Order

on

True up for FY 2019-20,

Annual Performance Review for FY 2020-21

&

ARR for FY 2021-22

For

M/s Greenko Budhil Hydro Power Pvt. Ltd.

April 26, 2021

Uttarakhand Electricity Regulatory Commission

Vidyut Niyamak Bhawan, Near I.S.B.T., P.O. Majra

Dehradun – 248171

Table of Contents

LIST OF TABLES

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No.: 17 of 2021

In the Matter of:

Petition filed by M/s Greenko Budhil Hydro Power Pvt. Ltd. for true-up of AFC for FY 2019-20, Annual Performance Review for FY 2020-21 and Annual Fixed Charges for FY 2021-22 for Budhil Hydro Station.

In the Matter of:

M/s Greenko Budhil Hydro Power Pvt. Ltd.
Plot No. #1366, Road no. 45,
Jubliee Hills, Hyderabad-500033 ...Petitioner

AND

In the Matter of:

Uttarakhand Power Corporation Ltd
Urja Bhawan, Kanwali Road, Dehradun ...Respondent

Coram

Shri D.P. Gairola **Member (Law)**

Shri M.K. Jain **Member (Technical)**

Date of Order: April 26, 2021

Section 64(1) read with Section 61 and 62 of the Electricity Act, 2003 (hereinafter referred to as "the Act") requires the Generating Companies and the Licensees to file an application for determination of tariff before the Appropriate Commission in such manner and along with such fee as may be specified by the Appropriate Commission through Regulations.

In accordance with the relevant provisions of the Act, the Commission had notified

Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011 for the first Control Period from FY 2013-14 to FY 2015-16 and Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 (hereinafter referred to as "UERC Tariff Regulations, 2015") for the second Control Period from FY 2016-17 to FY 2018-19 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued the Tariff Order dated 30.11.2016 on approval of Business Plan and Multi Year Tariff for the Petitioner from 01.12.2015 to 31.03.2016 and for the second Control Period from FY 2016-17 to FY 2018-19. In accordance with the provisions of UERC Tariff Regulations, 2015, the Commission had carried out the Annual Performance Review (APR) for FY 2017-18 and FY 2018-19 vide its Tariff Orders dated 21.03.2018 and 27.02.2019.

Further, in accordance with the relevant provisions of the Act, the Commission had notified the Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018 (hereinafter referred to as "UERC Tariff Regulations, 2018") for the third Control Period from FY 2019-20 to FY 2021-22 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued the Tariff Order dated 27.02.2019 on approval of Business Plan and Multi Year Tariff for the third Control Period from FY 2019-20 to FY 2021-22. Subsequently, in accordance with the provisions of UERC Tariff Regulations, 2018, the Commission carried out APR for FY 2019-20 vide its Tariff Order dated 18.04.2020. As per the provisions of Regulation 12 of the UERC Tariff Regulations, 2018, M/s Greenko Budhil Hydro Power Pvt. Ltd. (hereinafter referred to as "M/s GBHPPL" or "the Petitioner" or "the Generator") filed the Petition (Petition No. 17 of 2021 and hereinafter referred to as "Petition"), giving details of its revised projections of Aggregate Revenue Requirement (ARR) for FY 2021-22, based on the true up for FY 2019-20 and APR for FY 2020-21 on 07.01.2021.

It was observed from the Petition filed by M/s GBHPPL that the Petition had certain infirmities/deficiencies which were informed to the Petitioner vide Commission's letter no. UERC/6/TF-601/2020-21/2021/1172 dated 18.01.2021 and the Petitioner was directed to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. M/s GBHPPL vide its reply dated 27.01.2021 removed the critical deficiencies. Based on the submission dated 27.01.2021 made by M/s GBHPPL, the Commission provisionally admitted the Petition for further processing subject to the condition that M/s GBHPPL shall furnish any further information/clarifications as deemed necessary by the Commission during the processing of the Petition, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

This Order, accordingly, relates to the Petition filed by M/s GBHPPL for true up for FY 2019-20, APR for FY 2020-21 and revised ARR for FY 2021-22 and is based on the Petition as well as all the subsequent submissions made by M/s GBHPPL during the course of the proceedings and the relevant findings contained in the Tariff Order dated 18.04.2020.

Tariff determination being the most vital function of the Commission, it has been the practice of the Commission to elaborate in detail the procedure and to explain the underlying principles in determination of tariffs. Accordingly, in the present Order also, in line with past practices, the Commission has tried to elaborate the procedure and principles followed by it in determining the ARR of the generator. The ARR of M/s GBHPPL is recoverable from the beneficiary, i.e. UPCL. It is the endeavour of the Commission, to issue Tariff Orders for M/s GBHPPL concurrently with the issue of Order on retail tariffs for UPCL, so that UPCL is able to honour the payment liability towards generation charges of M/s GBHPPL. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

Chapter 1 -	Background and Procedural History
Chapter 2 -	Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2019-20
Chapter 3-	Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2020-21
Chapter 4-	Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on ARR for FY 2021-22

1 Background and Procedural History

M/s GBHPPL is a company incorporated under the Companies Act, 1956. M/s GBHPPL is a generating company falling within the definition under sub-section 28 of Section 2 of the Act and has developed a 70 MW (2x35 MW) Hydro Electric power project. The Petitioner had executed a Power Purchase Agreement (PPA) for 70 MW capacity with the distribution licensee, i.e. UPCL and had initiated scheduling of power w.e.f. 01.12.2015. The Petitioner had filed a Petition for determination of tariff for supply of power from its aforesaid hydroelectric power plant (hereinafter referred to as "Project" or "Plant") to UPCL from 01.12.2015 to 31.03.2016 and second Control Period from FY 2016-17 to FY 2018-19. The Commission based on the information submitted by the Petitioner had approved a provisional tariff of Rs. 4.00 per unit to be recovered by the Petitioner from UPCL till determination of final tariff by the Commission.

Subsequently, the Commission vide its Order dated 30.11.2016 had approved the Business Plan and Multi Year Tariff for M/s GBHPPL for contracted capacity from 01.12.2015 to 31.03.2016 and for the second Control Period from FY 2016-17 to FY 2018-19. The Commission, on the approval of the Business Plan, approved the Capital Expenditure Plan, Capitalisation Plan, Human Resource Plan and Trajectory of the performance parameters and, in the approval of Multi Year Tariff (MYT), approved the Aggregate Revenue Requirement (ARR) for each year of the second Control Period from FY 2016-17 to FY 2018-19. Subsequently, the Commission had carried out the true up of FY 2015-16 & FY 2016-17 and approved the ARR for FY 2018-19 vide Tariff Order dated 21.03.2018. Further, the Commission had carried out the true up of FY 2017-18 and approved the Business Plan and ARR for each year of the third Control Period from FY 2019-20 to FY 2021-22 vide its MYT Order dated 27.02.2019. Thereafter, the Commission had carried out the true-up for FY 2018-19 and approved ARR for FY 2020-21 vide Tariff Order dated 18.04.2020. In accordance with Regulation 12 of the UERC Tariff Regulations, 2018, the Generating Company is required to file a Petition for Annual Performance Review by November 30 of every year. M/s GBHPPL, vide letter dated 27.11.2020 requested the Commission to grant time extension till 31.12.2020, for filing of the True up Petition in compliance with Regulation 12 of UERC Tariff Regulations, 2018. The Commission vide letter no. UERC/6/TF-601/2020-21/2020/968 dated 03.12.2020 accepted the request of the Petitioner partly and granted the time extension till 18.12.2019 for filing of the Petition.

In compliance with the Regulations, M/s GBHPPL filed its Petition for Annual Performance Review for FY 2020-21 on 07.01.2021. Through the above Petition, M/s GBHPPL sought true up for FY 2019-20, APR for FY 2020-21 and ARR for FY 2021-22 based on the audited accounts for FY 2019-20 and requested the Commission for condonation of delay in filing of the Petition which was granted to the Petitioner. The Commission vide its letter no. UERC/6/TF-601/2020-21/2021/1172 dated 18.01.2021 informed the Petitioner that the Petition had certain deficiencies/data gaps and directed the Petitioner to rectify the said deficiencies in the Petition and it was required to submit certain additional information necessary for admission of the Petition. M/s GBHPPL vide its submission dated 27.01.2021 removed the critical deficiencies. Based on the submission dated 27.01.2021 made by M/s GBHPPL, the Commission provisionally admitted the Petition. This Order, accordingly, relates to the Petition filed by M/s GBHPPL for true up for FY 2019-20, APR for FY 2020-21 and revised ARR for FY 2021-22 and is based on the Petition as well as all the subsequent submissions made by M/s GBHPPL during the course of the proceedings and the relevant findings contained in the Tariff Order dated 27.02.2019 and dated 18.04.2020.

In order to provide transparency to the process of tariff determination and give UPCL an opportunity to submit their objections/suggestions/comments on the proposals of M/s GBHPPL, the Commission sent the copy of the tariff Petition to UPCL vide letter no. UERC/6/TF-601/2020-21/2021/1256 dated 09.02.2021. However, the Commission has not received any objections/ suggestions/comments from UPCL in this regard till the date of Order. Further, the Petitioner raised certain objections on the methodology followed by SLDC for verification of the Declared Capacity of the plant. The same has been dealt in the subsequent paragraphs of this Tariff Order.

The submissions made by M/s GBHPPL in the Petition as well as additional submissions have been discussed by the Commission at appropriate places in the Order along with the Commission's views on the same.

2 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2019-20

Regulation 12 of the UERC Tariff Regulations, 2018 specifies as follows:

"12. Annual Performance Review

(1) Under the multi-year tariff framework, the performance of the Generating Company or Transmission and Distribution Licensees or SLDC, shall be subject to an Annual Performance Review.

(2) The Applicant shall under affidavit and as per the UERC (conduct of Business) Regulations 2004 make an application for Annual Performance Review by November 30th of every year;

…

(3) The scope of the Annual Performance Review shall be a comparison of the performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of following:

a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;

b) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors).

c) Revision of estimates for the ensuing financial year, if required, based on audited financial results for the previous financial year;

d) Computation of the sharing of gains and losses on account of controllable factors for the previous year"

In its present filing, the Petitioner has submitted the data relating to its expenses and revenues for FY 2019-20 for the contracted capacity of the generating station based on the audited accounts and has, accordingly, requested the Commission to carry out the truing up for FY 2019-20 alongwith the sharing of gains and losses.

2.1 Impact of Sharing of Gains and Losses on account of Controllable Factors for FY 2019-20

Regulation 14 of the UERC Tariff Regulations, 2018 specifies as follows:

"14. Sharing of Gains and Losses on account of Controllable factors:

The approved aggregate gain and loss to the Applicant on account of controllable factors shall be dealt with in the following manner:

(a) 1/3rd of such gain or loss shall be passed on as a rebate or allowed to be recovered in tariffs over such period as may be specified in the Order of the Commission;

(b) The balance amount of such gain or loss may be utilized or absorbed by the Applicant."

The above referred Regulation requires a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenues subject to prudence check including pass through of the impact of uncontrollable factors.

O&M expenses comprises of the major portion of AFC of M/s GBHPPL and are within the control of the Petitioner and, moreover, in accordance with UERC Tariff Regulations, 2018 these are controllable expenses. Similarly, in accordance with the applicable Tariff Regulations, the variation in working capital requirements is also a controllable factor. Hence, the sharing of gains and losses has been carried out for these expenses. The capital related expenses like interest on loans, depreciation etc. have been treated as uncontrollable and, hence, no sharing of losses or gains of the same has been carried out.

2.1.1 Physical Parameters

2.1.1.1 NAPAF

The Commission vide its Order dated 28.12.2016 on approval of PPA for the Petitioner's plant approved the NAPAF, in accordance with Regulation 3(54) of the UERC Tariff Regulations, 2018, as follows:

""Normative Availability" or "Target Availability" Or Normative Annual Plant Availability Factor (NAPAF) shall mean Eighty Five (85%) Availability of aggregate Contracted Capacity at the Delivery Point on Contract Year Basis. However, UPCL may vary the Availability Factor on monthly basis as required by

UPCL but maintaining the NAPAF at 85% yearly basis."

As per the prevailing UERC Tariff Regulations, NAPAF is 85% for the hydro plant of the Petitioner. Further, the Commission vide its Multi Year Tariff Order dated 27.02.2019 had also fixed the NAPAF of 85% for the third Control Period from FY 2019-20 to FY 2021-22 in accordance with the Regulations. Relevant extract of the said Order is as follows:

"Further, the Petitioner has submitted that proposed additional capitalisation for the third Control Period shall enable it to maintain NAPAF as per UERC Tariff Regulations, 2018, i.e. 85%. Accordingly, the Commission is of the view that the NAPAF of 85% approved in the Tariff Order dated 30.10.2016 for second Control Period shall continue to be applicable for the third Control Period without any change in accordance with the Regulations."

Hence, the Commission is of the view that the NAPAF of 85% approved for the Control Period in Multi Year Tariff Order dated 27.02.2019 shall continue to be applicable without any change for FY 2019-20.

2.1.1.2 Design Energy and Saleable Primary Energy

The Commission in its Tariff Order dated 27.02.2019 on approval of Business Plan and Multi Year Tariff for the third Control Period from FY 2019-20 to FY 2021-22 had approved the Design Energy of 283.54 MUs in accordance with the MYT Regulations, 2018 after making necessary adjustment for mandatory discharge of water. Further, the Commission, in accordance with the implementation agreement signed by the Petitioner with GoHP and normative auxiliary consumption @ 1.20% for the under-ground stations had approved the saleable energy for the project as 246.52 MUs for the first 12 years from CoD and 229.71 MUs for the balance life of the project. The Commission decides to consider the design energy and saleable primary energy as considered in the Tariff Order dated 30.11.2016 and 27.02.2019 for the project.

2.1.2 Financial Parameters

2.1.2.1 Capital Cost

Regulation 21 (2) of UERC Tariff Regulations, 2018 specifies as under:

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

a) The capital cost admitted by the Commission prior to 01.04.2019 duly trued up as on

01.04.2019;

b) *Additional capitalisation and de-capitalisation for the respective year of tariff as determined in accordance with Regulation 22; and*

c) *Expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulations 23."*

The Petitioner has claimed Opening GFA amounting to Rs. 528.51 Crore as on 01.04.2019. The Commission, vide its Tariff Order dated 18.04.2020, had approved the Opening GFA and net additional capitalisation amounting to Rs. 525.81 Crore and Rs. 2.71 Crore respectively for FY 2018-19 for the Petitioner's plant. Accordingly, the Commission has considered the approved closing capital cost, i.e. Rs. 528.51 Crore (Rs. 525.81 Crore plus Rs. 2.71 Crore) for FY 2018-19 as opening GFA for the purpose of truing up for FY 2019-20.

2.1.2.2 Additional Capitalisation

With regard to Additional Capitalisation for FY 2019-20, Regulation 22 of UERC Tariff Regulations, 2018 specifies as under:

"(1) The following capital expenditure within the original scope of work actually incurred or projected to be incurred after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

a. *Undischarged liabilities;*

b. *Works deferred for execution;*

c. *Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 21(11);*

d. *Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*

e. *On account of change in law.*

Provided that the details included in the original scope of work along with estimates of expenditure, deferred liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.

(2) The capital expenditure of the following nature actually incurred 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 order or decree of a court;

b. Change in law;

c. Works deferred for execution within the original scope of work;

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

e. Any additional capital expenditure which has become necessary for efficient operation of generating station 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;

f. In case of hydro generating stations, any additional 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), including due to geological surprises, after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;

Provided that additional capitalisation on this account would only be allowed if appropriate and adequate insurance cover was available at the time of occurrence of natural calamities referred to above;

g. xxx

h. xxx

(3) ..."

The Petitioner has claimed additional capitalisation of Rs. 3.12 Crore for FY 2019-20 which reconciles with the audited annual accounts for FY 2019-20. Details of the same are given in the Table below:

Table 2.1: Details of Additional Capitalisation claimed for FY 2019-20 (Rs. Crore)

S. No.	Description	Amount	Justification
1	Submersible pump	0.06	Earlier centrifugal pumps were being used for powerhouse drainage water dewatering. The centrifugal pumps required priming from the bottom with foot valves. They undergo more wear & tear and power consumption is also higher compared to the submersible pumps. The existing Centrifugal pumps have aged and needs to be replaced. Submersible Pumps were found to be more suitable from the above-mentioned point of view and have been, therefore, procured.
2	500 kVA transformer	0.09	The Auxiliary Transformer got damaged and had to be replaced. The amount has been claimed though insurance which is under process.
3	Cladding work with pre-painted CGI sheets in PH	0.06	There is enough space from column to column at service bay floor that can be used for storage of small spares and consumables. Cladding is done with proper opening arrangement and racks. In addition to this, aesthetic look of power plant cavern improves.
4	Hydraulic Breaker for Spider Excavator	0.12	The Hydraulic Breaker is an attachment to the Spider Excavator procured and capitalized in FY 2018-19. The Strata of excavation generally comprises Boulders and rocky strata, and at times it is not possible to use explosives for blasting for carrying out the excavation. At such places the Breaker is used to disintegrate the boulders and rocky strata. The muck/ debris is then collected for disposal by the Spider excavator.
5	Thrust Collar for Unit # 1	2.37	During the annual maintenance, misalignment i.e. rocking of Thrust Head was observed. In view of this misalignment and shim provided in Generator Turbine coupling that is beyond permissible limits, Unit#1 was being operated at a restricted load of 107%. The vibration level of the machine also went beyond the ISO standard level while in operation. Alignment expert intimated that there might be a problem in thrust collar and runner disc mating and had advised to do the machining of the mating part of Thrust Collar and Runner Disc. Budhil power plant is situated in a very remote location and there is no workshop available nearby that can execute this highly specialized machine job. Further, the time required to complete this job would be more than 3-4 months excluding transportation time etc. if it is sent for machining and surface mating. The unit may remain under shutdown for one season leading to generation loss of 100-125 MUs. Keeping in view the above facts, it was advised by the alignment expert to procure a new thrust collar, runner disc & other allied parts from the OEM and replace these components at site so that the unit can be put in operation in 10-15 days.
6	Supply, erection, testing & commissioning of Excitation panel with recommended spares	0.41	The present available Excitation system is procured from China and is also outdated. Therefore, finding spare components for the same was getting difficult. In addition, no spare was available for existing panel at site. Therefore, a new and updated model of Excitation system with spare was procured.
7	Furniture and fixtures	0.02	Furniture for Budhil HEP.
	Total	**3.12**	

With regard to the additional capitalisation incurred for FY 2019-20, the Petitioner submitted that it has claimed additional capitalisation under Regulation 22(2) of UERC Tariff Regulations, 2018. The Petitioner also submitted that the project has been in operation for about 9 year and requires strengthening of its civil structure and electrical equipments. The plant is being exposed to geological stresses and, accordingly, needs to be strengthened at regular intervals. The Petitioner also submitted that in order to ensure the efficiency, safety and continuous operation of the plant, the additional capitalisation was required to be incurred.

It is pertinent to mention that the Commission vide its Tariff Order dated 18.04.2020 had not approved any projected additional capitalisation for FY 2019-20 as at that time works were in initial stage or PO/WO were yet to be awarded for the execution of proposed works. Accordingly, the Commission had directed the Petitioner to provide proper justification for the additional capitalisation in accordance with Regulation 22(2) of the UERC Tariff Regulations, 2018 duly substantiated with the technical justification and supported by the documentary evidence carried out by an independent agency at the time of truing up for FY 2019-20.

The Petitioner submitted the Purchase Orders/Work Orders, invoices raised by the vendor alongwith the report of the independent agency in support of the additional capitalisation incurred for FY 2019-20. The Commission has examined the findings and suggestions of the report submitted by the independent agency for the purpose of allowance of additional capitalisation.

The Commission observed that 'Centrifugal pumps', 'Thrust Collar & its allied parts', '500 kVA Transformer' and 'Excitation Panel' have been replaced by the Petitioner due to ageing/damage of the assets. However, no accounting entry for disposal/de-capitalisation was made in the audited books of accounts for FY 2019-20. Accordingly, the Commission directed the Petitioner to submit the accounting treatment of the replaced assets along with the book value at the time of capitalization alongwith year of capitalization and funding pattern. The Petitioner vide its reply dated 03.03.2021 expressed its inability to provide the requisite information for the said assets stating that Budhil HEP was an acquired project and project's due diligence & takeover was carried out considering a different cost accounting perspective based on underlying contracts for executing Civil, Electro-mechanical and Hydro-mechanical works and was not based on component-wise cost. Further, these replaced assets will be stored as spares to be used under emergency conditions.

In the matter, it is pertinent to mention that as per Regulation 21(5)(a) of UERC Tariff

Regulations, 2018 any asset forming part of the project but not in use shall be excluded or removed from the capital cost of the project for the purpose of determination of tariff. Accordingly, the Commission once again directed the Petitioner to submit the accounting treatment of old/replaced afore-mentioned assets alongwith book value at the time of capitalisation, year of capitalisation and depreciation charged till date of replacement. In reply, the Petitioner reiterated its statement regarding non availability of information and based on certain assumption like, CPI and WPI, worked out the cost of replaced assets as on CoD. The Commission does not find it prudent to consider the cost worked out based on CPI and WPI. Further, if any of the assets is to be used as spare, the same should be transferred to stock account and not capitalised. It is to be noted that the Petitioner has admitted that the aforesaid assets have been replaced. However, no accounting entry has been made for the same. If the same practice is followed by the Petitioner in the future years also, GFA would not show the true and fair picture of the value of the assets in the books of accounts. Accordingly, in the absence of actual book value as on date of capitalisation, the Commission is of the view to consider the books value of the replaced assets equivalent to the cost of newly acquired assets.

Based on the above discussion, details of the trued-up capital cost for FY 2019-20 is as follows:

Table 2.2: Approved Gross Fixed Assets for FY 2019-20 (Rs. Crore)

S. No.	Particular	Opening GFA	Addition	De-capitalisation	Closing GFA
1.	Freehold Land	0.87	0.00	0.00	0.87
2.	Leasehold Land	7.18	0.00	0.00	7.18
3.	Buildings	60.54	0.00	0.00	60.54
4.	Other Civil Works	226.10	0.00	0.00	226.10
5.	Hydraulic Mechanical Works	31.72	0.00	0.00	31.72
6.	Plant & Machinery	200.84	3.108	(2.926)	201.02
7.	Vehicles	0.32	0.00	0.00	0.32
8.	Furniture and Fixtures	0.24	0.016	0.00	0.26
9.	Office Equipment	0.62	0.00	0.00	0.62
10.	Computers	0.06	0.00	0.00	0.06
11.	Computer Software	0.01	0.00	0.00	0.01
	Total	**528.51**	**3.12**	**(2.93)**	**528.71**

2.1.2.3 Capital Structure

Regulation 24 of UERC Tariff Regulations, 2018 specifies as under:

"24. Debt-Equity Ratio

(1) For a project declared under commercial operation on or after 1.4.2019, debt-equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as normative loan. Where actual equity employed is less than 30%, the actual equity would be used for determination of Return on Equity in tariff computations.

...

...

(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 service in the matter specified in Regulation 22 and 23 of these Regulations.

(6) In case of Generating Company, Transmission Licensee, Distribution Licensee, or SLDC where investments have been made prior to 1.4.2019, Debt: Equity Ratio shall be as approved by the Commission in the previous Order."

The Commission vide its Tariff Order dated 18.04.2020 had approved a Debt-Equity ratio of 70:30 as on 31.03.2019 which has been considered in the present Petition also. Further, as per the submissions of the Petitioner, entire capitalisation for FY 2019-20 has been done through equity/internal accruals only. Hence, in accordance with the aforesaid Regulations, the amount of equity for the purpose of tariff determination has been limited to 30% and equity in excess of 30% has been considered as normative loan for the purpose of determination of tariff. Further, the Commission has considered the funding pattern of the replaced as approved by the Commission as on CoD, i.e. 70:30.

Accordingly, based on the above discussion, capital structure of Opening & Closing GFA and addition and deletion in GFA for FY 2019-20 is as follows:

Table 2.3: Financing for capitalisation for FY 2019-20

Particular	Opening capital structure as on 01.04.2019		Addition during the year		De-capitalisation during the year		Closing capital structure as on 31.03.2020	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	369.95	70.00	2.19	70.00	(2.05)	70.00	370.08	70.00
Equity	158.56	30.00	0.94	30.00	(0.88)	30.00	158.62	30.00
Total	**528.51**	**100.00**	**3.12**	**100.00**	**(2.93)**	**100.00**	**528.71**	**100.00**

2.1.2.4 *Depreciation*

Regulation 28 of the UERC Tariff Regulations, 2018 specifies as follows:

"28. Depreciation

(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

Provided that depreciation shall not be allowed on assets funded through Consumer Contribution and Capital Subsidies/Grants.

(2) 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.

...

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix - II to these Regulations.

..."

The Petitioner submitted that the depreciation has been charged at the rates specified by the Commission in UERC Tariff Regulations, 2018 for FY 2019-20. The Petitioner has claimed depreciation of Rs. 26.37 Crore for FY 2019-20.

It is pertinent to mention that the Commission in its Tariff Order dated 30.11.2016 had considered additional capitalisation pertaining to Foundation work, grouting, works for De-silting chamber, Head Race Tunnel, Road to dam etc. under the head of 'Other civil works' in accordance with the Regulations and had worked out the depreciation accordingly. Further, as discussed under Para 2.1.2.2 of this Order, the Commission has deducted the cost of replaced assets from the Gross Fixed Assets considering the book value equivalent to the newly acquired assets for the computation of depreciation in the absence of original cost of those assets. Accordingly, allowable depreciation works out to Rs. 26.58 Crore for FY 2019-20 based on the UERC Tariff Regulations, 2018.

Details of depreciation as approved in the Tariff Order, claimed by the Petitioner and trued up for FY 2019-20 is as follows:

Table 2.4: Depreciation for FY 2019-20 (Rs. Crore)

Particular	Approved in Tariff Order dated 27.02.2019	Claimed	Approved
Depreciation	26.44	26.37	26.58

2.1.2.5 *Return on Equity (RoE)*

Regulation 26 of the UERC Tariff Regulations, 2018 specifies as follows:

"26. Return on Equity

(1) Return on equity shall be computed on the equity base determined in accordance with Regulation 24.

Provided that, Return on Equity shall be allowed on account of allowed equity capital for the assets put to use at the commencement of each financial year.

(2) Return on equity shall be computed on at the base rate of 15.50% for thermal generating stations, transmission licensee, SLDC and run of the river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations and run of river generating station with pondage and distribution licensee on a post-tax basis."

The Petitioner has claimed Return on Equity amounting to Rs. 26.16 Crore for FY 2019-20 and requested the Commission to consider the RoE based on average equity contribution at beginning and at the end of the year as on a cumulative basis since the currently followed ROE calculation methodology is having detrimental effect on the developer's finances. The Petitioner submitted that additional capitalisation is done during the financial year. However, no return is allowed on the same as the Regulations allows RoE on the Equity balance in the beginning of the financial year. By this methodology, the RoE on the additional capitalisation during the year is foregone by the Petitioner.

With respect to the request of the Petitioner for allowing RoE on average equity, the Commission rejects the same on the ground that the request of the Petitioner amounts to amendment of the Tariff Regulations and any such amendment of Regulations requires a separate procedure given under Section 181 of the Electricity Act, 2003 and which cannot be dealt in the current Petition as the same has been filed for determination of ARR for FY 2021-22 based on true up of FY 2019-20 and APR of FY 2020-21 and prevalent Regulations. The Petitioner is advised to submit its comments separately before the Commission as and when the Commission issues draft

UERC Tariff Regulations for the fourth Control Period.

As per the aforesaid Regulations, the Commission has allowed Return on Equity at the rate of 16.50% on the opening admissible normative equity of Rs. 158.56 Crore which works out to Rs. 26.16 Crore for FY 2019-20 in accordance with Regulation 26 of UERC Tariff Regulations, 2018. Details of the Return on Equity claimed and trued up is as follows:

Table 2.5 : Return on Equity for FY 2019-20 (Rs. Crore)

Particular	Approved in Tariff Order dated 27.02.2019	Claimed	Approved
Return on Equity	26.03	26.16	26.16

2.1.2.6 *Interest on Loans*

Regulation 27 of the UERC Tariff Regulations, 2018 specifies as follows:

"27. Interest and finance charges on loan capital and on Security Deposit

(1) The loans arrived at in the manner indicated in Regulation 24 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 year of the Control Period shall be deemed to be equal to the depreciation allowed for that year

...

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

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 or the distribution system or SLDC, 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 or the Distribution Licensee or SLDC 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.

…"

The Petitioner submitted that for the purpose of the calculation of interest on loan, normative debt has been considered as 70% of additional capitalisation and, accordingly, it has claimed interest on normative loan as Rs. 21.04 Crore for FY 2019-20 for the purpose of truing up based on the weighted average rate of interest of 11.00% p.a., i.e. interest rate of Non-Convertible debentures.

The Commission observed that the Petitioner has considered the net opening normative loan amounting to Rs. 203.36 Crore as on 01.04.2019 whereas the Commission vide Tariff Order dated 18.04.2020 had approved the net closing normative loan of Rs. 202.66 Crore as on 31.03.2019. The Commission has considered the approved net closing loan as on 31.03.2019 as net opening loan for FY 2019-20. Further, 70% of the additional capitalisation and decapitalisation approved for FY 2019-20 has been considered as addition/deletion to normative loan which works out to Rs. 2.19 Crore & Rs. 2.05 Crore respectively and repayment has been considered equivalent to admissible depreciation, i.e. Rs. 26.58 Crore. Hence, interest on normative loan works out to Rs. 20.84 Crore considering the interest rate @ 11.00% p.a.

Furthermore, it has been observed from the submission of the Petitioner that the Petitioner has considered Rs. 0.27 Crore pertaining to 'Bank & Other charges' as a part of A&G expenses as per audited annual accounts for FY 2019-20. However, the Commission is of the view that such expenses are part of finance charges. Accordingly, the amount of Rs. 0.27 Crore pertaining to Bank Charges for FY 2019-20, actually incurred by the Petitioner as per the audited accounts, has been allowed by the Commission as part of the finance cost of FY 2019-20 on actual basis.

Based on the above, details of the interest claimed and allowed during the truing up for FY 2019-20 is given in the Table below:

Table 2.6: Interest on Normative Loan for FY 2019-20 (Rs. Crore)

Particular	Approved in Tariff Order 27.02.2019	Claimed by Petitioner	Approved
Interest on Normative Loan	20.65	21.04	21.11*

**inclusive of bank charges actually incurred as per audited accounts.*

2.1.2.7 Operation & Maintenance (O&M) Expenses

2.1.2.7.1 Truing up of O&M Expenses for FY 2019-20

"48 Operation and Maintenance Expenses

...

(2) For Hydro Generating Stations

(a) ***For Generating Stations in operation for more than five years preceding the Base Year***

The operation and maintenance expenses for the first year of the control period will be approved by the Commission taking in to account the actual O&M expenses for last five years till base year, based on the audited balance sheets, excluding abnormal operation and maintenance expenses, if any, subject to prudence check and any other factors considered appropriate by the Commission.

(b) ***For Generating Stations in operation for less than 5 years preceding the base year:***

In case of the hydro electric generating stations, which have not been in existence for a period of five years preceding the base year, i.e. FY 2017-18, the operation and maintenance expenses for the base year of FY 2017-18 shall be fixed at 4% and 2.5% of the actual capital cost (excluding cost of rehabilitation & resettlement works) as admitted by the Commission, for stations less than 200 MW projects and for stations more than 200 MW respectively, for the first year of operation and shall be escalated from the subsequent year in accordance with the escalation principles specified in clause (e) below.

(c) ***For Generating Stations declared under commercial operation on or after 1.4.2019.***

In case of new hydro electric generating stations, i.e. the hydro electric generating stations declared under commercial operation on or after 1.4.2019, the base operation and maintenance expenses for the year of commissioning shall be fixed at 4% and 2.5% of the actual capital cost (excluding cost of rehabilitation & resettlement works) as admitted by the Commission, for stations less than 200 MW projects and for stations more than 200 MW respectively and shall be escalated from the subsequent year in accordance with the escalation principles specified in clause (e) below.

(d) Post determination of base O&M Expenses for the base year, i.e. FY 2017-18, the O&M expenses for the nth year and also for the year immediately preceding the Control Period, i.e. 2018-19 shall be approved based on the formula given below:-

O&Mn = R&Mn + EMPn + A&Gn

Where –

O&Mn – Operation and Maintenance expenses for the nth year;

EMPn – Employee Costs for the nth year;

R&Mn – Repair and Maintenance Costs for the nth year;

A&Gn – Administrative and General Costs for the nth year;

The above components shall be computed in the manner specified below:

EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)

R&Mn = K x (GFA n-1) x (1+WPIinflation) and

A&Gn = (A&Gn-1) x (1+WPIinflation)+ Provision

Where -

EMPn-1 – Employee Costs for the (n-1)th year;

A&G n-1 – Administrative and General Costs for the (n-1)th year;

Provision: Cost for initiatives or other one-time expenses as proposed by the Generating Company and approved by the Commission after prudence check.

'K' is a constant to be specified by the Commission %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on Generating Company's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

Provided that for the projects whose Renovation and Modernisation has been carried out, the R&M expenses for the nth year shall not exceed 4% of the capital cost admitted by the Commission.

CPIinflation – is the average increase in the Consumer Price Index (CPI) for immediately *preceding three years;*

WPIinflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;

GFAn-1 – Gross Fixed Asset of the Generating Company for the n-1th year;

Gn is a growth factor for the nth year and it can be greater than or less than zero based on the actual performance. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on Generating Company's filings, benchmarking and any other factor that the Commission feels appropriate

Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only.

Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only.

(e) O&M expenses determined in sub-Regulation 2(b) & 2(c) above, shall be escalated for subsequent years to arrive at the O&M expenses for the control period by applying the Escalation factor (EFk) for a particular year (Kth year) which shall be calculated using the following formula:

$$EF_k = 0.55xWPI_{Inflation} + 0.45xCPI_{Inflation}$$

(f) In case of multi-purpose hydroelectric stations, with irrigation, flood control and power components, the O&M expenses chargeable to power component of the station only shall be considered for determination of tariff."

The Petitioner has claimed O&M expenses amounting to Rs. 18.88 Crore for FY 2019-20 which reconciles with the audited annual accounts for FY 2019-20. The Commission carried out the prudence check of the actual O&M expenses incurred by the Petitioner for FY 2019-20. The actual details of O&M expenses for FY 2019-20 are given in the Table below:

Table 2.7: Actual O&M expenses for FY 2019-20 (Rs. Crore)

S. No.	Particulars	Amount
1.	Repairs & Maintenance Expenses	5.90
2.	Employee Expenses	8.05
3.	Administrative & General Expenses	4.93
	Total	**18.88**

The MTB's of FY 2019-20 was also examined to verify the claims of the Petitioner. The Petitioner has claimed an expense of Rs. 0.27 Crore under O&M expenses related to 'Bank & Other Charges' which has already been dealt under the head of 'Interest on Loans'. Further, the Petitioner has made a donation amounting to Rs. 0.086 Crore during FY 2019-20. The Commission is of the view that the same cannot be allowed to be passed on to the consumers of the State. Any such activity by the Petitioner must be carried out by its own resources as it would be claiming tax deductions on the same. Hence, the same is again disallowed. The Commission also observed that the Petitioner has incurred expenditure amounting to Rs. 0.005 Crore under the head of 'Sponsorship events'. In this regard, it is to be noted that such expenses have not been allowed in previous years tariff also as such expenses are to be met out of profit and cannot be allowed to be passed on to the consumers. Hence, the same is disallowed.

Further, the Commission observed that employee expenses have increased significantly from Rs. 5.17 Crore for FY 2018-19 to Rs. 8.05 Crore for FY 2019-20. In this regard, the Petitioner submitted that the actual O&M expenses have been incurred considering the optimized relevant man-power allocation working for the power plant as highlighted in the true-up Petition filed for FY 2018-19 and as a part of the rationalization certain team members (six) primarily involved in the overall management of Budhil plant have been additionally apportioned to Budhil manpower account. Further, these six members were allocated to the Budhil HEP in the last quarter of FY 2018-19, therefore, part salary was charged to Budhil HEP account. However, during FY 2019-20, entire salary has been charged to the Plant.

In the matter, it is to be noted that during the proceedings for determination of ARR for FY 2020-21, the Commission had decided to apportion the employee cost pertaining to these six employees based on the total operating capacity of the Greenko Group taking cognizance of the fact that six numbers of employees whose expenses have been completely allocated to the Budhil Plant were involved in other projects of the group company as well. Further, the Commission had also advised the Petitioner for allocation of indirect costs of the Group to the project based on some rationale as 100% of any indirect cost cannot be allocated to the project. The relevant extract of the Tariff Order dated 18.04.2020 is reproduced below:

"During the scrutiny of the submission, the Commission observed that the Petitioner allocated employee cost of six number of employees to the Budhil Plant. For the purpose of in-depth analysis of the employee

expenses, the Commission directed the Petitioner to submit employees' details w.r.t. designation and location alongwith joining details of the said six number of employees whose cost have been allocated to the Budhil Plant. From the submission of the Petitioner in the matter, the Commission observed that out of these six number of employees, three number of employees have already been working with the Greenko Group even prior to the acquisition of Budhil plant. Further, out of the remaining three employees, one employee was appointed as Advisor to advice the Greenko Group on Electricity Regulatory matter and on its power transmission business & guide the Group in expansion of business into Power Transmission, Distribution and Supply sectors. Similarly another person was recruited as Consultant by M/s Harsar Hydro Projects Pvt. Ltd., i.e. one of the subsidiary of Greenko Group. Accordingly, it can be concluded that these six number of employees whose expenses have been completely allocated to the Budhil Plant are involved in other projects of the group company as well. Accordingly, it would be injustice to load the entire employee cost of these six employees on the consumers of the State of Uttarakhand when they are providing services to other projects of the Greenko group also. Therefore, the Commission is of the view to apportion the employee cost pertaining to these six employees based on the total operating capacity of the Greenko Group. The Petitioner is advised that allocation of indirect costs of the Group to the project should be based on some rationale and 100% of any indirect cost cannot be allocated to the project. Accordingly, the actual O&M expenses of the Petitioner for FY 2018-19 after carrying out the prudence check by the Commission works out to Rs. 13.08 Crore."

With respect to the views of the Commission vide its Order dated 18.04.2020, regarding 'Employee Cost', the Petitioner submitted that manpower expenses of additional shared manpower including middle management to senior management, from departments such as Corporate finance and banking, Corporate accounts & Billing, Regulatory & Legal, Travel-desk, Insurance, Scheduling, Central Project monitoring team, Human Resources, Contracts & Procurement, Corporate communication, IT administration, etc., have not been allocated to Greenko Budhil Hydro Power Pvt Ltd even though, as obvious, they spend considerable time for operation & management of Budhil Hydro project. This was done to keep the manpower cost of Greenko Budhil to a minimum as it was estimated that man-power expenses allocation based on proportionate time & effort pertaining to Greenko Budhil hydro project would lead to much higher manpower expenses to the account of Greenko Budhil Hydro Power Pvt Ltd. This aspect was not considered while determination of employee expense in the Tariff Order dated 18.04.2020. The Petitioner requested the Commission that the actual man-power expenses for FY 2018-19 and FY 2019-20 as submitted in the instant Petition be approved.

The Commission does not find any reason to allocate entire employee cost of aforesaid six employees working at the headquarter of the Petitioner when they are involved in other business operations of the group company as was evident from their offer letters. In the matter, the Commission is of the view that it would be appropriate to apportion the indirect manpower cost deployed at headquarter level on the basis of operating capacity handled by Greenko group. Accordingly, the Commission directed the Petitioner to submit the manpower cost of the employees deployed at the headquarter level. The Petitioner vide email dated 12.04.2021 submitted the requisite details. In the Present Petition, the Commission has reworked the employee expenses allowed for FY 2018-19 and allowed the incremental cost on account of apportionment of indirect manpower cost deployed at headquarter level alongwith the O&M cost worked out for FY 2019-20. The actual O&M expenses of the Petitioner after carrying out the prudence check by the Commission works out to Rs. 17.03 Crore.

For the purpose of truing up of O&M expenses, the Commission has adopted the same methodology in the present Petition as adopted in previous Tariff Orders dated 27.02.2019 and 18.04.2020 for determination of normative O&M expenses. Accordingly, the escalation rates have been computed on the basis of actual CPI Inflation and WPI Inflation for FY 2019-20 which works out to 3.54% in accordance with Regulation 48(2)(e) of UERC Tariff Regulations, 2018. The Commission has escalated the O&M expenses approved for FY 2018-19, i.e. Rs. 13.90 Crore by the escalation factor to compute normative O&M expenses for FY 2019-20 which works out to Rs. 14.39 Crore. The detail of O&M expenses claimed and approved by the Commission is as follows:

Table 2.8: O&M expenses for FY 2019-20 (Rs. Crore)

Particular	Claimed	Actual after prudence check	Normative O&M expenses worked out
Normative O&M expenses	18.88	17.03	14.39

O&M expenses have been considered as controllable factor and are subject to sharing of gains and losses. Further, as the Commission has applied UERC Tariff Regulations, 2018 for the purpose of computation of normative O&M expenses, sharing of gain/loss on account of controllable factors needs to be done as per UERC Tariff Regulations, 2018. Accordingly, O&M expenses will have to be shared in the manner given in the Table below:

Table 2.9: O&M Expenses Approved After Sharing of Gains and Losses for FY 2019-20 (Rs. Crore)

Particulars	Actual after prudence check	Normative as per Regulations	Efficiency loss	Generator Share	Recovery through Tariff	O&M approved after sharing
	A	B	C=B-A	D=2/3xC	(E)=1/3xC	F= A+D
O&M Expenses	17.03	14.39	(2.64)	(1.76)	(0.88)	15.27

2.1.2.8 *Interest on Working Capital*

The Petitioner has submitted that it has availed interest free loans from Group Company to meet out the requirement of working capital and no actual expenditure has been incurred towards interest on working capital. The Petitioner has claimed Interest on Working Capital amounting to Rs. 2.64 Crore.

With respect to working capital and interest thereon for FY 2019-20, Regulation 33 of the UERC Tariff Regulations, 2018 specifies as under:

"33. Interest on Working Capital

Rate of interest on working capital shall be on normative basis and shall be equal to the State Bank Advance Rate (SBAR) of State Bank of India as on the date on which the application for determination of tariff is made.

(1) Generation:

...

b) In case of hydro power generating stations, working capital shall cover:

(i) Operation and maintenance expenses for one month;

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

(iii) Receivables equivalent to two months of annual fixed charges.

..."

2.1.2.9 *One Month O&M Expenses*

The Commission has trued up the annual O&M expense for FY 2019-20. Based on the approved O&M expenses, one month's trued up O&M expenses have been worked out for determining the working capital requirement.

2.1.2.10 Maintenance Spares

The Commission has considered the maintenance spares in accordance with the prevailing UERC Tariff Regulations for FY 2019-20. The Commission has determined the plant wise maintenance spares requirement @ 15% of the trued up O&M Expenses for FY 2019-20.

2.1.2.11 Receivables

UERC Tariff Regulations, 20185 envisage receivables equivalent to two months of annual fixed charges as an allowable component of working capital. Aggregate Revenue Requirement (AFC) includes O&M expenses, depreciation, interest on loan, return on equity and interest on working capital. The Commission has considered the receivables for two months based on the trued-up AFC for FY 2019-20.

With regard to the interest on working capital, Regulation 33 of UERC Tariff Regulations, 2018 specifies that the rate of interest on working capital would be the State Bank Advance Rate (SBAR) of State Bank of India as on the date on which the application for determination of tariff was made. Accordingly, the Commission has considered the prevailing State Bank Advance Rate (SBAR), i.e. 13.75% for computing the interest on working capital as on date of filing ARR Petition for FY 2019-20, for the true up of FY 2019-20.

Based on the above discussion, the normative Interest on working Capital for FY 2019-20 as approved by the Commission is as shown in the Table below:

Table 2.10: Interest on working capital for FY 2019-20 (Rs. Crore)

Particular	Approved in Tariff Order 18.04.2020	Claimed	Normative IWC worked out
O&M Expenses	1.18	1.57	1.27
Maintenance spare	2.13	2.83	2.29
Receivables	14.97	14.89	14.96
Margin Money	0.00	3.69	0.00
Total	**18.28**	**19.29**	**18.52**
Normative Interest Rate	13.75%	13.70%	13.75%
Interest on Working Capital	2.51	2.64	2.55

Further, the UERC Tariff Regulations, 2018 specify for sharing of gains/losses due to controllable factors and as per Tariff Regulations, variation in working capital requirements is a controllable factor. Further, as mentioned above, as the Petitioner has availed interest free loan for working capital, actual interest on working capital has been considered nil. Accordingly, entire interest on working capital worked out as per Regulations is a gain and the Commission has shared the gain in accordance with the provisions of UERC Tariff Regulations, 2018.

The interest on working capital after sharing the gains is as given in Table below:

Table 2.11: Interest on Working Capital for FY 2019-20 after Sharing of Gains (Rs. Crore)

Particulars	Actual	Normative as Trued up	Efficiency gain/loss	Generator Share	Rebate in Tariff	IWC approved after sharing
	A	B	C=B-A	D=2/3xC	E=1/3xC	F=A+D
IWC	0.00	2.55	2.55	1.70	0.85	1.70

2.1.2.12 *Non-Tariff Income*

Regulation 46 of UERC Tariff Regulations, 2018 specifies as follows:

*"**46. Non Tariff Income***

The amount of non-tariff income relating to the Generation Business as approved by the Commission shall be deducted from the Annual Fixed Charges in determining the Net Annual Fixed Charges of the Generating Company.

Provided that the Generating Company shall submit full details of its forecast of non tariff income to the Commission in such form as may be stipulated by the Commission from time to time.

The indicative list of various heads to be considered for non tariff income shall be as under:

a) Income from rent of land or buildings;

b) Income from sale of scrap;

c) Income from statutory investments;

d) Interest on delayed or deferred payment on bills;

e) Interest on advances to suppliers/contractors;

f) Rental from staff quarters;

g) Rental from contractors;

h) Income from hire charges from contactors and others;

i) Income from advertisements, etc.;

j) Any other non- tariff income.

Provided that the interest earned from investments made out of Return on Equity corresponding to *the regulated business of the Generating Company shall not be included in Non-Tariff Income."*

The Petitioner has claimed Rs. 1.90 Crore as Non-Tariff Income for FY 2019-20. However, the Commission observed that there is a Non-Tariff Income of Rs. 4.15 Crore as per the audited accounts for FY 2019-20 which is inclusive of Rs. 3.07 Crore pertaining to Interest on fixed deposits and Rs. 1.08 Crore related to insurance claim received.

The Petitioner submitted that interest earning investments as reflected in the financial statements of the Petitioner for FY 2019-20 have been made from the retained earnings of the entity. The Petitioner further submitted that it did not distribute any dividend to its shareholders. Hence, the non-tariff income on account of investments made from the retained earnings may be allowed to be retained by the Petitioner.

The Commission observed that the other income of Rs. 4.15 Crore is inclusive of interest on deposits amounting to Rs. 3.07 Crore as per audited books of accounts for FY 2019-20. The Commission analysed the investment details submitted by the Petitioner and RoE approved by the Commission for respective years. The Commission observed that, the Petitioner had claimed that post CoD the capitalization have been funded entirely through internal resources and also that it is investing its funds on rolling basis based on surplus funds available with it. Accordingly, the Commission worked out the Average Investment amounting to Rs. 52.79 Crore made by the Petitioner in FY 2019-20 and the weighted average rate of interest as 5.82%p.a.

The Commission examined the claim of the Petitioner and observed that cumulative RoE upto 31.03.2019 was Rs. 61.34 Crore and net addition to RoE after procurement of assets for FY 2019-20 works out to Rs. 23.04 Crore. Accordingly, average RoE available with the Petitioner works out to Rs. 72.86 Crore and considering the weighted average rate of interest of 5.82%, the interest on RoE works out to Rs. 4.24 Crore which is more than the actual interest amount received, i.e. Rs. 3.07 Crore. Based on the above discussion, details of allowable interest on deposits to be excluded from the Non-Tariff Income are as follows:

Table 2.12: Interest on deposits allowed by the Commission for FY 2019-20

Particulars		**Rs. Crore**
Cumulative RoE as on 01.04.2019	(A)	61.34
RoE during the year	(B)	26.16
Procurement of Assets from Internal Accruals	(C)	(3.12)

Table 2.12: Interest on deposits allowed by the Commission for FY 2019-20

Particulars		Rs. Crore
Cumulative RoE as on 31.03.2020	(D)=(A)+(B)+(C)	84.38
Average RoE		72.86
Weighted Average Rate of Return	(E)	5.82%
Interest workout	(F)	4.24
Actual Interest on Investment	(G)	3.07
Approved Interest on RoE	Minimum of (F) & (G)	3.07

Accordingly, for the purpose of true up for FY 2019-20, the Commission considers the Non-Tariff Income of Rs. 1.08 Crore *(Rs. 4.15 Crore Less Rs. 3.07 Crore)* excluding actual interest earned from fixed deposits made out of RoE.

2.2 Aggregate Revenue Requirement for FY 2019-20

Based on the above analysis, the Commission has worked out the trued-up AFC for FY 2019-20. The summary of the same is as follows:

Table 2.13: Annual Fixed Charges for FY 2019-20 (Rs. Crore)

Particulars	Tariff Order dated 27.02.2019	Claimed	Allowable
Depreciation	26.44	26.37	26.58
Interest on Loan & Financial Cost	20.65	21.04	21.11
Return on Equity	26.03	26.16	26.16
O&M Expenses	14.20	18.88	15.27
Interest on Working Capital	2.51	2.64	1.70
Total	**89.83**	**95.09**	**90.82**
Less: Non-Tariff Income	0.00	1.90	1.08
Total	**89.83**	**93.19**	**89.74**

Accordingly, trued-up AFC for FY 2019-20 works out to Rs. 89.74 Crore after sharing of gain/loss on account of controllable factors. Recovery of AFC for FY 2019-20 has been envisaged through two-part tariff, i.e. through Capacity Charges linked with NAPAF & PAFM and Energy Charges linked with generation.

With regard to the recovery of Capacity Charges for FY 2019-20, the Petitioner submitted that actual Plant Availability Factor during FY 2019-20 was 84.01% which is lower than the NAPAF of 85% due to Unit-1 forced breakdown in June, 2019 in addition to planned maintenance of Unit-1 & 2 in December, 2019 and March, 2020. The Petitioner submitted that the PAF 84.01% is based on the provisionally Verified Declared Capacity by SLDC. The Petitioner submitted that the PAF for FY

2019-20 will be 87.59% if the Scheduled Capacity is considered as Declared Capacity.

The Petitioner also submitted that because of heavy snow fall in the month of December, 2019, January, 2020 and February, 2020 the NAPAF could not be achieved. The Petitioner requested the Commission that the true-up for FY 2019-20 may be done after taking into account aforementioned un-controllable factors and allow capacity charges considering Actual Plant Availability Factor as NAPAF for FY 2019-20.

With regard to considering actual Plant availability Factor equal to NAPAF, the Commission is of the view that norms specified by the Commission vide its Regulations are an outcome of detailed deliberation with the stakeholders and is determined after following a due procedure. Therefore, reviewing the norms dilutes the very sanctity of the Regulations and due procedures followed for determination of the same. Further, one of the most important goal of MYT framework is to provide regulatory certainty and, therefore, dilution of norms is not prudent. The Commission has, therefore, not revised the NAPAF approved for the Budhil Plant. Instead, the Commission has restated the PAFY during the year for the purpose of recovery of fixed cost considering the actual operation period after adjusting the force majeure events mentioned by the Petitioner after prudence check. For the period, during which the plant was operating for the whole month without any force majeure event, the Commission has considered the actual PAF approved by SLDC and in the months wherein the plant was shut down due to any event beyond the control of the Petitioner, the Commission has restated the PAFM by excluding those events. Accordingly, the Commission has restated the actual PAFY of 84.01% to 84.12% for FY 2019-20 for recovery of Capacity Charges.

Further, with regards to the verification of the Declared Capacity by SLDC, the Petitioner submitted that instead of considering the Scheduled Capacity as Declared Capacity, SLDC considers the quantum of actual power injection to calculate the Declared Capacity of the day. In the matter, it is pertinent to mention that a separate Petitioner has been filed by the Petitioner before the Commission requesting for consideration of Scheduled Capacity as Declared Capacity for recovery of AFC. The matter is pending before the Commission and this issue shall be decided separately.

Further, as discussed earlier, trued-up AFC for FY 2019-20 works out to Rs. 89.53 Crore after sharing of gain/loss on account of controllable factors against the actual recovered amount of Rs. 89.30 Crore by the Petitioner from UPCL under the two-part tariff. The Petitioner has supplied 246.47 MUs during FY 2019-20 which is nominally less than the saleable energy of 246.52 MUs.

Accordingly, based on the above discussions, the summary of truing up for FY 2019-20 after considering the actual performance achieved in FY 2019-20 is shown in the Table below:

Table 2.14: Summary of net truing-up for FY 2019-20 (Rs. Crore)

AFC to be recovered from UPCL (Rs. in Crore)	Capacity Charges (Rs. in Crore)	NAPAF (%)	Actual PAFY (%)	Capacity Charges allowable (Rs. in Crore)	Capacity Charges after sharing	Saleable Energy (MU)	Actual Energy Considered (MU)	Per unit rate approved (Rs./kWh)	Allowable Energy Charge (Rs. in Crore)	Secondary Energy (MU)	Sec. Energy Rate (Rs./kWh)	Total Sec Energy charges (Rs. in Crore)	Total allowable (EC+CC) (Rs. in Crore)	Total Recovered from UPCL (Rs. in Crore)	Turing-up impact
89.74	44.87	85%	84.12%	44.41	44.56	246.52	246.47	1.820	44.86	0.00	0.00	0.00	89.42	89.30	0.125

Thus, the Commission has computed the net gap of Rs. 0.125 Crore for FY 2019-20 on the account of sharing of gains and losses and considering the actual performance parameters the same is to be recovered from UPCL. Based on the above, the total amount recoverable from UPCL by the Petitioner alongwith the carrying cost is as summarised in the Table given below:

Table 2.15: Details of Surplus with Carrying Cost for FY 2019-20 (Rs. Crore)

Particulars	2020-21	2021-22
Opening (Surplus)/Gap	-	(0.133)
True Up Amount	(0.125)	-
Carrying Cost	(0.008)	(0.016)
Closing (Surplus)/Gap	(0.133)	(0.149)
Interest Rate	12.05%	12.05%

Accordingly, the gap alongwith carrying cost works out to Rs. 0.149 Crore. **The Commission directs the Petitioner to recover the deficit amount, i.e. Rs. 0.149 Crore on account of Truing up for FY 2019-20 from UPCL in 12 equal monthly instalments commencing from April 2021 to March 2022.**

3 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2020-21

3.1 Annual Performance Review

The Commission, vide its MYT Order dated 27.02.2019, approved the Tariff for the third Control Period, i.e. FY 2019-20 to FY 2021-22 for the Petitioner's plant. Subsequently, the Commission vide Tariff Order dated 18.04.2020 approved the ARR for FY 2020-21. Regulation 12(3) of the UERC Tariff Regulations, 2018 stipulates that under the MYT framework, the performance of the generating company shall be subject to Annual Performance Review.

Regulation 12(3) of the UERC Tariff Regulations, 2018 specifies as under:

"The scope of Annual Performance Review shall be a comparison of the performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise the following:-

a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;

b) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factor) and those caused by factors beyond the control of the applicant (un-controllable factors);

c) Revision of estimates for the ensuing financial year, if required, based on audited financial results for the previous financial year;

d) Computation of sharing of gains and losses on account of controllable factors for the previous year."

The Commission vide its Tariff Order dated 18.04.2020, had approved the AFC for FY 2020-21 based on the approved capital cost as on 31.03.2018. The Petitioner, in its present Petition, has proposed revision of estimates for FY 2020-21 based on the audited accounts for FY 2019-20 and revised estimates for FY 2020-21.

The Petitioner has proposed the following additional capitalisation for FY 2020-21:

Table 3.1: Proposed Additional Capitalisation for FY 2020-21

S. No.	Particular	Rs. (in Crore)	Remark
1.	Supply, erection testing & commissioning of Generator protection panel (Unit 2)	0.25	Unit # 2 is running with single protection and there is no redundancy. The measure will help in reducing generation loss in case of failure of main protection panel.
2.	Supply, erection, testing & commissioning of Line protection panel	0.15	Presently the Line is with single protection and there is no redundancy. The measure will help mitigate generation loss in case of failure of main protection panel.
3.	Supply, erection testing & commissioning of Bus bar protection panel	0.15	Presently the bus-bar is with single protection and there is no redundancy. The measure will help mitigate generation loss in case of failure of main protection panel.
4.	Manufacturing of new spare one runner	1.20	There is only one spare runner supplied by OEM with original scope of supply. The project has been commissioned about seven years back & the worn out runner required replacement. If both the runner required are to be replaced in same year then after replacement, dismantled runner need to be sent for refurbishment and it shall require minimum three month of machine downtime. By purchasing the new spare runner, the shut-down period for annual maintenance will be reduced and thus avoiding generation loss.
5.	Manufacturing of top & bottom cover	0.25	If top & bottom ring of both the generation units are required to be replaced in same year, then after replacement dismantlde top & bottom ring need to be sent for refurbishment and it requires minimum three month & downtime of machine is increased. By purchasing the top & bottom covers, the shut-down period for annual maintenance will be reduced.
6.	Air duct for cable tunnel	0.08	Cables are heating up when machines are overloaded. The length of cable tunnel is more than 100 m & heat dissipated have no proper ventilation system & fresh air suction & hot air exhaust provision. To maintain the cables operating temperature and to mitigate potential cable failure due to over-heating, proper ventilation is required.

Table 3.1: Proposed Additional Capitalisation for FY 2020-21

S. No.	Particular	Rs. (in Crore)	Remark
7.	Replacement of existing drainage pipe from drainage to service way	0.05	The existing drainage pipes have been in service for more than ten years and thus these old pipes are rusted and worn out. Replacement will help ensure seamless drainage and thus avoid water overflow in the plant operation area which is essential for plant operation.
8.	Providing side cladding with CGI sheet both side of MAT	0.15	It will make healthy environment as dust will not enter the power house main cavern. Also, the aesthetic look of power plant cavern shall improve.
9.	Protection work & site development back side GIS Building & Transformer yard	0.25	Due to flash floods, left bank area of Ravi river along GIS building and Transformer yard got eroded and would become unsafe in near future. To avoid further damages and interruption in power generation due to damage to GIS building and Transformer yard, this measure is required.
10.	Protection work near of Power House left bank of Ravi river	0.7	Due to flash floods, left bank area of Ravi river along residential accommodation and approach road got eroded and will be unusable and unsafe in near future. Protection work is necessary to avoid further damages and interruption in power generation due to damage to approach road or non-availability of accommodation at site. Moreover, staff quarters are located at the left side of Ravi river. So, further slidings and damages will endanger the residential building and staff in future.
11.	Access road to Dam Site soling and concreting from security check post to dam top	0.25	There is no alternative road and this single road gets damaged/blocked in rains. Material transportation and manpower movement during rainy and winter seasons gets hampered which hampers the annual maintenance activities during lean season and O&M activities during peak season. As a permanent solution, protection work and black toping with proper soiling and bearing/PCC road is required.

Table 3.1: Proposed Additional Capitalisation for FY 2020-21

S. No.	Particular	Rs. (in Crore)	Remark
12.	Construction of Permanent panel room in Gantry Operated Cavern at PH & Dam	0.12	Existing panels are kept either in temporary CGI sheets sheds or in open. Due to underground structure, excess humidity/moisture is prevalent in the surrounding area. To maintain healthy environment and protection of electrical and hydraulic operated panels and equipment, permanent room is required.
13.	Construction of DG room at Dam site & PH	0.10	Presently DG sets are either kept in open or in the temporary CGI sheet sheds. This increases the risk of environmental damage to the DG set as well as risk of damage due to being hit by rocks/ boulders. Permanent DG room to keep DG set and operating panel/distribution panel is required.
14.	Construction of Store-room at Dam site	0.08	There is no store for key equipments at the Dam site. The material is kept in the GOC which is not safe. To ensure the security and availability of critical tools and spares during maintenance, store is a necessity.
15.	Construction of sound-proof cabin inside PH	0.15	Currently, there is no office inside power house to keep the critical drawings and documents of the plant equipments. During O&M activities, discussion and meetings are required to be done along with key team members at site using the key drawings and contracts. The sound proof cabin inside power house shall help provide the safe room for critical documents as well as ambient environment for O&M discussion.
16.	Construction of fire wall inside Ventilation Tunnel for fire control	0.03	There is no fire wall in Ventilation Tunnel due to which HVAC system is not fully effective. Moreover, in case of fire inside the power plant, fresh air may enter through cross ventilation system and help the fire thus increasing the damage caused.
17.	Construction of Hazard waste store at PH	0.03	Permanent hazard waste store is required. Observation of DoE Govt of HP and Audit team.
18.	Construction of permanent security check post at Dam & PH	0.05	The existing security check post at required locations is of temporary type needs to be constructed permanent and safe structure.

Table 3.1: Proposed Additional Capitalisation for FY 2020-21

S. No.	Particular	Rs. (in Crore)	Remark
19.	Construction of canopy in front of Main Access Tunnel & Ventilation Tunnel	0.06	Budhil power plant is underground type of power house under hill footing. Rolling stones from hill top due to rains, snowfall and by the grazing animals or monkeys are falling down. Persons coming outside from power house is not aware about this and chances are felling of stones on someone and injury. to avoid any incident/accident canopies are required in front of MAT & VT. additionally rain water is also entering inside power plant. after construction of canopy rain water will be channelized.
20.	Establishment of site store inside PH	0.11	Inside power house when maintenance works are going on in late hours main store get closed and locked. To keep the bear minimum spares inside power house to meet out emergencies and cut down the maintenance time site store inside power house is required.
21.	Slope Stabilisation & protection work behind staff colony & near Power house	0.60	Up hill side, near power house MAT & VT which is access path was loose and sliding zone. There are chances of sliding the hill mass. The loose portion threatens the safety of employees and transformer equipment.
22.	Cladding work with pre-painted CGI sheets in PH	0.06	There is enough space from column to column at service bay floor that can be used for storage of small spares and consumables. Cladding will be done with proper opening arrangement and racks. In addition to this aesthetic look of power plant cavern shall improve.
23.	Providing Permanent kotta stone flooring at MIV floor	0.05	The existing flooring is not dust proof as per the requirements. Lot of dust is entering in main Machines and control Panels. To make the dust free environment in Power Plant permanent flooring is required. Additionally, leakage seepage water is stagnating on floor.
24.	Supply, erection testing & commissioning of Battery charger, Battery bank & DCDB in PH and GIS	0.42	As per DoE of HP observation. The standby battery bank & charger for Power House & GIS
25.	400sqmm cable for Unit #1 of the plant	0.23	No spare power cable is available
26.	Shifting of conductor to increase ground clearance	0.04	To maintain the proper ground clearance, work is required to be done.
27.	Civil foundation for workshop	0.44	The power plant is located in remote and

Table 3.1: Proposed Additional Capitalisation for FY 2020-21

S. No.	Particular	Rs. (in Crore)	Remark
28.	Establishment of steel structure shed for workshop	1.18	tribal area of Himachal Pradesh and there is no well-equipped workshop near the power plant. For every small machining works, modification and repairs visit has to be made to Pathankot, Jalandhar and Ludhiana which takes long time and plant for very small works remain under shutdown. To cut-down /minimize the back-down time and make plant available for generation mechanical workshop is required at plant.
29.	Purchase of workshop machinery	1.32	
30.	C/o of Office building at PH	1.68	The existing office building was made considering only construction purpose and temporary nature. Every year repair works are done but existing structure is now got damaged beyond repairs. In view this and permanent long time requirement of office, proposal for new office building was prepared.
			Proposed new office building is in safer zone (On hard rock and above the highest flood level of river Ravi) near GIS building. Before taking quote from vendor on our request he visited site and found the site suitable for proposed structure. The same vendor constructed adjoining GMR, Hydro Project Township and office building.
31.	Flooring of Service bay	0.01	
32.	Generator rotor pole, Insulating box & Orientation & control valves	0.33	In previous years, problems with rotor pole jumper removal have been faced. The Magnetic poles for generators at Budhil plant has no spares. The rotor poles are four types and now we are purchasing 2 types of poles (part nos. S441-02-002 & S441-02-003) along with copper jumpers and its accessories. The Part Nos S441-02-001 & S441-02-004 shall be procured in future. Generator magnetic poles are site specific and are available with generator OEMs only. Hence, the generator poles are being procured from OEM Dong Feng Electric Corporation (DEC). The insulation boxes are used for fixing of generator poles enabling a vibration free running of the unit. The Orientation and control valves are used for oil flow of LGB and UGB.

Table 3.1: Proposed Additional Capitalisation for FY 2020-21

S. No.	Particular	Rs. (in Crore)	Remark
33.	Construction of protection wall for safety of Tower 2	0.55	Tilt was observed in the Tower after heavy rainfall of Feb 2019. If tower fails to withstand the soil erosion underneath, entire PWD road will be blocked, generation targets may get hampered and the tower will also become a possible threat to the public and property.
Total		**11.12**	

The Commission, in this Order, has carried out the Truing up for FY 2019-20 in accordance with the UERC Tariff Regulations, 2018. In accordance with Regulation 12(3) of the UERC Tariff Regulations, 2018 the scope of annual performance review is limited to the revision of estimates for the ensuing year, if required, based on the audited financial results for the previous year and does not provide for the revision of estimates for the current year and give effect on this account in the estimates of the ensuing year. The Commission shall carry out the truing up of FY 2020-21 based on the audited accounts for that year and give effect on this account in the AFC of FY 2022-23 as discussed in the MYT Order dated 27.02.2019. The Commission, as discussed earlier, while carrying out the truing up has trued up the O&M expenses for FY 2019-20 based on the details of actual expenses submitted by the Petitioner. The Commission, under the provisions of Regulation 12(3) of the UERC Tariff Regulations, 2018, has revised the AFC for FY 2021-22.

The approach adopted by the Commission in the approval of each element of ARR for FY 2021-22 is elaborated in the subsequent paragraphs.

4 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on ARR for FY 2021-22

4.1 Physical Parameters

4.1.1 NAPAF

Regulation 47(1)(b) of UERC Tariff Regulations, 2018 specifies as under:

"(b) For existing hydro generating stations:

The trajectory for NAPAF fixed by the Commission in case of existing hydro generating stations, in the preceding Control Period would continue to be applicable. However, the NAPAF of the stations undergone RMU would be adjusted accordingly, considering the impact of RMU."

Accordingly, the Commission is of the view that the NAPAF of 85% approved for FY 2021-22 in the MYT Order dated 27.02.2019 for the third Control Period shall continue to be applicable without any change for FY 2021-22.

4.1.2 Design Energy, Auxiliary Energy Consumption and Saleable Primary Energy

The Petitioner in its Petition has projected energy generation from its 70 MW (2x35 MW) Hydro Electric power project as approved for FY 2021-22 in the Tariff Order dated 27.02.2019 for the third Control Period.

Accordingly, the Commission approves the saleable primary energy after deducting the normative auxiliary consumption of 1.20% and adjusting home State share as 246.52 MU.

4.2 Financial Parameters

4.2.1 Opening GFA and Additional Capitalisation for FY 2021-22

The Commission has not allowed any capitalisation for FY 2020-21 as the same will be approved based on the prudence check at the time of truing up proceedings for FY 2020-21. Accordingly, opening capital cost for FY 2021-22 has been considered equivalent to the closing GFA for FY 2019-20.

Further, the Petitioner has claimed additional capitalisation amounting to Rs. 8.47 Crore. Detail of the same is as follows:

Table 4.1: Proposed Additional Capitalisation for FY 2021-22

S. No.	Particulars	Rs. in Crore	Remark
1.	Supply erection & testing of separate water operated OPU for MIV seals	0.20	There is a common OPU for maintenance and work seal, bypass & MIV operation. Seals are pressurised oil operated seals & water is mixing with oil & contaminating the main surge tank oil. The contaminated oil is troubling bypass & MIV operation and required continue oil filtration/ treatment due to which not only Auxiliaries power consumption is increased but the quality of oil & life of dehydration/ filtration machine is deteriorating. It is proposed to provide either separate OPU for existing oil operated MIV seals or necessary modification for water operated seals with new OPU. The water enters into the hydraulic oil pipeline and get mixed up with oil which results in impurities in oil content so as the dropping the pressure in OPU. Because of this the solenoid valves couldn't close the MIV seal during MIV Operation. During emergency shutdown, machine goes to over speed and results into more vibrations and increase in bearing temperatures. The work shall help ensure that the solenoid valves can easily close the MIV seal during MIV Operation for smooth operation of the power plant. Also, during emergency shutdown, machine speed remains in control and does not lead to more vibrations and increase in bearing temperatures.
2	Establishment of dam SCADA system & interfacing with Budhil PH with main SCADA	1.30	The operation of Dam gate is operated manually & its status is not visible in Dam & Powerhouse control room. Moreover, in case of emergency the operator has to operate gates in local manual mode. When the dam gates are operating manually, there can be human error in controlling the water levels in flood season. The SCADA system will avoid the human errors and in case of emergency gates can operate from remote. The SCADA system shall remove the human error in controlling the water level in the dam and thus obviate any damage to the plant dam site.
3	New turbine governor for unit-I & II	1.00	No spare is available in market for the old version currently installed at the plant units. It is recommended to replace it with new updated version. The current governor is malfunctioning during operation which incurs generation loss. The governor was supplied by OEM of China. The new governor shall ensure smooth operation of the plant turbines. This shall ensure reduced

Table 4.1: Proposed Additional Capitalisation for FY 2021-22

S. No.	Particulars	Rs. in Crore	Remark
			O&M issues and generation loss of the plant
4	400sqmm cable for Unit-2	0.20	Budhil Project has an under-ground powerhouse, and the plant generating units has been operating for a long-time now. Currently, 7 runs per phase of 11 KV XLPE cables (300 meters per run per phase) are laid. Due to over-heating of cable or any damages, we require to maintain spare cable to restore the units immediately.
5	LGB Cooler	0.12	Currently, there is no spares available for the current LGB cooler. The capex shall help ensure critical equipment availability for smooth operation of the power plant.
6	5T Fork lifter/Mini loader	0.10	Required for shifting the heavy mechanical spare parts from GOC to service bay. The non-availability of the 5T fork lifter causes time delay, inconvenience as well as risk of breakage while frequent requirement of movement of goods at plant site. Thus, the equipment shall not only help in reducing O&M time but also reduce risk of breakage of heavy material during transfer at site.
7	Dam down stream scouring	2.00	When the flood waters were released through the Dam of Budhil HEP, the condition on the down-stream of the Dam appeared precarious. It is noticed that the energy dissipation structure on the downstream of the Budhil Dam ends abruptly, without matching with the river bed. In view the apprehended threats to the safety/ stability of the Dam it is felt very much essential to execute appropriate protection works at the d/s Toe of the Dam viz. Protection Apron in the river bed, concrete cladding on the slopes of the banks, rock bolting, special groutings for the consolidation of the strata on the river bed & slopes.
8	Providing side cladding work with CGI sheet at Turbine & Generator floor	0.10	There is enough space from column to column at Turbine and Generator floor that can be used for storage of small spares and consumables. Cladding will be done with proper opening arrangement and racks. In addition to this aesthetic look of power plant cavern shall improve.
9	Permanent staff accommodation at dam site	0.40	Dam site of the plant is located in remote location and tribal area of HP. In rains and snow seasons, roads often get closed, and movement is very difficult. The staff associated with O&M activities is required to be retained and available near to Dam to avoid the generation loss. Considering the land-slides and frequent road blockages during

Table 4.1: Proposed Additional Capitalisation for FY 2021-22

S. No.	Particulars	Rs. in Crore	Remark
			winter and rainy season accessibility to dam gets difficult for dam employees. Hence, arranging accommodation to the employees at dam is necessary for smooth operation.
10	Black toping/ concrete work dam apporach road zero RD to security check post L-300mts	0.30	The road is getting damaged and it is difficult for material transportation and man power movement during rainy season and winter season which hampers the annual maintenance activities during lean season and O&M activities during peak season. Also, there is no alternative road and this single road with rains gets damaged/blocked. For permanent solution protection work and black toping with proper soling and bearing/PCC road is required.
11	Construction of single room workers accommodation at PH	0.75	Power plant is located in remote location and tribal area of HP. In rains and snow seasons roads often get closed and movement is very difficult. The staff associated with O&M activities required to be retained and available near to Power house to avoid the generation loss. Till now there is no accommodation to workers near power plant.
12	Construction of staff quarters (Executives residence) at PH	2.00	Presently situated Executive residence is located at the hill side and is under risk due to falling boulders from top hill. Shifting of the residence by reconstructing at a safer location is recommended. Moreover, power plant is located in remote location and tribal area of HP. During rains and snow seasons, roads often get closed and movement is very difficult. The Executive staff managing O&M activities needs to be placed near the power house to avoid the generation loss.
Total		**8.47**	

The Commission vide its MYT Order dated 27.02.2019 on approval of the Business Plan and Tariff Petition of the Petitioner for the third Control Period from FY 2019-20 to FY 2021-22, had decided to consider the additional capitalisation at the time of truing up of the respective years based on the audited accounts and as per the prevailing Regulations. Accordingly, the Commission at this stage does not find any reason to approve any additional capitalisation for FY 2021-22 and additional capitalisation, if any, shall be considered on actual basis based on the audited annual accounts subject to prudence check and based on the need for such capital works.

4.2.2 *Capital Structure*

Regulation 24 of UERC Tariff Regulations, 2018 specifies as under:

"24. Debt-Equity Ratio

(1) For a project declared under commercial operation on or after 1.4.2019, debt-equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as normative loan. Where actual equity employed is less than 30%, the actual equity would be used for determination of Return on Equity in tariff computations.

..."

Based on the discussion in the preceding Paras, capital cost worked out as on 31.03.2020, i.e. Rs. 528.71 Crore after considering the additional capitalisation and de-capitalisation approved for FY 2019-20 and nil additional capitalisation for FY 2020-21, has been considered as opening capital cost for FY 2021-22, accordingly, the capital structure for FY 2019-20 has also been considered for FY 2021-22. Details of the capital structure for FY 2021-22 claimed by the Petitioner and approved by the Commission is as follows:

Table 4.2: Financing for capitalisation for FY 2021-22

Particulars	Opening Capital Structure as on 01.04.2021				Addition during year				Closing Capital Structure as on 31.03.2022			
	Claimed		Approved		Claimed		Approved		Claimed		Approved	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	379.92	70.00	370.08	70.00	0.00	0.00	0.00	00.00	379.92	68.92	370.08	70.00
Equity	162.83	30.00	158.62	30.00	8.47	100.00	0.00	00.00	171.30	31.08	158.62	30.00
Total	**542.75**	**100.00**	**528.71**	**100.00**	**8.47**	**100.00**	**0.00**	**00.00**	**551.22**	**100.00**	**528.71**	**100.00**

As discussed above, the Commission has not considered any additional capitalisation as of now. However, based on the actual admissible additional capitalization and actual financing, truing up will be done for the purpose of determination of tariff based on the audited accounts for FY 2021-22 after prudence check.

4.3 Revised ARR for FY 2021-22

4.3.1 *Depreciation*

Regulation 28 of the UERC Tariff Regulations, 2018 specifies as follows:

"28. Depreciation

(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

Provided that depreciation shall not be allowed on assets funded through Consumer Contribution and Capital Subsidies/Grants.

(2) 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.

...

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix - II to these Regulations.

..."

The Petitioner has claimed depreciation for FY 2021-22 of Rs. 27.15 Crore. The Commission has worked out the depreciation of Rs. 26.59 Crore against the admissible average GFA of Rs. 528.71 Crore for FY 2021-22. The detail of the depreciation claimed and approved for FY 2021-22 is as follows:

Table 4.3: Depreciation for FY 2021-22 (Rs. Crore)

Particular	Approved in MYT Order dated 27.02.2019	Claimed	Approved
Depreciation	26.44	27.15	26.59

4.3.2 *Return on Equity*

Regulation 26 of the UERC Tariff Regulations, 2018 specifies as follows:

"26. Return on Equity

(1) Return on equity shall be computed on the equity base determined in accordance with Regulation 24.

Provided that, Return on Equity shall be allowed on account of allowed equity capital for the assets put to use at the commencement of each financial year.

(2) Return on equity shall be computed on at the base rate of 15.50% for thermal generating stations, transmission licensee, SLDC and run of the river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations and run of river generating

station with pondage and distribution licensee on a post-tax basis."

The Petitioner has claimed return on equity of Rs. 26.87 Crore corresponding to the equity amount of Rs. 162.83 Crore based on the projected capital cost as on 01.04.2021. As discussed earlier, the additional capitalisation will be approved based on the actual expenditure at the time of truing up. Accordingly, the Commission has worked out the Return on Equity based on the approved opening equity of FY 2021-22. Details of the Return on Equity claimed and approved for FY 2021-22 is as follows:

Table 4.4: RoE for FY 2021-22 (Rs. Crore)

Particular	Approved in MYT Order dated 27.02.2019	Claimed	Approved
Return on Equity	26.03	26.87	26.17

4.3.3 *Interest on Loans*

Regulation 27 of the UERC Tariff Regulations, 2018 specifies as follows:

"27. Interest and finance charges on loan capital and on Security Deposit

(1) The loans arrived at in the manner indicated in Regulation 24 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 year of the Control Period shall be deemed to be equal to the depreciation allowed for that year

...

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

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 or the distribution system or SLDC, 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 or the Distribution Licensee or SLDC 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.

…"

The Petitioner has claimed interest on normative loan of Rs. 16.46 Crore at the interest rate of 11.00% p.a. on the Non-Convertible Debentures for FY 2021-22. The Commission has considered the closing net normative loan of Rs. 176.22 Crore for FY 2019-20 as opening net normative loan for FY 2020-21. Further, considering the repayment equivalent to depreciation, i.e. Rs. 26.59 Crore for FY 2020-21, the closing net normative loan works out to Rs. 149.63 Crore for FY 2020-21 which has been considered as opening normative loan for FY 2021-22 and depreciation of Rs. 26.59 Crore approved for FY 2021-22 has been considered as repayment of normative loan as per applicable UERC Tariff Regulations, 2018. Further, rate of interest on Nov-Convertible Debentures, i.e. 11.00% p.a. has been considered for FY 2021-22. Accordingly, the Commission approves interest on loan of Rs. 15.00 Crore for FY 2021-22. Details of the interest claimed and allowed for FY 2021-22 is given in the Table below:

Table 4.5: Interest on Normative Loan for FY 2021-22 (Rs. Crore)

Particular	Approved in MYT Order dated 27.02.2019	Claimed	Approved
Normative Interest	14.83	16.46	15.00

4.3.4 *Operation and Maintenance expenses*

With regards to Operation and Maintenance expenses, Regulation 48(2) of the UERC Tariff Regulations, 2018 specifies as follows:

"48 Operation and Maintenance Expenses

...

(2) For Hydro Generating Stations

(a) ***For Generating Stations in operation for more than five years preceding the Base Year***

The operation and maintenance expenses for the first year of the control period will be approved by the Commission taking in to account the actual O&M expenses for last five years till base year, based on the audited balance sheets, excluding abnormal operation and maintenance expenses, if any, subject to prudence check and any other factors considered appropriate by the Commission.

(b) ***For Generating Stations in operation for less than 5 years preceding the base year:***

In case of the hydro electric generating stations, which have not been in existence for a period of five years preceding the base year, i.e. FY 2017-18, the operation and maintenance expenses for the base year of FY 2017-18 shall be fixed at 4% and 2.5% of the actual capital cost (excluding cost of rehabilitation & resettlement works) as admitted by the Commission, for stations less than 200 MW projects and for stations more than 200 MW respectively, for the first year of operation and shall be escalated from the subsequent year in accordance with the escalation principles specified in clause (e) below.

(c) ***For Generating Stations declared under commercial operation on or after 1.4.2019.***

In case of new hydro electric generating stations, i.e. the hydro electric generating stations declared under commercial operation on or after 1.4.2019, the base operation and maintenance expenses for the year of commissioning shall be fixed at 4% and 2.5% of the actual capital cost (excluding cost of rehabilitation & resettlement works) as admitted by the Commission, for stations less than 200 MW projects and for stations more than 200 MW respectively and shall be escalated from the subsequent year in accordance with the escalation principles specified in clause (e) below.

(d) Post determination of base O&M Expenses for the base year, i.e. FY 2017-18, the O&M expenses for the nth year and also for the year immediately preceding the Control Period, i.e. 2018-19 shall be approved based on the formula given below:-

O&Mn = R&Mn + EMPn + A&Gn

Where –

O&Mn – Operation and Maintenance expenses for the nth year;

EMPn – Employee Costs for the nth year;

R&Mn – Repair and Maintenance Costs for the nth year;

A&Gn – Administrative and General Costs for the nth year;

The above components shall be computed in the manner specified below:

EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation)

R&Mn = K x (GFA n-1) x (1+WPIinflation) and

A&Gn = (A&Gn-1) x (1+WPIinflation)+ Provision

Where -

EMPn-1 – Employee Costs for the (n-1)th year;

A&G n-1 – Administrative and General Costs for the (n-1)th year;

Provision: Cost for initiatives or other one-time expenses as proposed by the Generating Company and approved by the Commission after prudence check.

'K' is a constant to be specified by the Commission %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on Generating Company's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

Provided that for the projects whose Renovation and Modernisation has been carried out, the R&M expenses for the nth year shall not exceed 4% of the capital cost admitted by the Commission.

CPIinflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;

WPIinflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;

GFAn-1 – Gross Fixed Asset of the Generating Company for the n-1th year;

Gn is a growth factor for the nth year and it can be greater than or less than zero based on the actual performance. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on Generating Company's filings, benchmarking and any other factor that the Commission feels appropriate

Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only.

Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only.

(e) *O&M expenses determined in sub-Regulation 2(b) & 2(c) above, shall be escalated for subsequent years to arrive at the O&M expenses for the control period by applying the Escalation factor (EFk) for a particular year (Kth year) which shall be calculated using the following formula:*

$$EF_k = 0.55xWPI_{Inflation} + 0.45xCPI_{Inflation}$$

(f) *In case of multi-purpose hydroelectric stations, with irrigation, flood control and power components, the O&M expenses chargeable to power component of the station only shall be considered for determination of tariff."*

The Commission has followed the same methodology as followed in Tariff Order dated 27.02.2019. Accordingly, as discussed in Para 2.1.2.7 of this Order, the normative O&M expenses for FY 2019-20 has been escalated with escalation factor of 4.04% to work out the normative O&M expenses for FY 2020-21 and the same has been further escalated to determine the O&M expenses for FY 2021-22 as shown in the Table below:

Table 4.6: O&M expenses approved by the Commission for FY 2021-22 (Rs. Crore)

Particular	Approved in MYT Order dated 27.02.2019	Claimed	Approved
O&M expense	14.81	20.95	15.58

4.3.5 *Interest on Working Capital*

The Petitioner has submitted that the interest on working capital for FY 2021-22 has been proposed in accordance with Regulation 33 of UERC Tariff Regulations, 2018.

Regulation 33 of UERC Tariff Regulations, 2018 specifies as follows:

"Rate of interest on working capital shall be on normative basis and shall be equal to the State Bank Advance Rate (SBAR) of State Bank of India as on the date on which the application for determination of tariff is made.

…

In case of hydro power generating stations and transmission system and SLDC, the working capital shall cover:

(i) Operation and maintenance expenses for one month

(ii) Maintenance spares @ 15% of operation and maintenance expenses

(iii) Receivables equivalent to two months of the Aggregate Revenue Requirement"

The Petitioner has further submitted that it has considered the rate of interest on working capital equal to SBI PLR of 12.15%. It is to be noted that the said SBI PLR was applicable from 10.09.2020 to 09.12.2020 and the present Petition has been filed before the Commission on 07.01.2021. Accordingly, the applicable SBI PLR of 12.05% on the date of filing of the Petition has been considered for the purpose of computation of interest on working capital. The Commission has determined the interest on working capital for FY 2021-22 in accordance with the aforesaid Regulations and is as discussed below:

4.3.5.1 *One Month O&M Expenses*

Based on the approved O&M expenses, one month's O&M expenses have been worked out for determining the working capital requirement.

4.3.5.2 *Maintenance Spares*

The Commission has considered the maintenance spares in accordance with the prevailing UERC Tariff Regulations for FY 2021-21. The Commission has determined the maintenance spares requirement @ 15% of normative O&M expenses worked out for FY 2021-22.

4.3.5.3 *Receivables*

UERC Tariff Regulations, 2018 envisage receivables equivalent to two months of annual fixed charges as an allowable component of working capital. Aggregate Revenue Requirement (AFC) includes O&M expenses, depreciation, interest on loan, return on equity and interest on working capital. The Commission has considered the receivables for two months based on the AFC for FY 2021-22.

Based on the above, the total working capital requirement of the Petitioner for FY 2021-22 works out to Rs. 17.88 Crore. As discussed above, the Commission has considered the rate of interest on working capital as 12.05% equal to State Bank Advance Rate (SBAR) as on the date of filing of the present Petition and, accordingly, the interest on working capital works out to Rs. 2.15 Crore for FY 2021-22. The interest on working capital approved by the Commission for FY 2021-22 is as shown in the Table below:

Table 4.7: Interest on working capital for FY 2021-22 (Rs. Crore)

Particular	Approved in MYT Order dated 27.02.2019	Claimed	Approved
O&M Expenses	1.23	1.75	1.30
Maintenance spare	2.22	3.14	2.34
Receivables	14.09	14.82	14.25
Margin Money	0.00	3.69	0.00
Total	**17.54**	**19.70**	**17.88**
IWC	**2.41**	**2.39**	**2.15**

4.3.6 *Non-Tariff Income*

Regulation 46 of UERC Tariff Regulations, 2018 specifies as follows:

"46. Non Tariff Income

The amount of non-tariff income relating to the Generation Business as approved by the Commission shall be deducted from the Annual Fixed Charges in determining the Net Annual Fixed Charges of the Generating Company.

Provided that the Generating Company shall submit full details of its forecast of non tariff income to the Commission in such form as may be stipulated by the Commission from time to time.

The indicative list of various heads to be considered for non tariff income shall be as under:

a) Income from rent of land or buildings;

b) Income from sale of scrap;

c) Income from statutory investments;

d) Interest on delayed or deferred payment on bills;

e) Interest on advances to suppliers/contractors;

f) Rental from staff quarters;

g) Rental from contractors;

h) Income from hire charges from contactors and others;

i) Income from advertisements, etc.;

j) Any other non- tariff income.

Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated business of the Generating Company shall not be included in Non-Tariff Income."

The Petitioner has not projected any Non-Tariff Income for FY 2021-22. The Commission has also considered the non-tariff income as nil for FY 2021-22. However, the same shall be reviewed at the time of truing up subject to prudence check.

4.3.7 *Annual Fixed Charges, Capacity Charge and Energy Charge Rate (ECR) for FY 2021-22*

Based on the above analysis for all the heads of expenses of AFC, the Commission has approved the Annual Fixed Charges (AFC) of the Petitioner for FY 2021-22. Regulation 50 of UERC Tariff Regulations, 2018 specifies as follows:

"50. Computation and Payment of Capacity Charges and Energy Charges for Hydro Generating Stations

(1) The Annual Fixed Charges of Hydro Generating Station shall be computed on annual basis, based on norms specified under these Regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and Energy Charge, which shall be payable by the beneficiaries in proportion to their respective percentage share/allocation in the saleable capacity of the generating station, i.e. in the capacity excluding the free power to the home State.

(2) The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be:

AFC x 0.5 x NDM / NDY x (PAFM / NAPAF) (in Rupees)

Where,

AFC = Annual fixed cost specified for the year, in Rupees.

NAPAF = Normative plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in Percentage

(3) *The PAFM shall be computed in accordance with the following formula:*

$$PAFM = 10000\ x \sum_{i=1}^{N} DCi/\{N\ x\ IC\ x\ (100 - Aux)\}\%$$

Where,

AUX = Normative auxiliary energy consumption in percentage

DCi = Declared capacity (in ex-bus MW) for the ith day of the month which the station can deliver for at least three (3) hours, as certified by the Uttarakhand State Load Despatch Centre after the day is over.

IC = Installed capacity (in MW) of the complete generating station

N = Number of days in the month

(4) *The Energy Charge shall be payable by every beneficiary for the total energy supplied to the beneficiary, during the calendar month, on ex-power plant basis, at the computed Energy Charge rate. Total Energy Charge payable to the Generating Company for a month shall be:*

(Energy Charge Rate in Rs. / kWh) x {Energy supplied (ex-bus)} for the month in kWh} x (100- FEHS)/100

(5) *Energy Charge Rate (ECR) in Rupees per kWh on ex-power plant basis, for a Hydro Generating Station, shall be determined up to three decimal places based on the following formula, subject to the provisions of sub-Regulation (7):*

ECR = AFC x 0.5 x 10 / {DE x (100 – AUX) x (100 –FEHS)}

Where,

DE = Annual Design Energy specified for the hydro generating station, in MWh,.

FEHS = Free Energy for home State, in percent, as applicable"

In accordance with the above Regulations, the Annual Fixed Charge (AFC) for FY 2021-22 as claimed and approved by the Commission is shown in the Table below:

Table 4.8: Annual Fixed Charges approved by the Commission for FY 2021-22
(Rs. Crore)

Particular	Approved in MYT Order dated 27.02.2019	Claimed	Approved
Depreciation	26.44	27.15	26.59

Table 4.8: Annual Fixed Charges approved by the Commission for FY 2021-22 (Rs. Crore)

Particular	Approved in MYT Order dated 27.02.2019	Claimed	Approved
Interest on Loan	14.83	16.46	15.00
Return on Equity	26.03	26.87	26.17
O&M Expenses	14.81	20.95	15.58
Interest on Working Capital	2.41	2.39	2.15
Total AFC	**84.52**	**93.82**	**85.49**

The summary of Capacity Charge and Energy Charge Rate (ECR) for the Petitioner's project for FY 2021-22 is as given in the Table below:

Table 4.9: Capacity Charge and Energy Charge Rate approved by the Commission for FY 2021-22

Particular	Amount
Net AFC (Rs. Crore)	85.49
Saleable Energy (MU)	246.52
Capacity Charges (Rs. Crore) (50% of AFC)	42.74
Energy Charges (Rs./kWh) (50% of AFC)	1.734

In accordance with the provisions of the Regulations, the secondary energy rate shall be equal to the rate derived based on the saleable energy subject to a cap of 90 paise per unit and shall be applicable when actual saleable energy exceeds the Primary Energy (DE-(100-Auxiliory Consumption)-FS).

(M.K. Jain)
Member (Technical)

(D.P. Gairola)
Member (Law)