ¹ | Gross Block as on 31.03.2014 | Gross Block as on 31.03.2015 | Gross Block as on 31.03.2016 | Gross Block as on 31.03.2017 | Gross Block as on 31.03.2018 | Gross Block as on 31.03.2019 | Depreciation Rates as per CERC's Depreciation Rate Schedule | Depreciation Amount for 31.03.2014 | Depreciation Amount for 31.03.2015 | Depreciation Amount for 31.03.2016 | Depreciation Amount for 31.03.2017 | Depreciation Amount for 31.03.2018 | Depreciation Amount for 31.03.2019 | |
|---------|---|------------------------------|--|------------------------------|------------------------------|------------------------------|------------------------------|---|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|----------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9=Col.2XCol.8 | 10=Col.3XCol.8 | 11=Col.4XCol.8 | 12=Col.5XCol.8 | 13=Col.6XCol.8 | 14=Col.7XCol.7 | |
| 1 | Land – Freehold | 410101 | 0 | 0 | 0 | 0 | 0 | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2 | Land – Leasehold | 410111 | 35814893 | 3,58,14,893 | 3,58,14,893 | 3,58,14,893 | 3,88,14,893 | 3.34% | 11,96,217 | 11,96,217 | 11,96,217 | 11,96,217 | 12,96,417 | 12,96,417 | |
| 3 | Roads and Bridges | 4102 | 112747134 | 12,06,14,558 | 12,91,28,076 | 14,01,90,573 | 15,48,26,868 | 3.34% | 37,65,754 | 40,28,526 | 43,12,878 | 46,82,365 | 51,71,217 | 51,71,217 | |
| 4 | Buildings Others | 4103 | 126778309 | 14,33,40,972 | 15,70,43,034 | 16,71,08,194 | 20,35,77,626 | 3.34% | 42,34,396 | 47,87,588 | 52,45,237 | 55,81,414 | 67,99,493 | 67,99,312 | |
| 5 | INTERNAL ELECTRIFICATION WORK -BUILDINGS-OTHERS | 4104 | 0 | 0 | 0 | 45,005 | 45,005 | 6.33% | 0 | 0 | 0 | 0 | 2,849 | 2,849 | |
| 6 | Building containing GPM | 410301,410303 | 2445977419 | 2,45,38,35,096 | 2,45,38,35,096 | 2,45,38,35,096 | 2,45,38,35,096 | 3.34% | 8,16,95,646 | 8,19,58,092 | 8,19,58,092 | 8,19,58,092 | 8,19,58,092 | 8,19,58,092 | |
| 7 | BUILDINGS-TEMPORARY | 410305, | 2888711 | 28,88,711 | 28,88,711 | 28,88,711 | 2,45,23,466 | 100% | 28,88,711 | 28,88,711 | 28,88,711 | 28,88,711 | 2,45,23,466 | 2,80,35,981 | |
| 8 | Railway sidings | 4105 | 0 | 0 | 0 | 0 | 0 | 5.28% | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9 | Hydraulic Works (Dams, Water Conductor system, Hydro mechanical gates, tunnels) | 4106 | 29650191336 | 29,65,50,74,720 | 29,66,48,83,861 | 29,69,42,84,161 | 29,73,41,64,789 | 5.28% | 1,56,55,30,103 | 1,56,57,87,945 | 1,56,63,05,868 | 1,56,78,58,204 | 1,56,99,63,901 | 1,56,99,63,901 | |
| 10 | Generating Plant and machinery | 4107 | 19682123699 | 19,70,38,66,983 | 19,80,81,21,924 | 19,89,03,59,384 | 19,89,18,70,120 | 5.28% | 1,03,92,16,131 | 1,04,03,64,177 | 1,04,58,68,838 | 1,05,02,10,975 | 1,05,02,90,742 | 1,05,96,35,605 | |
| 11 | Plant and machinery Sub station | 4108 | 7776092 | 77,76,092 | 1,04,77,773 | 1,04,77,773 | 1,12,04,522 | 5.28% | 4,10,578 | 4,10,578 | 5,53,226 | 5,53,226 | 5,91,599 | 5,91,599 | |
| 12 | Plant and machinery Transmission lines | 4109 | 56690987 | 5,66,90,987 | 5,73,15,928 | 5,73,15,928 | 5,73,15,928 | 5.28% | 29,93,284 | 29,93,284 | 30,26,281 | 30,26,281 | 30,26,281 | 30,33,699 | |
| 13 | Plant and machinery Others | 4110 | 4469493 | 44,69,493 | 53,42,930 | 56,15,685 | 91,49,049 | 5.28% | 2,35,989 | 2,35,989 | 2,82,107 | 2,96,508 | 4,83,070 | 4,83,070 | |
| 14 | Construction Equipment | 4111 | 37616014 | 3,95,68,653 | 3,95,68,653 | 7,48,20,110 | 7,50,18,029 | 5.28% | 19,86,126 | 20,89,225 | 20,89,225 | 39,50,502 | 39,60,952 | 39,60,926 | |
| 15 | Water Supply System / Drainage and Sewerage | 4112 | 58899006 | 7,41,69,927 | 8,49,95,070 | 12,30,49,795 | 12,94,47,857 | 3.34% | 19,67,227 | 24,77,276 | 28,38,835 | 41,09,863 | 43,23,558 | 43,38,805 | |
| 16 | Electrical installations | 4114 | 0 | 0 | 0 | 0 | 0 | 5.28% | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17 | Vehicles | 4115 | 18592816 | 1,94,30,599 | 1,92,16,298 | 2,06,40,665 | 1,90,20,803 | 9.50% | 17,66,318 | 18,45,907 | 18,25,548 | 19,60,863 | 18,06,976 | 17,97,621 | |
| 18 | Aircraft/ Boats | 4116 | 389875 | 3,89,875 | 3,89,875 | 3,89,875 | 3,89,875 | 9.50% | 37,038 | 37,038 | 37,038 | 37,038 | 37,038 | 25,200 | |
| 19 | Furniture and fixture | 4117 | 10996689 | 1,14,21,055 | 1,20,89,167 | 1,26,69,062 | 1,34,12,637 | 6.33% | 6,96,090 | 7,22,953 | 7,65,244 | 8,01,952 | 8,49,020 | 8,62,428 | |
| 20 | Computers | 4118 | 20116241 | 1,40,12,105 | 1,59,31,488 | 1,30,87,986 | 1,46,33,508 | 15.00% | 30,17,436 | 21,01,816 | 23,89,723 | 19,63,198 | 21,95,026 | 23,57,956 | |
| 21 | NETWORKING DEVICES & SERVER | 411806 | 0 | 88,77,182 | 89,25,645 | 89,25,645 | 91,87,147 | 15.00% | 0 | 13,31,577 | 13,38,847 | 13,38,847 | 13,78,072 | 15,24,030 | |
| 22 | Communication Equipment | 4119 | 3146026 | 34,15,141 | 49,35,801 | 50,92,500 | 56,39,418 | 6.33% | 1,99,143 | 2,16,178 | 3,12,436 | 3,22,355 | 3,56,975 | 3,56,975 | |
| 23 | Office Equipments | 4120 | 20815346 | 2,11,00,314 | 2,11,92,214 | 2,31,22,994 | 2,43,13,559 | 6.33% | 13,17,611 | 13,35,650 | 13,41,467 | 14,63,686 | 15,39,048 | 9,67,085 | |
| 24 | OFFICE EQUIPT- AIR CONDITIONER | 412008 | 559345 | 6,87,932 | 7,85,032 | 8,31,032 | 10,11,532 | 9.50% | 53,138 | 65,354 | 74,578 | 78,948 | 96,096 | 9,65,219 | |
| 25 | Research and Development | 4121 | 0 | 0 | 0 | 0 | 0 | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | |
| 26 | Computer Software | 4122 | 2041929 | 20,41,929 | 20,41,929 | 20,41,929 | 21,63,812 | 15.00% | 3,06,289 | 3,06,289 | 3,06,289 | 3,06,289 | 3,24,572 | 3,24,572 | |
| 27 | Other assets | 4125 | 20537382 | 2,25,31,757 | 2,66,81,696 | 2,89,82,329 | 3,73,48,945 | 6.33% | 13,00,016 | 14,26,260 | 16,88,951 | 18,34,581 | 23,64,188 | 33,70,826 | |
| 28 | Capital Expenditure on assets Not Owned by NHPC | 4126 | 0 | 0 | 0 | 0 | 0 | 0.00% | 0 | 0 | 0 | 0 | 0 | 0 | |
| 29 | Tangible Assets of minor value >750 and < 5000 | 4128 | 2699323 | 28,41,531 | 33,04,489 | 37,98,516 | 47,44,231 | 5.28% | 1,42,524 | 1,50,033 | 1,74,477 | 2,00,562 | 2,50,495 | 2,54,769 | |
| 30 | | | | | | | | | | | | | | | |
| | TOTAL | | 52,32,18,68,065 | 52,40,48,60,505 | 52,56,49,09,583 | 52,77,53,42,836 | 52,91,56,58,715 | | 2,71,49,55,766 | 2,71,87,56,664 | 2,72,68,20,115 | 2,73,66,20,678 | 2,76,35,89,145 | 2,77,80,69,153 | |
| | | | Weighted Average Depreciation Rate (%) of depreciation | | | | | | | 5.1890% | 5.1880% | 5.1875% | 5.1854% | 5.2226% | 5.2303% |



Annexure II: Weighted average rate of Depreciation for 2019-24 period

| Sl. No. | Name of the Assets ¹ | Gross Block as on 31.03.2019 | Depreciation Rates as per CERC's Depreciation Rate Schedule | Depreciation Amount for 31.03.2019 | |
|---------|---|------------------------------|---|------------------------------------|-----------------------|
| 1 | | 2 | 3 | 4=Col.2XCol.3 | |
| 1 | Land – Freehold | 410101 | 0 | 0.00% | 0 |
| 2 | Land – Leasehold | 410111 | 3,88,14,893 | 3.34% | 12,96,417 |
| 3 | Roads and Bridges | 4102 | 15,48,26,868 | 3.34% | 51,71,217 |
| 4 | Buildings Others | 4103 | 20,33,02,740 | 3.34% | 67,90,312 |
| 5 | INTERNAL ELECTRIFICATION WORK - BUILDINGS-OTHERS | 4104 | 45,005 | 6.33% | 2,849 |
| 6 | Building containing GPM | 410301,410303 | 2,45,38,35,096 | 3.34% | 8,19,58,092 |
| 7 | BUILDINGS-TEMPORARY | 410305, 410326 | 2,80,35,981 | 100% | 2,80,35,981 |
| 8 | Railway sidings | 4105 | 0 | 5.28% | 0 |
| 9 | Hydraulic Works (Dams, Water Conductor system, Hydro mechanical gates, tunnels) | 4106 | 29,73,41,64,789 | 5.28% | 1,56,99,63,901 |
| 10 | Generating Plant and machinery | 4107 | 20,06,88,56,148 | 5.28% | 1,05,96,35,605 |
| 11 | Plant and machinery Sub station | 4108 | 1,12,04,522 | 5.28% | 5,91,599 |
| 12 | Plant and machinery Transmission lines | 4109 | 5,74,56,418 | 5.28% | 30,33,699 |
| 13 | Plant and machinery Others | 4110 | 91,49,049 | 5.28% | 4,83,070 |
| 14 | Construction Equipment | 4111 | 7,50,17,529 | 5.28% | 39,60,926 |
| 15 | Water Supply System / Drainage and Sewerage | 4112 | 12,99,04,328 | 3.34% | 43,38,805 |
| 16 | Electrical installations | 4114 | 0 | 5.28% | 0 |
| 17 | Vehicles | 4115 | 1,89,22,328 | 9.50% | 17,97,621 |
| 18 | Aircraft/ Boats | 4116 | 2,65,267 | 9.50% | 25,200 |
| 19 | Furniture and fixture | 4117 | 1,36,24,462 | 6.33% | 8,62,428 |
| 20 | Computers | 4118 | 1,57,19,704 | 15.00% | 23,57,956 |
| 21 | NETWORKING DEVICES & SERVER | 411806 | 1,01,60,200 | 15.00% | 15,24,030 |
| 22 | Communication Equipment | 4119 | 56,39,418 | 6.33% | 3,56,975 |
| 23 | Office Equipments | 4120 | 1,52,77,805 | 6.33% | 9,67,085 |
| 24 | OFFICE EQUIPT- AIR CONDITIONER | 412008 | 1,01,60,200 | 9.50% | 9,65,219 |
| 25 | Research and Development | 4121 | 0 | 0.00 | 0 |
| 26 | Computer Software | 4122 | 21,63,812 | 15.00% | 3,24,572 |
| 27 | Other assets | 4125 | 5,32,51,602 | 6.33% | 33,70,826 |
| 28 | Capital Expenditure on assets Not Owned by NHPC | 4126 | 0 | 0.00% | 0 |
| 29 | Tangible Assets of minor value >750 and < 5000 | 4128 | 48,25,162 | 5.28% | 2,54,769 |
| 30 | | | | 0.00% | 0 |
| | TOTAL | | 53,11,46,23,326 | | 2,77,80,69,153 |
| | Weighted Average Depreciation Rate (%) of depreciation | | | | 5.2303% |

