Order

On

True up for FY 2021-22,
Annual Performance Review
for FY 2022-23
&
ARR for FY 2023-24
For

M/s Gama Infraprop Pvt. Ltd.

March 30, 2023

Uttarakhand Electricity Regulatory Commission
Vidyut Niyamak Bhawan, Near I.S.B.T., P.O. Majra
Dehradun – 248171

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Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No.: 51 of 2022

In the Matter of:

Petition filed by M/s Gama Infraprop Private Limited for True up for FY 2021-22, Annual Performance Review for FY 2022-23 and Revised Annual Revenue Requirement for FY 2023-24.

In the Matter of:

M/s Gama Infraprop Pvt. Ltd.
M-3 (First Floor), Hauz Khas,
Aurobindo Marg, New Delhi- 110016 ...Petitioner

AND

In the Matter of:

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

Coram

Shri D.P. Gairola	**Member (Law)/ Chairman (I/c)**
Shri M.K. Jain	**Member (Technical)**

Date of Order: March 30, 2023

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, 2018 (hereinafter referred to as "UERC Tariff Regulations, 2018") for the third Control Period from FY 2019-20 to FY 2021-22 and Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2021 (hereinafter referred to as "UERC Tariff Regulations, 2021") for the fourth Control Period from FY 2022-23 to FY 2024-25 specifying therein terms, conditions and norms of operation for licensees, generating companies and

SLDC.

The Commission had issued the Order on approval of Business Plan and Multi Year Tariff dated 27.02.2019 for the third Control Period from FY 2019-20 to FY 2021-22. Subsequently, the Commission had carried out the Annual Performance Review (APR) for FY 2019-20, FY 2020-21 and FY 2021-22 vide its Order dated 18.04.2020, Order dated 26.04.2021 and Order dated 31.03.2022 respectively.

In compliance with the provisions of the Act and Regulation 12 of UERC Tariff Regulations, 2021, M/s Gama Infraprop Pvt. Ltd. (hereinafter referred to as "M/s GIPL" or "the Petitioner" or "the Generator") filed the Petition (Petition No. 51 of 2022 and hereinafter referred to as "Petition"), giving details of its revised projections of Aggregate Revenue Requirement (ARR) for FY 2023-24 and APR for FY 2022-23 on 30.11.2022. Through the above Petition, the Petitioner has also requested for true up of FY 2021-22 based on the audited accounts in accordance with UERC Tariff Regulations, 2018.

The Petition filed by the Petitioner had certain infirmities/deficiencies. The Commission, accordingly, vide its letter no. UERC/6/TF-667/2022-23/2022/1092 dated 06.12.2022 directed the Petitioner to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. M/s GIPL vide its letter no. GIPL/UERC/TRUE-UP/03/2022 dated 26.12.2022 removed the critical deficiencies. Based on the submission dated 26.12.2022 made by M/s GIPL, the Commission provisionally admitted the Petition for further processing subject to the condition that M/s GIPL shall furnish any further information/clarifications as deemed necessary by the Commission during the processing of the Petition, as may be stipulated by the Commission, 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 GIPL for true up for FY 2021-22, APR for FY 2022-23 and revised ARR for FY 2023-24 and is based on the Petition as well as all the subsequent submissions made by M/s GIPL during the course of the proceedings and the relevant findings contained in the Tariff Order dated 26.04.2021 and MYT Tariff Order dated 31.03.2022.

Tariff determination being the most vital functions 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 GIPL is recoverable from the beneficiary, i.e. Uttarakhand Power Corporation Ltd. (UPCL). It is the endeavour of the Commission, to issue Tariff Order for M/s

GIPL 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 GIPL. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

Chapter 1- Background and Procedural History.

Chapter 2 - UPCL's Objections/Suggestions, Petitioner's Responses and Commission's Views.

Chapter 3 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2021-22.

Chapter 4 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2022-23.

Chapter 5 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on ARR for FY 2023-24.

1. Background and Procedural History

M/s GIPL is a company incorporated under the Companies Act, 1956. M/s GIPL is a generating company falling within the definition under sub-section 28 of Section 2 of the Companies Act, 1956 and has developed a 214 MW gas based CCPP comprising of two gas turbine generators (GTG), each having a gross output of about 71 MW at site conditions, two heat recovery steam generators (HRSG) and one common steam turbine generator (STG) of about 72 MW capacity.

The name plate capacity of the gas-based Power Station is 225 MW (ISO condition) which comprises of two GTGs, each having a gross output of about 76 MW, and one common steam turbine generator (STG) of about 73 MW. However, at site conditions the power plant will have a gross capacity of 214 MW. The Project is designed to use natural gas/Re-Gasified Liquefied Natural Gas (R-LNG) as the main fuels for power generation.

The Petitioner due to shortage of gas fuel allocation could not commission its plant which remained stranded for considerable duration until the Scheme for utilization of gas based power generation capacity was implemented by the Ministry of Power, Government of India vide OM No. 4/2/2015 – Th-1 dated 27.03.2015 (the "Scheme"). Subsequently, Power System Development Fund Support Agreement (PSDF Support Agreement) dated 18.09.2015 was signed between Government of India and the Petitioner and other agreements were executed pursuant to the requirements under the scheme.

The Petitioner had executed a PPA for 107 MW capacity with the State licensee, i.e. UPCL and had initiated commercial operation of one gas turbine and one steam turbine w.e.f. 16.03.2016. The Petitioner had filed a Petition for determination of tariff for supply of power from its 214 MW Gas based Kashipur Combined Cycle Power Plant (hereinafter referred to as "the Project") to UPCL from COD, i.e. 16.03.2016 to 31.03.2016 and for the second Control Period from FY 2016-17 to FY 2018-19.

Subsequently, the Commission vide its Tariff Order dated 16.05.2017 approved the Business Plan and Multi Year Tariff for M/s GIPL for contracted capacity from 16.03.2016 to 31.03.2016 and for the second Control Period from FY 2016-17 to FY 2018-19. The Commission, in the approval of Business Plan, approved the Capital Expenditure Plan, Capitalisation Plan, Human Resource Plan and Trajectory of the performance parameters and, in the approval of MYT, approved the ARR for each year of the third 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 ARR for each year of the third Control Period from FY 2019-20 to FY 2021-22 vide Tariff Order dated 27.02.2019. Subsequently, the Commission vide Tariff Order dated 18.04.2020 had carried out the true-up of FY 2018-19 and approved the ARR for FY 2020-21. Thereafter, the Commission vide Tariff Order dated 26.04.2021 had carried out the true-up of FY 2019-20 alongwith the APR for FY 2020-21 and ARR for FY 2021-22. Further, the Commission vide its MYT Tariff Order dated 31.03.2022 approved the Business Plan and Multi Year Tariff for the Petitioner for the contracted capacity for the fourth Control Period from FY 2022-23 to FY 2024-25 alongwith APR for FY 2021-22 and True up for FY 2020-21.

In accordance with Regulation 12 of the UERC Tariff Regulations, 2021, the Generating Company is required to file a Petition for Annual Performance Review by November 30 of every year. In compliance with the Regulations, M/s GIPL filed its Petition for APR for FY 2022-23 on 30.11.2022. Through the above Petition, M/s GIPL sought true up for FY 2021-22, APR for FY 2022-23 and ARR for FY 2023-24 based on the audited accounts for FY 2021-22 and revised projections for additional capitalisations for FY 2022-23 and FY 2023-24. The Commission vide its letter no. UERC/6/TF-667/2022-23/2022/1092 dated 06.12.2022 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 GIPL vide its letter dated 26.12.2022 removed the critical deficiencies. Based on the submissions made by M/s GIPL, the Commission provisionally admitted the Petition. This Order, accordingly, relates to the Petition filed by M/s GIPL for true up for FY 2021-22, APR for FY 2022-23 and revised ARR for FY 2023-24 and is based on the Petition as well as all the subsequent submissions made by M/s GIPL during the course of the proceedings and the relevant findings contained in the Tariff Order dated 26.04.2021 and Tariff Order dated 31.03.2022.

Based on the submission dated 26.12.2022 made by M/s GIPL, the Commission provisionally admitted the Petition for further processing subject to the condition that M/s GIPL shall furnish any further information/clarification as deemed necessary by the Commission during the processing of the Petitions within the time frame, as may be stipulated by the Commission, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

Based on the scrutiny of the Petition, the Commission pointed out certain data gaps in the Petition and sought following additional information/clarifications from the Petitioner:

- Copy of primary fuel invoices raised by Gas supplier.
- Copy of all invoices raised to UPCL for supply of electricity during FY 2021-22;
- Supporting documents w.r.t. GCV, Trial Balance for FY 2021-22, Insurance policy.
- Details of Actual O&M expenses incurred.

In order to provide transparency to the process of tariff determination and give UPCL an opportunity to submit its objections/suggestions/comments on the proposals of M/s GIPL, the Commission sent the copy of the tariff proposal to UPCL vide letter no. UERC/6/TF-630/2022-23/ 2022/1186 dated 28.12.2022.

UPCL vide its letter no. 460/UPCL/Com/GG-3/CE dated 03.02.2023 submitted its comments on the Tariff Petition filed by the Petitioner, which was forwarded to the Petitioner for counter reply, if any. The Petitioner vide its letter no. GIPL/UERC/TRUE-UP/05/2023 dated 20.02.2023 submitted its rejoinder. The Commission has dealt with the reply of the Respondent and rejoinder of the Petitioner in Chapter-2 of this Order.

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

2. UPCL's Objections/Suggestions, Petitioner's Responses and Commission's Views

The Commission has received suggestions/objections/comments from UPCL on M/s GIPL's Petitions for approval of approval of true up for FY 2021-22, Annual Performance Review for FY 2022-23 and Aggregate Revenue Requirement for FY 2023-24. The Commission has further obtained replies from the Petitioner on the suggestions/objections/comments received from UPCL. For the sake of clarity, the objections raised by UPCL and responses of the Petitioner have been summarized issue wise. In the subsequent Chapters of this Order, the Commission has kept in view the suggestions/objections/comments of UPCL and replies of the Petitioner while deciding the ARR for M/s GIPL.

2.1 Recovery on account of incentives on reduction of SHR.

2.1.1 UPCL's Comment

UPLC submitted that a prudence check may be applied to verify whether the incentive on reduction of SHR as claimed by the Petitioner are sufficient to balance the gain on account of reduction in variable charges, i.e. fuel cost. UPCL also submitted that the SHR performance may also get improved on account of O&M works carried out by the Petitioner for which the generator has incurred a hefty amount and may not be passed without prudence check.

2.1.2 Petitioner's reply

The Petitioner submitted that the recovery of Rs. 1.44 Crore from UPCL is done as per the methodology for arriving at SHR of the plant already approved by the Commission. While finalising SHR, all the parameters have already been considered.

2.1.3 Commission's view

The Commission vide its Order dated 05.04.2019 had finalised the SHR for the Petitioner's plant. The relevant extract of the Order is as follows:

"the two generators will be eligible for incentives on account of lower SHR if the same is below 1988.05 Kcal/kWh and disincentive if the actual SHR exceeds 2007.4 Kcal/kWh. There will be no incentive or disincentive in the range of 1988.05 Kcal/kWh to 2007.4 Kcal/kwh"

The Commission has gone through the available information to determine the actual SHR. Further, impact on account of actual SHR has been been dealt in the subsequent Chapters of this Order in accordance with the provisions of UERC Tariff Regulations.

2.2 Additional Capitalistion

2.2.1 UPCL's Comment

With regard to additional capitalisation, UPCL submitted that the Petitioner has not submitted any substantial evidence to show that the cost incurred on the same will be attributable to only performance enhancement on the generation of the plant, therefore it cannot be allowed. Further, in the submission made by the Petitioner, a cost of Rs. 0.92 Crore has been booked under the head of "Vehicle" with an irrational justification and, therefore, UPCL opposes such expenses incurred on the exchequer of the consumer of the State.

2.2.2 Petitioner's reply

The Petitioner submitted that the land was purchased for erection of the transmission line tower as till now the arrangement was done on someone else's land as a temporary arrangement. Another major expenditure is done in vehicle, which again was requirement for commutation of lending bank executive, foreign delegates, officials and senior executives to plant at Kashipur and Head Office in Delhi. The frequent visits of foreign delegates as well as senior bank officials needs to be taken care of and, hence, this vehicle is purchased.

2.2.3 Commission's view

The Commission while carrying out the truing up for FY 2021-22 as discussed in subsequent Chapters of this Order has carried out detailed analysis and prudence of additional capitalisation claimed and allowed only those capital expenses which are necessary for smooth running of the plant.

2.3 Operation &Maintenance Expenses

2.3.1 UPCL's Comment

UPCL submitted that the Petitioner in its Petition while seeking true-up for FY 2021-22 has submitted a saving of Rs. 16.77 Crore in the O&M expenses against the approved O&M expenses of Rs. 45.09 Crore as per UERC Tariff Regulations, 2018 and has requested to be allowed to retain Rs. 11.18 Crore as O&M expenses on account of 2/3rd of the saving as per the Regulations. UPCL submitted that as stated by the generator regarding approved O&M expenses of Rs. 45.09 Crore is only threshold limit which cannot be considered as allowed and hence cannot be considered as a base. Further, the plant remained under shutdown from October, 2021 onwards and therefore, the need for O&M works is not required even otherwise the same may be allowed only after prudence check.

With regard to O&M expenses for FY 2022-23 and FY 2023-24, UPCL submitted that the O&M expenses claimed are amounting to Rs. 46.98 Crore and Rs. 48.96 Crore respectively are exorbitant and hypothetical. Moreover, the claim should be restricted to minimum after prudence check by the Commission as the plant during FY 2022-23 remained under Shutdown and the plant is stranded due to non-availability of gas at reasonable rates in FY 2022-23 and the chances of getting the gas at viable prices in near future is also very bleak and considering the same O&M expenses should be restricted to bare minimum and optimum.

2.3.2 *Petitioner's reply*

The Petitioner requested the Commission for sharing of gain on O&M expenses for FY 2021-22 as per the prevailing UERC Tariff Regulations. The Petitioner submitted that the operating and maintenance of machine is not jut limited to running of plant, however, the maintenance of the machinery is always done irrespective of plant operation and there are some maintenance expenses which are linked to operation of machine for example in case of GT, the major maintenance of GT arrives after certain running hours and then only such maintenance can be done.

2.3.3 *Commission's view*

Sharing of gain/loss on account of O&M expenses has been done in accordance with the provisions of UERC Tariff Regulations, 2018 after prudence analysis of actual O&M expenses incurred. Further, projected O&M expenses for FY 2023-24 has been approved in accordance with the provisions of UERC Tariff Regulations, 2021 subject to the condition that the same shall be trued up while carrying out the truing up exercise for FY 2023-24 based on the actual O&M expenses incurred after prudence check.

2.4 Recovery of Annual Fixed Cost

2.4.1 UPCL's Comment

UPCL submitted that the Petitioner has requested to fix the NAPAF as per the actual due to the uncertainty of gas, the same cannot be considered being against the provisions of the Regulations, wherein the AFC has to be calculated by considering NAPAF as 85%. The Petitioner is requesting for recovery of AFC in case of non-availability of gas while there may be possibility that the Petitioner may associate any other inefficiency with the non-availability of gas to get the benefits. UPCL also submitted that the Petitioner will get the recovery of cost together with the other benefits like RoE, on the other hand the Respondent will have to bear the same without even having the requisite units of power.

UPCL submitted that it would be reasonable to consider the recovery of total AFC should be on a per unit basis of energy generated and not through the fixed charges component allowed in normal case considering the non-availability of power in future in case of non-availability of fuel linkage to the Petitioner.

2.4.2 Petitioner's reply

The Petitioner submitted it has requested to fix the NAPAF as per actual due to uncertainty of gas. The Petitioner submitted that AFC claimed by the Petitioner is as per the prevailing UERC Tariff Regulations and tariff order as approved by the Commission from time to time.

2.4.3 Commission's view

Recovery of the annual fixed charged are being done in accordance with the principles laid down in the applicable UERC Tariff Regulations and also the PPA entered into by the Respondent with the Petitioner company. Further, the two part tariffs has been in vogue in the country for thermal as well as hydro plants. In fact the Respondent procures power from NTPC stations which are also coal based and gas based plants and such issue has not been raised by UPCL in the past for such plants. Besides the contention of UPCL that gas is not available is incorrect. Gas is available, however, the prices vary in the market and for this reason the Commission has always been advising UPCL to ask the generators for long term tie up of gas to keep the plants running. Hence, the issue raised by UPCL does not hold ground and the Commission does not find any merit in deviating from the existing principles in this regard.

3. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2021-22

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 as amended from time to time, 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 related to its expenses and revenues for FY 2021-22 based on the audited annual accounts and has, accordingly, requested the Commission to carry out the truing up for FY 2021-22 alongwith the sharing of gains and losses. The Petitioner submitted that the Tariff formats submitted by it are based on the actual capitalisation and the revenue expenditure as per the books of accounts.

3.1 Impact of Sharing of Gains and Losses on account of Controllable Factors for FY 2021-22.

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 UERC Tariff Regulations, 2018 require 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 the pass through of the impact of uncontrollable factors.

O&M expenses comprises of the major portion of AFC of M/s GIPL 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 UERC Tariff Regulations, 2018, the variation in working capital requirements is also a controllable factor. However, as discussed in the previous Tariff Orders for the Petitioner, the interest on working capital (IWC) was not included in the annual fixed charges (AFC) allowable to the Petitioner based on the Petitioner's submission that it intended to forego the same in case UPCL does not charge rebate on their energy bills and make payments as specified by the Commission vide its Order dated 17.04.2017 read with provisions of the PPA. Further, the capital related expenses like interest on loans, depreciation etc. has been treated as uncontrollable and hence, no sharing of losses or gains for the same has been carried out. The performance parameters namely, Station Heat Rate and Auxiliary Consumption are controllable factors and, accordingly, as discussed in the subsequent paragraphs of this Tariff Order, the Commission has carried out the truing up of the same and sharing of loss or gain, as the case may be, in accordance with UERC Tariff Regulations, 2018.

M/s GIPL in the current Petition has requested the Commission to approve the interest amounting to Rs. 0.0186 Crore paid to fuel supplier on account of delayed payment made by UPCL.

Accordingly, the Commission has worked out the trued up (surplus)/gap of the Petitioner after sharing of gains and losses as per the provisions of UERC Tariff Regulations, 2018.

3.1.1 Physical Parameters

3.1.1.1 NAPAF

The Commission vide its Order dated 08.02.2016, on approval of PPA for the Petitioner's plant, approved the definition of NAPAF, as per Regulation 3(53) of the UERC Tariff Regulations, 2015, 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."*

The Commission in its Tariff Order dated 27.02.2019 had considered the NAPAF of 85% in accordance with the UERC Tariff Regulations, 2018 for the entire third Control Period. The Commission is of the view that the NAPAF of 85% approved for the third Control Period in Tariff Order dated 27.02.2019 shall continue to be applicable without any change for FY 2021-22.

3.1.1.2 Energy Generation 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 based on the contracted capacity of 107 MW. Further, in accordance with Regulation 47(4)(i) of UERC Tariff Regulations, 2018, auxiliary consumption of 2.50% has been considered. Accordingly, applying the NAPLF of 85% as specified in the Regulations and reducing the auxiliary power, the saleable energy works out as 776.80 MU for FY 2021-22. M/s GIPL has not sought any deviation in the approved saleable energy for FY 2021-22.

M/s GIPL in its submission has submitted the actual saleable energy for FY 2021-22 as 353.66 MUs which in turn translates to a PLF of 37.73%. In this regard, the Petitioner submitted that, the Plant Availability Factor, i.e. the period for which the plant was available for generation of power (irrespective of the actual generation) was 91.67% for FY 2021-22. However, during the year, the actual Gross Generation was 362.61 MUs and the Plant Load Factor which is determined based on output was 38.68%. The Petitioner submitted that this was primarily due to restrictions imposed by UPCL on power offtake due to which the loss in gross generation of power during FY 2021-22 was 423.14 MUs. The Petitioner further submitted that if units not generated due to back-down are also considered then the PLF shall be at its normal level of 85% and match up the Normative Plant Availability Factor.

The Commission analysed the submissions made by M/s GIPL in this regard and observed that based on the provisionally verified declared capacity by SLDC, the generator's plant availability was more than 85% during FY 2021-22. M/s GIPL has also not sought any deviation in the approved design energy for FY 2021-22. Accordingly, the Commission decides to maintain the design energy and saleable primary energy as considered in the MYT Order dated 16.05.2017 for the Petitioner's plant.

3.1.2 *Financial Parameters*

3.1.2.1 *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 an opening GFA amounting to Rs. 402.85 Crore as on 01.04.2021. The Commission vide its Tariff Order dated 31.03.2022 had approved the opening GFA and net additional capitalisation amounting to Rs. 401.126 Crore and Rs. 1.729 Crore respectively for FY 2020-21 for the contracted capacity of 107 MW. Accordingly, the Commission has considered the approved closing GFA, i.e. Rs. 402.85 Crore for FY 2020-21 as opening GFA for the purpose of truing up for FY 2021-22.

3.1.2.2 *Additional Capitalisation and De-capitalisation*

Regulation 22(1) 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. "

Regulation 24(5) of UERC Tariff Regulations, 2018 specifies as under:

"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the matter specified in Regulation 22 and 23 of these Regulations."

In its Petition, the Petitioner has claimed an additional capitalisation of Rs. 0.74 Crore, Rs. 0.02 Crore, Rs. 0.01 Crore and Rs. 0.92 Crore pertaining to Land, Air Conditioner for Plant, Computers and Vehicles respectively for FY 2021-22 in accordance with Regulation 22(2) of UERC Tariff Regulations, 2018. Further, the Petitioner also submitted that there is removal of vehicles amounting to Rs. 0.11 Crore.

The Petitioner submitted that it has purchased land for erection of transmission line tower as till now the arrangement was done on someone else's land with temporary arrangement. However, now the Petitioner has executed an agreement for connectivity as per the Commission's Order dated 13.01.2021, the land having tower erected is now in the Petitioner's custody. Further, Plant and Machinery amounting to Rs. 0.02 Crore pertains to Air Conditioner purchased for Plant. With regard to additional capitalisation pertaining to vehicles, the Petitioner submitted that it has purchased a car for commutation of lending bank executives, foreign delegates, and other senior government officials to plant at Kashipur and head office in New Delhi.

With regard to additional capitalisation pertaining to vehicle, the Petitioner was directed to submit the details of vehicles purchased. In reply, the Petitioner submitted that car of 'Mercedes-Benz' make amounting to Rs. 0.92 Crore has been purchased for commutation of lending bank executives, foreign delegates, management and senior employees to plant at Kashipur and head office in New Delhi. In the matter, vehicle purchased appears to be a luxury item and could have been avoided. Hence, the Commission does not find any merit in passing such expenses of capital nature on the consumer of the State in the form of tariff. As discussed in this Order, the Petitioner has written off two old vehicles in FY 2021-22. Use of vehicle is a necessity for smooth commutation of the employees and also for management of the plants. The Commission observed that the Petitioner had purchased vehicle on an average amounting to Rs. 0.25 Crore in the past also for commutation of employees and management. Accordingly, the Commission approves Rs. 0.25 Crore towards the cost of vehicle purchased for FY 2021-22. Further, the Petitioner is advised to exercise prudence in incurring capital expenditure.

Accordingly, based on the above, the Commission approves the additional capitalisation pertaining to Land, Air Conditioner and Computer amounting to Rs. 0.77 Crore and capitalisation of Rs. 0.25 Crore is allowed against the procurement of Car. The Commission approved the additional capitalisation of Rs. 1.02 Crore against the claim of Rs. 1.70 Crore for the purpose of truing up of FY 2021-22 after prudence check. Further, removal of old vehicles amounting to Rs. 0.11 Crore during FY 2021-22 has also been considered as de-capitalisation.

Accordingly, based on the above discussion, the details of the trued-up capital cost for FY 2021-22 are as follows:

Table 3.1: Approved Gross Fixed Assets for FY 2021-22 (Rs. Crore)

Particulars	Opening GFA	Additional Capitalisation	De-capitalisation	Closing GFA
Land (Freehold Land)	6.76	0.74	0.00	7.50
Civil Works	29.10	0.00	0.00	29.10
Plant & Machinery	365.98	0.02	0.00	366.00
Furniture and Fixtures	0.21	0.00	0.00	0.21
Office Equipment & Others	0.09	0.00	0.00	0.09
Computers	0.04	0.01	0.00	0.05
Vehicles	0.67	0.25	(0.11)	0.81
Total	**402.85**	**1.02**	**(0.11)**	**403.77**

3.1.2.3 Capital Structure

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

"…

(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 Orders."

The Petitioner has claimed the Debt-Equity Ratio of 81.19:18.81 as on 31.03.2021 as approved by the Commission vide its Tariff Order dated 31.03.2022 while carrying out the truing up for FY 2020-21. The Commission has considered the same Debt-Equity Ratio for the GFA.

Further, with regard to the additional capitalisation claimed for FY 2021-22, the Petitioner submitted that the expenses for the procurement of assets were done through the revenues of the Company. As the actual equity infused is more than 30% of the capitalisation, the Commission has restricted the equity to 30% and the balance has been considered as normative loan. Accordingly, the Commission has considered the financing of additional capitalisation incurred for FY 2021-22 in the ratio of 70:30 in accordance with the UERC Tariff Regulations, 2018.

With regard to De-capitalisation, sub-clause (3) of Regulation 22 of MYT Regulations, 2018 reads as under:

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

Further, Sub-clause (6) of Regulation 28 of MYT Regulations, 2018 reads as under:

"(6) In case of de-capitalization of assets in respect of generating station or unit thereof or distribution licensee

or SLDC or transmission system or element thereof, ***the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.***"

In view of the above quoted Regulations, principles of Tariff Regulations, 2018 and past practices of the Commission, the cost of decapitalised asset amounting to Rs. 0.11 Crore has been reduced from the gross fixed assets in FY 2021-22.

Further, for the purpose of funding pattern of the decapitalised asset, the Commission directed the Petitioner to submit the year of capitalisation. The Petitioner submitted that one vehicle was capitalised during FY 2013-14 and other one was capitalised during FY 2017-18. The Commission observed that one vehicle was deployed in the business prior to the COD for which the Commission had approved a Debt-Equity ratio of 80.64:19.36 and the other vehicle was purchased during FY 2017-18 which was approved by the Commission in the Debt-Equity ratio of 70:30. Accordingly, the Commission has considered the same Debt-Equity ratio for de-capitalisation of the vehicles during FY 2021-22.

Further, the accumulated repayment corresponding to the decapitalised assets has been deducted from the total accumulated repayment of debt for the purpose of determination of net opening normative loan for FY 2021-22. The impact of the same has been considered at subsequent paragraphs of this Order while dealing with Interest on Loan Capital and Return on Equity.

Capital structure for the GFA, additional capitalisation and de-capitalisation for FY 2021-22 is as follows:

Table 3.2: Financing for capitalisation for FY 2021-22

Particular	Opening Capital Structure as on 01.04.2021		Addition during year		De-Capitalisation during year		Closing Capital Structure as on 31.03.2022	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	327.06	81.19	0.72	70.00	(0.09)	77.37	327.70	81.16
Equity	75.79	18.81	0.31	30.00	(0.03)	22.63	76.07	18.84
Total	**402.85**	**100.00**	**1.02**	**100.00**	**(0.11)**	**100.00**	**403.77**	**100.00**

3.1.2.4 *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 has claimed depreciation of Rs. 20.48 Crore for FY 2021-22 considering the additional capitalisation at the beginning of the year and the depreciation rates specified by the Commission in its UERC Tariff Regulations, 2018. The Commission has calculated the weighted average rate of depreciation of 5.06% by applying the depreciation rates as specified in Appendix-II of UERC Tariff Regulations, 2018. Further, the Commission has worked out the depreciation of Rs. 20.39 Crore on the admissible average GFA of Rs. 403.31 Crore for FY 2021-22 by applying the weighted average rate of depreciation of 5.06%.

Depreciation, as approved in the Tariff Order dated 26.04.2021, claimed by the Petitioner and trued up for FY 2021-22 is as follows:

Table 3.3: Depreciation claimed and approved for FY 2021-22 (Rs. Crore)

Particular	Approved in Tariff Order dated 26.04.2021	Claimed by Petitioner	Approved after truing up
Opening Capital Cost	401.13	402.85	402.85
Addition during year	0.00	1.70	1.02
De-capitalisation	0.00	(0.11)	(0.11)
Closing Capital Cost	401.13	404.43	403.77
Average Capital Cost	401.13	-	403.31
Weighted Average rate of Depreciation	5.06%	-	5.06%
Depreciation	**20.29**	**20.48**	**20.39**

3.1.2.5 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 the Return on Equity amounting to Rs. 11.79 Crore on the average equity for FY 2021-22 after considering actual additional capitalisation during FY 2021-22. The Commission has allowed the Return on Equity on the opening equity base at the rate of 15.50% in accordance with UERC Tariff Regulations, 2018. The Return on Equity approved by the Commission for FY 2021-22 is given in the Table below:

Table 3.4: Return on Equity approved for FY 2021-22 (Rs. Crore)

Particular	Approgved in Tariff Order dated 26.04.2021	Claimed by Petitioner	Approved after truing up
Opening Equity	75.27	75.79	75.79
Net Addition during the year	0.00	0.51	0.28
Closing Equity	75.27	76.30	76.07
Rate of Return on Equity	15.50%	15.50%	15.50%
Return on Equity	**11.67**	**11.79**	**11.75**

3.1.2.6 *Interest and Finance charges*

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 wheighted 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. 27.14 Crore for FY 2021-22 for the purpose of truing up based on the weighted average rate of interest of 12.58% p.a. Further, the Petitioner has considered the entire additional capitalisation, i.e. Rs. 1.70 claimed for FY 2021-22 as addition to normative loan.

The Commission examined the audited annual accounts & Trial Balance for FY 2021-22 as well as the submissions made by the Petitioner w.r.t. interest on loan and observed that the Petitioner has considered opening debt and closing debt amounting to Rs. 250.31 Crore and Rs. 185.67 Crore respectively in Form 9.2, i.e. "Calculation of Weighted Average Interest Rate of Interest on Actual Loans", whereas as per audited accounts, opening and closing debt worked out to Rs. 254.30 Crore and Rs. 189.01 Crore respectively for FY 2021-22. With regard to variation in opening and closing debt for FY 2021-22, the Petitioner submitted that the variation was on account of interest payable which has not been considered in Form 9.2 while computing the weighted average rate of interest.

The Petitioner submitted that the actual interest for FY 2021-22 is Rs. 27.43 Crore. The Commission observed that the total interest amounting to Rs. 27.77 Crore has been charged to the P&L Statement for FY 2021-22 out of which Rs. 27.43 Crore pertains to long term borrowings. Accordingly, the Commission has considered interest of Rs. 27.43 Crore only pertaining to long term borrowings for the purpose of calculation of weighted average rate of interest by the Petitioner. Based on the opening and closing debt of Rs. 254.30 Crore and Rs. 189.01 Crore respectively and considering the interest paid on long term borrowings during the year, the weighted average rate of interest works out to 12.37% p.a. for FY 2021-22.

Further, as discussed under Para 3.1.2.3 of this Order the Gross Loan for FY 2021-22 has been reduced by the amount corresponding to the loan of the asset decapitalised.

The Commission has considered the net opening normative loan of Rs. 225.12 Crore and repayment has been considered equal to the admissible depreciation, i.e. Rs. 20.39 Crore. Further, as mentioned earlier above in this Order, admissible net additional capitalisation for FY 2021-22 of Rs. 0.91 Crore has been considered in the ratio of 70:30 in accordance with the UERC Tariff Regulations, 2018. Accordingly, the Commission has considered net addition to normative loan amounting to Rs. 0.63 Crore.

Further, the Petitioner has claimed Bank Charges amounting to Rs. 0.90 Crore for FY 2021-22 as finance charges. The Commission has gone through the detailed breakup of the bank charges and finds the same in order.

Based on the above, details of interest claimed and allowed for the truing up are given in the Table below:

Table 3.5: Interest on Normative Loan for FY 2021-22 (Rs. Crore)

Particular	Approved in Tariff Order dated 26.04.2021	Claimed by Petitioner	Approved after truing up
Gross Opening Normative Loan	325.85	327.06	327.06
Cumulative Repayment	101.95	102.00	101.95
Net Opening Normative Loan	223.91	225.06	225.12
Net Additional Capitalisation	0.00	1.70	0.63
Normative Repayment of loan	20.29	20.48	20.39
Net Closing Normative Loan	203.62	206.28	205.35
Average Normative Loan	213.76	215.67	215.24
Rate of Interest	12.37%	12.58%	12.37%
Normative Interest	**26.45**	**27.14**	**26.64**
Add: Financial charges	1.34	0.90	0.90
Total Interest and Finance Charges	**28.36**	**28.04**	**27.54**

3.1.2.7 Operation & Maintenance (O&M) Expenses

3.1.2.7.1 Truing up of O&M Expenses for FY 2021-22

Regulation 48(1) of UERC Tariff Regulations, 2018 as amended from time to time, specifies as follows:

"(1) Normative O&M Expenses for Open Cycle Gas Turbine/Combined Cycle generating stations shall be as under:

(In Rs. Lakh/MW)

Year	Gas Turbine/ Combined Cycle generating stations		Small gas turbine power generating stations (less than 50 MW Unit size)	Advance F class Machines
	With warranty spares for 10 years	Without warranty spares		
2018-19	11.22	16.82	20.41	34.56
2019-20	11.97	17.94	21.76	36.92
2020-21	12.76	19.13	23.21	39.44
2021-22	13.61	20.41	24.75	42.14

"

Based on the applicable norms of O&M expenses for combined cycle generating station, the Commission had approved the normative O&M expenses of Rs. 45.09 Crore for FY 2021-22 for the contracted capacity of the Petitioner's Plant. The Petitioner submitted that the actual O&M expense of Rs. 28.32 Crore has been incurred during FY 2021-22.

It is to be noted that the Commission approved the PPA for the contracted capacity of 107 MW with certain modifications vide its Order dated 08.02.2016. At present as far as the O&M expenses are concerned, the Commission is of the view that O&M expenses are the recurring expenses which are required to be incurred for regular maintenance and upkeep of the plant and at present only 50% of the capacity of the plant is being operated.

The Commission observed that the expenses towards 'Repair and Maintenance of Building', 'Consultancy Charges' and 'Technical Fees' have increased to 2.67 Crore, Rs. 1.77 Crore and Rs. 0.39 Crore respectively during FY 2021-22 against the expenses amounting to Rs. 0.78 Crore, 0.91 Crore and Rs. 0.09 Crore incurred during FY 2020-21. In the matter, the Petitioner submitted that the repair & maintenance pertaining to building increased due to repair of the followings:

1. Repair of raw water and storage tanks due to leakages in the wall.
2. Repairing work in DM plant building, due to leakage in the tile and acidic water of the DM plant, the whole flooring of DM plant was damaged.
3. Due to open atmospheric conditions, the steel structure around ACC building was painted.
4. Store building rearing work done,
5. Repairing of SCADA room of 220 kV switchyard,
6. There was some minor civil works carried out related to plumbing of various toilet blocks

in the STG building.

Regarding increase in consultancy charges, the Petitioner submitted that certain expenses were made in the Arbitration matter of GAIL w.r.t. GAIL loading Ship and pay charges of transportation line of RLNG on the Petitioner. Since the matter is in the Court, the Petitioner had to incur expenses in seeking legal opinion and hearings. With regard to Technical Fees, the Petitioner submitted that the increase is due to tariff filing fee, Petition filing fee wr.t. connectivity charges and fees for boiler inspection. The above mentioned expenses appears to be in order, hence, the Commission allows these expenses.

The Petitioner has claimed expenses amounting to Rs. 0.27 Crore during FY 2021-22 under the head of Corporate Social Responsibility. In the matter, the Commission is of the view that expenses pertaining to CSR/Donation are not necessary to be incurred for the successful running of the plant but are incurred to meet the statutory requirement under the Companies Act, 2013 out of the profits. Accordingly, such expenses are to be met out of profit and if such expenses are allowed in the ARR, it would indirectly mean that such expenses are being loaded on to the consumers and are not borne by the Petitioner. Hence, the same is disallowed.

Based on the above discussion, allowable O&M expenses for the purpose of sharing works out to Rs. 28.05 Crore against the claim of Rs. 28.32 Crore for FY 2021-22. Further, as per UERC Tariff Regulations, 2018 the variation in normative and actual O&M expenses shall be considered as part of gain/loss on account of controllable factors.

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

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

(1) 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."

As discussed in Para 3.1 above, O&M expenses have been considered as controllable factor, accordingly, the Commission has approved the total O&M expenses for FY 2021-22 after sharing of gain/loss in accordance with the Regulations as shown in the Table below:

Table 3.6: O&M Expenses Approved After Sharing of Gains & Losses for FY 2021-22 (Rs. Crore)

Actual Claimed in the Petition	Adjusted claim considered for sharing	Normative approved now	Efficiency gain/(loss)	Generator Share	Net Entitlement
A	B	C	D=C-B	E=2/3xD	F=B+E
28.32	28.05	45.09	17.04	11.36	39.41

3.1.2.8 *Interest on Working Capital*

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

"In case of open cycle Gas Turbine/Combined Cycle thermal generating stations, working capital shall cover:

a) Landed fuel cost for 1 (one) month corresponding to the NAPAF duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;

b) Liquid fuel stock for ½ (half) month corresponding to the NAPAF, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;

c) Operation and maintenance expenses for one month;

d) Maintenance spares @ 30% of operation and maintenance expenses; and

e) Receivables equivalent to 2 (two) months of Capacity Charge and Energy Charges for sale of electricity calculated on NAPAF duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel."

The Petitioner submitted that the Commission vide its Order dated 17.04.2017 had given the option of getting the payment from UPCL without deduction of applicable rebate if the Petitioner forgoes Interest on Working Capital (IoWC) in the interest of the consumers of the State. Accordingly, the Petitioner has relinquished the Interest on Working Capital in the present Petition.

With regard to IoWC, the Commission in its Tariff Order dated 16.05.2017 had allowed the Petitioner to forgo interest on working capital in lieu of non-chargeability of rebate by UPCL on payment of bills raised by the Petitioner. The relevant extract of the aforesaid Tariff Order is as follows:

"In response, M/s GIPL vide its letter dated 28.04.2017 informed that they had given their offer to UPCL to surrender their claim on interest on working capital in lieu of exemption of 2% rebate on payment of fortnightly and monthly bills. Accordingly, based on the M/s GIPL consent as above, interest on working capital has not been included in the annual fixed charges (AFC) as discussed in subsequent paras."

Accordingly, in line with the decision taken in the Tariff Order dated 16.05.2017 and aforesaid discussions, interest on working capital is not being allowed for the purpose of truing up of FY 2021-22.

Further, the Petitioner referring to the Commission's Order dated 17.04.2017 submitted that the payment of invoices was directed to be paid within three working days from the date of submission of invoices and in lieu of the same the Petitioner had forgone interest on working capital. However, the Petitioner incurred an extra burden of penal interest on delayed payment towards supply of Gas from GAIL of an amount of Rs. 0.02 Crore on account of delay in payment by UPCL.

The Commission vide its Order dated 17.04.2017 had directed that UPCL shall not deduct any rebate from bills of the gas generators and shall make the payment to the generator within 3 working days from the date of receipt of fuel bills and the Commission also ordered that in line with the said arrangement allowed to M/s SEPL, the other Gas generators can also approach UPCL, with proper justification, for entering into similar arrangement with respect to non-deductibility of rebate and waiving off interest on working capital in tariffs in the interest of the consumers of the State under intimation to the Commission. The relevant extract of the said Order is as follows:

"4 Accordingly, it is hereby decided that:

4.1 All the gas based generators may raise fortnightly Gas Supply Bills on UPCL on actual basis as is being received from GAIL/supplier of gas. The final monthly bill would be raised by the generator after the month is over based on the Joint Meter Reading in accordance with the procedure laid down in the PPA duly adjusting the aforesaid amount already realized from UPCL for the first fortnight of the month.

4.2 UPCL shall not deduct any rebate from bills of M/s SEPL and shall make the payment to the generator within 3 working days from the date of receipt of such bills.

4.3 However, in case of other two Gas generators namely M/s GIPL and M/s Beta Infratech , the provisions of payment of bills and rebate shall be governed by their respective PPAs and the principles regarding timely payment of bills enunciated by the Commission in its Order dated 25.01.2017. Further, in line with the arrangement allowed to M/s SEPL in this order, the other two Gas generators can also approach UPCL, with proper justification, for entering into similar arrangement with respect to non-deductibility of rebate and waiving off interest on working capital in tariffs in the interest of consumers of the State under intimation to the Commission."

Subsequent to the aforesaid Order, the Petitioner vide its letter dated 28.04.2017 informed that they had given their offer to UPCL to surrender their claim of interest on working capital in lieu of exemption of 2% rebate on payment of fortnightly and monthly bills. Accordingly, UPCL was required to make payment of such bills within 3 working days from the receipt of such bills from the Petitioner.

The Petitioner submitted that on account of delay in payment from UPCL, the Petitioner failed to pay GAIL payments on time and GAIL charged interest on the delay in payment amounting to Rs. 0.02 Crore. After analysing all the documents, the Commission worked out that Rs. 0.02 Crore of penal interest is only on account of delay in payments by UPCL. Accordingly, the Commission allows the Petitioner to recover penal interest amounting to Rs. 0.02 Crore.

3.1.2.9 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 other income amounting to Rs. 0.64 Crore as per the audited annual accounts for FY 2021-22. The Commission has approved the actual non-tariff income of Rs. 0.64 Crore for FY 2021-22 as per the audited accounts after prudence check.

3.1.2.10 Annual Fixed Charges (AFC) for FY 2021-22

Based on the above analysis, the Commission has worked out the approved figures of AFC for FY 2021-22. The summary of the same is as follows:

Table 3.7: Annual Fixed Charges for FY 2021-22 approved by the Commission (Rs. Crore)

Particulars	Tariff Order dated 26.04.2021	Claimed in Petition	Approved/ Trued up
Depreciation	20.29	20.48	20.39
Interest on Loan & Financial Cost	27.79	28.04	27.54
Return on Equity	11.67	11.79	11.75
O&M Expenses	45.09	39.50	39.41
Interest on Working Capital	0.00	0.00	-
Less: Non-Tariff Income	0.76	0.64	0.64
Sub-Total	**104.07**	**99.17**	**98.45**
True up for FY 2019-20 with carrying cost	(0.30)	(0.30)	(0.30)
Interest charged by fuel supplier due to delay by UPCL	0.00	0.02	0.02
Total	**103.77**	**98.89**	**98.17**

Accordingly, trued-up AFC for FY 2021-22 works out to Rs. 98.174 Crore against Rs. 103.77 Crore approved by the Commission vide its Tariff Order dated 26.04.2021. The Commission has worked out a surplus of Rs. 5.60 Crore for FY 2021-22 which works to Rs. 7.31 Crore with carrying cost to be adjusted against the ARR for FY 2023-24.

3.1.2.11 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 after truing up, has approved the Annual Fixed Charges (AFC) of the Petitioner attributable to its beneficiary for FY 2021-22.

Regulation 49 of UERC Tariff Regulations, 2018 specifies as follows:

*"**49. Computation and Payment of Annual Fixed Charges and Energy Charges for Thermal Generating Stations***

(1) The fixed cost of a thermal generating station shall be computed on annual basis, based on the norms specified under these Regulations, and recovered on monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share/allocation in the capacity of the generating station.

(2) The capacity charge (inclusive of incentive) payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:

CC_1= (AFC/12) (PAF_1 / NAPAF) subject to ceiling of (AFC/12)

CC2= (AFC/6) (PAF2 / NAPAF) subject to ceiling of ((AFC/6) – CC1)

CC3= (AFC/4) (PAF3 / NAPAF) subject to ceiling of ((AFC/4) – (CC1+CC2))

CC4= (AFC/3) (PAF4 / NAPAF) subject to ceiling of ((AFC/3) – (CC1+CC2+CC3))

CC5= (AFC x 5/12) (PAF5 / NAPAF) subject to ceiling of ((AFC x 5/12) – (CC1+CC2+CC3+CC4))

CC6= (AFC/2) (PAF6 / NAPAF) subject to ceiling of ((AFC/2) – (CC1+CC2+CC3+CC4+CC5))

CC7= (AFCx7/12) (PAF7/NAPAF) subject to ceiling of ((AFCx7/12)–(CC1+CC2+CC3+ CC4+CC5+CC6))

CC8=(AFCx2/3) (PAF8/NAPAF) subject to ceiling of ((AFCx2/3)–(CC1+CC2+CC3+CC4+CC5+CC6 +CC7))

CC9=(AFCx3/4) (PAF9/NAPAF) subject to ceiling of ((AFCx3/4))–(CC1+CC2+CC3+ CC4+CC5+CC6+ CC7+CC8))

CC10=(AFCx5/6) (PAF10/NAPAF) subject to ceiling of ((AFCx5/6)–(CC1+CC2+CC3+ CC4+CC5+CC6+ CC7+CC8+CC9))

CC11=(AFCx11/12) (PAF11/NAPAF) subject to ceiling of ((AFCx11/12)–(CC1+CC2+CC3+CC4 +CC5+CC6+CC7+CC8+CC9+CC10))

CC12=(AFC) (PAFY/NAPAF) subject to ceiling of ((AFC)–(CC1+CC2+CC3+CC4+CC5+ CC6+CC7+CC8+ CC9+CC10+CC11))

Provided that in case of generating station or unit thereof or transmission system or an element thereof, as the case may be, under shutdown due to Renovation and Modernisation, the generating company or the transmission licensee shall be allowed to recover part of AFC which shall include O&M expenses and interest on loan only.

Where,

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

NAPAF = Normative plant availability factor in percentage.

PAF_N *= Percent Plant availability factor achieved upto the end of the nth month.*

PAF_Y *= Percent Plant availability factor achieved during the Year.*

CC_1, CC_2, CC_3, CC_4, CC_5, CC_6, CC_7, CC_8, CC_9, CC_{10}, CC_{11} *and* CC_{12} *are the Capacity Charges of 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th and 12th months respectively.*

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

$$NPAFM = 10000 \times \sum_{i=1} DCi / \{ N \times IC \times (100 - AUX) \} \%$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

DCi = Average declared capacity (in ex-bus MW), for the ith day of the period, i.e. the month or the year as the case may be, as certified by the State load dispatch centre after the day is over.

IC = Installed Capacity (in MW) of the generating station

N = Number of days during the period i.e. the month or the year as the case may be.

Note: *DCi and IC shall exclude the capacity of generating units not declared under commercial operation. In case of a change in IC during the concerned period, its average value shall be taken.*

(4) Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in Regulation 47(2).

(5) The energy charge shall cover the primary fuel cost and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel price adjustment). Total Energy charge payable to the generating company for a month shall be:

(Energy charge rate in Rs./kWh) x {Scheduled energy (ex-bus) for the month in kWh.}

(6) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

(a) For gas and liquid fuel based stations

ECR = GHR x LPPF x 100 / {CVPF x (100 – AUX)}

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for gas and liquid fuel based stations.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

(7) The generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel, i.e. natural gas, RLNG, liquid fuel etc., as per the forms specified at Annexure-I to these regulations:

Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. natural gas, RLNG, liquid fuel etc., shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months.

(8) The landed cost of fuel shall include price of fuel corresponding to the grade/quality /calorific value of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail/road/gas pipe line or any other means for the purpose of computation of energy charges."

With regard to Gross Station Heat Rate, the Commission vide its suo-moto Order dated 05.04.2019 had approved the Design Station Heat Rate as 1911.809 kCal/kWh and Gross SHR as 2007.40 kCal/kWh for the gas based generating plants of M/s SEPL and M/s GIPL in accordance with the Regulations based on the report of external Consultant appointed by the Commission. Further, it is to be noted that SHR is a controllable factor which can be optimised through efficient operations and as per MYT Regulations, any variation in respect of controllable factor is subject to sharing of gain/loss. In accordance with the said Order, the Petitioner will be entitled for incentives on account of achieving lower SHR than the normative SHR of 1988.05 kCal/kWh which is nothing but the actual SHR achieved post stabilisation period as per the Consultant's report and disincentives if the actual SHR exceeds 2007.4 kCal/kWh. The relevant extract of the Order is as follows:

"2.45 In this regard, the Commission is of the view that the report submitted by the Consultant in the matter of determination of SHR of the Gas based CCPP of M/s GIPL and M/s SEPL can be adopted and, accordingly, the Commission approves the Design Station Heat Rate as 1911.809 kCal/kWh and Gross Station Heat Rate (considering MYT Regulation factor of 1.05) as 2007.4 kCal/kWh, for gas based CCPP of both the Generators, i.e. M/s GIPL & M/s SEPL, located at Kashipur, Uttarakhand, from the date of their respective CODs.

…

…

2.48 Further, the Station Heat Rate is a controllable factor the performance of which can be optimized by the Generators through efficient operations. The MYT Regulations states that, the variation in the performance of the Generators with respect to controllable factors is subject to sharing of gain/loss. In this regard, the Commission is of the view that for the purposes of sharing of gain/loss, on account of efficient operation with respect to achievement of the optimum actual Station Heat Rate by the Generators, the same shall be evaluated based on the Gross SHR of 1988.05 kCal/kWh which is nothing but the actual SHR achieved post stabilisation period as per Consultant's report. In other words, the two generators will be eligible for incentives on account of lower SHR if the same is below 1988.05 kCal/kWh and disincentives if the actual SHR exceeds 2007.4 kCal/kWh. There will be no incentive or disincentive in the range of 1988.05 kCal/kWh to 2007.4 kCal/kWh. This will motivate the Generators to optimize the performance of their respective plants in an efficient manner and keep a check on wasteful expenditure. However, for the purposes of periodic billing by the Generators on UPCL, the Gross Station Heat Rate shall be considered equivalent to 2007.4 kCal/kWh as discussed in above paras.

2.49 Further, the GSHR as approved in this Order shall be squarely applicable from billing period commencing on 1st April, 2019 and any adjustment for the prior period, i.e. from COD till 31st March, 2019 shall be considered in the next Tariff proceedings."

For the purpose of truing up of the Energy Charges for FY 2021-22, the Commission analysed the invoices raised by the fuel supplier for supply of fuel to the Petitioner's plant, gross generation as well as net generation of the Petitioner's plant for the aforesaid period and other relevant information that was required to work out the actual SHR and actual Auxiliary Energy Consumption (AUX) of the respective year as per the UERC Tariff Regulations, 2018.

Based on the analysis of the documents provided by the Petitioner, actual SHR works out to 1962.051 kCal/kWh for FY 2021-22 against the normative SHR, i.e. 1988.05 kCal/kWh to 2007.40

kCal/kWh approved by the Commission for the purposes of sharing of gain/losses on this account. Since the actual SHR is less than 1988.05 kCal/kWh, the Petitioner is entitled for incentives on account of lower SHR as per the aforesaid suo-moto Order. Further, based on the generation data, the Commission observed that the actual auxiliary consumption is 2.47% for FY 2021-22 against the Normative auxiliary consumption of 2.50% in accordance with the UERC Tariff Regulations, 2018.

In accordance with the UERC Tariff Regulations, 2018, auxiliary consumption and SHR are controllable factors and, therefore, financial impact of efficiency/inefficiency in the performance of the generator on these counts is to be shared between the generator and the distribution licensee. Accordingly, the Commission has determined the energy charges for FY 2021-22 based on the actual SHR and actual auxiliary consumption vis-a-vis normative SHR and normative auxiliary consumption, to share the gain/losses of lower SHR and lower actual auxiliary consumption than normative levels. In accordance with the UERC Tariff Regulations, 2018, the detailed computation of actual performance parameters, i.e. SHR and auxiliary consumption vis-à-vis norms approved by the Commission alongwith sharing of gains/losses is shown in the Table below:

Table 3.8: True-up of Energy Charges approved by the Commission

Particulars	Unit	FY 2021-22
CVPF (Weighted average GCV of fuel)	Kcal/SCM	9,399.63
Gas Consumption (SM3)	SM3	7,56,89,745.00
Total Fuel cost	Rs.	1,63,61,97,899.39
LPPF (Total Gas bill amount/ Total Gas taken during the month)	Rs./ SM3	21.62
Gross annual Generation	kWh	36,26,08,000.00
Actual Station Heat Rate	kCal/kWh	1,962.051
Normative Station Heat Rate	kCal/kWh	1988.05
Actual Auxiliary Energy Consumption	%	2.47%
Normative Auxiliary Energy Consumption	%	2.50%
Actual Energy Charge Rate **(a)**	Rs./kWh	4.6265
Normative Energy Charge Rate **(b)**	Rs./kWh	4.6893
Energy Sent out **(A)**	kWh	35,36,60,000.00
Energy Charges to be recovered at Actual Energy Charge Rate **(B) = (A)*(a)**	Rs.	1,63,61,97,899.39
Energy Charges to be recovered at Normative Energy Charge Rate **(C)= (B)*(b)**	Rs.	1,65,84,28,775.04
Gain/(Loss) **(D) = (C)-(B)**	Rs.	2,22,30,875.65
Sharing of Gain *(2/3 of Gain/loss)* **(D)**	Rs.	1,48,20,583.77
Energy Charges after sharing **(E)=(B)+(D)**	Rs.	1,65,10,18,483.16
Actual Energy charges already recovered **(F)**	Rs.	1,63,67,91,180.00
Balance amount to be recovered or (refund) (E)-(F)	**Rs.**	1,42,27,303.16

Accordingly, Energy Charges after sharing works out to Rs. 165.10 Crore against Rs. 163.68 Crore recovered by the Petitioner for FY 2021-22. The Commission has worked out a deficit of Rs. 1.42

Crore for FY 2021-22 which works to Rs. 1.86 Crore with carrying cost. Accordingly, **the energy charges to be recovered from UPCL works out to Rs. 1.86 Crore, which shall be adjusted by the Petitioner in twelve equal instalments starting from April, 2022 in the monthly invoices to be raised on UPCL.**

4. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2022-23

4.1 Annual Performance Review

The Commission, vide its Tariff Order dated 31.03.2022, approved the Tariff for the Petitioner for the fourth Control Period, i.e. FY 2022-23 to FY 2024-25. Regulation 12(3) of the UERC Tariff Regulations, 2021 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, 2021 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 31.03.2022, on approval of Business Plan and MYT Petition for the fourth Control Period from FY 2022-23 to FY 2024-25, had approved the AFC for the Control Period. The Petitioner, in its present Petition, has proposed revision of estimates for FY 2022-23 based on the audited accounts for FY 2021-22 and revised estimates for FY 2022-23.

The Commission, in this Order, has carried out the truing up for FY 2021-22 in accordance with the UERC Tariff Regulations, 2021. In accordance with Regulation 12(3) of the UERC Tariff

Regulations, 2021, 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. Accordingly, the Commission has carried out the truing up of FY 2021-22 based on the audited accounts for that year and has given effect on this account during the proceedings for determination of AFC for FY 2023-24.

Further, the Petitioner has claimed additional capitalization of Rs. 28.20 Crore in FY 2022-23 pertaining to Civil Work, Plant & Machinery, Furniture & Fixture, Office Equipment, Computer and Vehicles amounting to Rs. 4.00 Crore, Rs. 23.55 Crore, Rs. 0.20 Crore, Rs. 0.10 Crore, Rs. 0.10 Crore and Rs. 0.25 Crore respectively. The Commission has gone through the submissions of the Petitioner, and regarding additional capitalization in FY 2022-23, the Commission is of the view that the same shall be allowed at the time of truing-up of FY 2022-23 based on the actual expenditure and after carrying out prudence check of the same, which is in line with the view taken by the Commission in the Business Plan approved for the fourth Control Period vide Order dated 31.03.2022. **Further, the Commission directs the Petitioner to give prior information to the licensee before incurring any major capital expenditure or any major repair & maintenance in its plant and the licensee will be at liberty to physically verify the claims of the Petitioner so as to avoid any dispute in future regarding the claims of the Petitioner. The Petitioner is also directed to maintain documentary evidence in the form of photographs etc. in support of works to be executed and submit the same before the commission at the time of truing up of respective years.**

5. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on ARR for FY 2023-24

5.1 Physical Parameters

5.1.1 NAPAF

Regulation 47 of UERC Tariff Regulations, 2021 specifies as under:

*"**(1) Normative Annual Plant Availability Factor (NAPAF):***

(a) For all thermal generating stations: 85%"

Further, as discussed in the Tariff Order dated 27.02.2019, the Commission while approving the PPA for the Petitioner's plant fixed the NAPAF 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."

Accordingly, the Commission is of the view that the NAPAF of 85% approved for FY 2023-24 in the Tariff Order dated 31.03.2022 for the fourth Control Period shall continue to be applicable without any change.

5.1.2 Design Energy, Auxiliary Energy Consumption and Saleable Primary Energy

The Petitioner in its Petition has projected energy generation from its 225 MW CCPP as approved for FY 2023-24 in the Tariff Order dated 31.03.2022 for the fourth Control Period.

Accordingly, the Commission approves saleable primary energy after deducting the normative auxiliary consumption of 2.50% as 776.80 MU for FY 2023-24.

5.2 Financial Parameters

5.2.1 Capital Cost and Additional Capitalisation for FY 2023-24

The Commission has not allowed any capitalisation for FY 2022-23 as the same will be approved based on the prudence check at the time of truing up proceedings for FY 2022-23.

Accordingly, opening capital cost for FY 2023-24 has been considered equivalent to the closing capital cost for FY 2021-22.

Further, the Petitioner has claimed additional capitalisation amounting to Rs. 15.80 Crore for FY 2023-24. The Petitioner submitted that it has estimated additional capitalisation which are related to construction of new drainage system, surrounding the plant's boundaries so as to avoid damage to plant boundary due to water clogging during heavy rainfall, maintenance of boundary wall and procurement of initial spares.

The Commission vide its Tariff Order dated 31.03.2022 on approval of the Business Plan and Tariff Petition of the Petitioner for the fourth Control Period from FY 2022-23 to FY 2024-25, 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. Further, with respect to the cost of Initial Spares to be allowed as additional capitalisation, the Commission has already taken a view in this regard in the Tariff Order dated 16.05.2017 that such capitalisation shall be reviewed at the time of truing up based on the actual expenditure subject to the ceiling limit specified under the Regulations. Accordingly, the Commission at this stage does not find any reason to approve any additional capitalisation for FY 2023-24 and additional capitalisation, if any, shall be considered on actual basis subject to prudence check on the basis of provisions of additional capitalisation and de-capitalisation in the prevailing MYT Regulations.

Accordingly, based on the above discussion, capital cost worked out as on 31.03.2022, i.e. Rs. 403.77 Crore after considering the additional capitalisation and de-capitalisation approved for FY 2021-22 has been considered as opening capital cost for FY 2023-24 and no additional capitalisation has been considered for FY 2023-24.

Accordingly, based on the above discussion, the details of the capital cost is as follows:

Table 5.1: Approved Gross Fixed Assets for FY 2023-24 (Rs. Crore)

Particulars	Opening GFA	Additional Capitalisation	Closing GFA
Land (Freehold Land)	7.50	0.00	7.50
Civil Works	29.10	0.00	29.10
Plant & Machinery	366.00	0.00	366.00
Furniture and Fixtures	0.21	0.00	0.21
Office Equipment & Others	0.09	0.00	0.09
Computers	0.05	0.00	0.05
Vehicles	0.81	0.00	0.81
Total	**403.77**	**0.00**	**403.77**

5.2.2 *Capital Structure*

Regulation 24 of UERC Tariff Regulations, 2021 specifies as under:

"...

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2021 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 1.4.2021, Debt: Equity Ratio shall be as approved by the Commission in the previous Orders."

Based on the discussion in the preceding Paras, since capital cost worked out as on 31.03.2021, i.e. Rs. 403.52 Crore has been considered as opening capital cost for FY 2023-24, accordingly, the capital structure for FY 2021-22 has also been considered for FY 2023-24. Details of the capital structure for FY 2023-24 claimed by the Petitioner and approved by the Commission is as follows:

Table 5.2: Capital Structure for FY 2023-24

Particular	Opening Capital Structure as on 01.04.2023				Addition during year				Closing Capital Structure as on 31.03.2024			
	Claimed		Approved		Claimed		Approved		Claimed		Approved	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	356.96	80.81	327.70	81.16	0.00	00	0.00	00.00	356.96	78.02	327.70	81.16
Equity	84.76	19.19	76.07	18.84	15.80	100	0.00	00.00	100.56	21.98	76.07	18.84
Total	**441.72**	**100.00**	**403.77**	**100.00**	**14.10**	**100**	**0.00**	**00.00**	**457.52**	**100.00**	**403.77**	**100.00**

5.2.3 *Depreciation*

Regulation 28 of the UERC Tariff Regulations, 2021 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 2023-24 based on the opening capital cost and proposed additional capitalisation for FY 2023-24. As mentioned earlier, the Commission has not considered the proposed additional capitalisation and the same, if any, shall be approved at the time of truing up of the respective financial year after prudence check. Accordingly, the Commission has determined the depreciation based on the admissible GFA for FY 2023-24. Details of the depreciation claimed and approved for the fourth Control Period is as follows:

Table 5.3: Depreciation approved by the Commission for FY 2023-24 (Rs. Crore)

Particulars	Approved in Tariff Order dated 31.03.2022	Claimed	Approved
Opening Capital Cost	402.85	432.63	403.77
Addition during year	0.00	15.80	0.00
Closing Capital Cost	402.85	448.43	403.77
Average Capital Cost	402.85	-	403.77
Weighted Average rate of Depreciation	5.06%	-	5.05%
Depreciation	**20.38**	**22.67**	**20.40**

5.2.4 *Return on Equity*

Regulation 26 of the UERC Tariff Regulations, 2021 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.

Provided further that, if the generating stations/licensees are able to demonstrate the actual date of asset being put to use and capitalized in its accounts of each asset for the purposes of business carried on by it through documentary evidence, including but not limited to 'asset put to use certificate', 'audited accounts' etc., then in such cases, after due satisfaction of the Commission, the RoE shall be allowed on pro-rata basis after considering additional capitalization done during the year out of *the equity capital.*

(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 proposed additional capitalisation for FY 2023-24 amounting to Rs. 15.80 Crore for FY 2023-24 out of its equity. The Petitioner has claimed RoE of Rs. 13.51 Crore on average equity for FY 2023-24.

As discussed earlier, the additional capitalisation will be approved based on the actual expenditures at the time of truing up of the respective years. Accordingly, the Commission has worked out the Return on Equity in accordance with the above-mentioned Regulations for FY 2023-24. Further, as the proviso to the Regulations provides that if the generating station is able to demonstrate the actual date of asset being put to use and capitalised in its accounts of each asset for the purpose of business carried on by it through documentary evidence, then RoE shall be allowed in pro-data basis considering additional capitalization done during the year. Details of Return on Equity claimed and approved is as follows:

Table 5.4: Return on Equity approved by the Commission for FY 2023-24 (Rs. Crore)

Particular	Approved in Tariff Order dated 31.03.2022	Claimed	Approved
Opening Equity	75.79	84.76	76.07
Addition during the year	0.00	4.74	0.00
Closing Equity	75.79	89.50	76.07
Rate of Return on Equity	15.50%	15.50%	15.50%
Return on Equity	**11.75**	**13.51**	**11.79**

5.2.5 *Interest and Finance Charges*

Regulation 27 of the UERC Tariff Regulations, 2021 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 1.4.2022 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2022 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 considered the net opening normative loan balance of Rs. 212.56 Crore for FY 2023-24. Further, the Petitioner has considered entire proposed additional capitalisation of Rs. 15.80 Crore as addition to normative loan and repayment equivalent to depreciation claimed, i.e. Rs. 22.67 Crore for FY 2023-24 to work out the closing normative loan amounting to Rs. 205.69 Crore. The Petitioner has claimed interest on normative loan of Rs. 26.49 Crore considering the weighted average rate of interest of 12.67%.

The Commission has considered the net closing normative loan of Rs. 205.35 Crore for FY 2021-22 as opening normative loan for FY 2022-23 and depreciation of Rs. 20.40 Crore approved for FY 2022-23 as repayment of normative loan as per applicable UERC Tariff Regulations, 2021 to work out the opening net normative loan, i.e. Rs. 184.95 Crore for FY 2023-24. Further, repayment has been considered equivalent to approved depreciation for FY 2023-24. Furthermore, weighted average rate of interest as derived for FY 2021-22, i.e. 12.37% has been considered for determination of interest on normative loan which shall be reviewed at the time of truing up. Accordingly, the Commission has approved interest on loan of Rs. 21.63 Crore for FY 2023-24.

The Petitioner has claimed Bank charges amounting to Rs. 1.34 Crore for FY 2023-24 as approved by the Commission vide its Tariff Order dated 31.03.2023 for the fourth Control Period from FY 2022-23 to FY 2024-25. The Commission has decided to provisionally approve the Bank Charges for FY 2023-24 as claimed by the Petitioner. However, the same shall be reviewed at the time of truing up for FY 2023-24.

Based on the above, details of interest claimed and allowed for the truing up are given in the Table below:

Table 5.5: Interest on Normative Loan Claimed and Approved for FY 2023-24 (Rs. Crore)

Particular	Approved in Tariff Order dated 31.03.2022	Claimed by Petitioner	Approved
Gross Opening Normative Loan	327.06	356.96	327.70
Cumulative Repayment	142.77	144.39	142.74
Net Opening Normative Loan	184.30	212.56	184.95
Additional Capitalisation	0.00	15.58	0.00
Normative Repayment of loan	20.38	22.67	20.40
Net Closing Normative Loan	163.91	205.69	164.55
Average Normative Loan	174.11	209.13	174.75
Rate of Interest	12.36%	12.67%	12.37%
Normative Interest	**21.51**	**26.49**	**21.63**
Add: Finance charges	1.34	1.34	1.34
Total Interest and Finance Charges	**22.85**	**27.83**	**22.97**

5.2.6 *Operation & Maintenance (O&M) Expenses*

Regulation 48(1) of the UERC Tariff Regulations, 2021, specifies as follows:

"(1) Normative O&M expenses for Open Cycle Gas Turbine/Combined Cycle gas based generating stations shall be as under:

(In Rs. Lakh/MW)

Year	*Gas Turbine/ Combined Cycle generating stations*		*Small gas turbine power generating stations (less than 50 MW Unit size)*	*Advance F Class Machines*
	With warranty spares for 10 years	*Without warranty spares*		
2021-22	*13.61*	*20.41*	*24.75*	*42.14*
2022-23	*14.18*	*21.27*	*25.79*	*43.91*
2023-24	*14.78*	*22.16*	*26.88*	*45.76*
2024-25	*15.40*	*23.10*	*28.01*	*47.69*

"

Accordingly, based on the applicable O&M norms, the normative O&M expenses claimed and allowed by the Commission for FY 2023-24 follows:

Table 5.6: O&M expenses approved by the Commission (Rs. Crore)

Particular	FY 2023-24		
	Approved in Tariff Order dated 31.03.2022	Claimed	Approved
O&M expense	48.96	48.96	48.96

However, the Petitioner is cautioned to exercise due prudence and diligence in incurring the O&M expenses. If during truing up exercise, the same is found unreasonable, the Commission will disallow the same.

5.2.7 Interest on Working Capital

Regulation 33 of UERC Tariff Regulations, 2021 specifies as follows:

"In case of open cycle Gas Turbine/Combined Cycle thermal generating stations, working capital shall cover:

i) Landed fuel cost for 1 (one) month corresponding to the NAPAF duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;

ii) Liquid fuel stock for ½ (half) month corresponding to the NAPAF, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;

iii) Operation and maintenance expenses for one month;

iv) Maintenance spares @ 30% of operation and maintenance expenses; and

v) Receivables equivalent to 2 (two) months of Capacity Charge and Energy Charges for sale of electricity calculated on NAPAF duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel."

The Petitioner submitted that the Commission vide its Order dated 17.04.2017 had given the provision of getting the payment from UPCL without deduction of applicable rebate if the Petitioner forgoes Interest on Working Capital in the interest of consumers of the State by reduction of tariff. Hence, the Petitioner relinquished Interest on Working Capital for the purpose of computation of Annual Fixed charges.

As discussed in Chapter 3 of this Order and methodology adopted in the Tariff Order dated 16.05.2017, the Commission has not considered any interest on working capital while approving the AFC for FY 2023-24.

5.2.8 Non-Tariff Income

Regulation 46 of UERC Tariff Regulations, 2021 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 proposed non-tariff income of Rs. 0.64 Crore for FY 2023-24. In the absence of any yardstick for estimating the non-tariff income of the Petitioner, the Commission provisionally accepts the same. However, the same shall be trued up based on the actual audited accounts.

5.2.9 Annual Fixed Charges for FY 2023-24

In accordance with the UERC Tariff Regulations, 2021, the Annual Fixed Charge (AFC) for FY 2023-24 as claimed and approved by the Commission is shown in the Table below:

Table 5.7: Annual Fixed Charges for FY 2023-24 approved by the Commission(Rs. Crore)

Particulars	As approved in Tariff Order dated 31.03.2022	As claimed by the Petitioner	As approved by the Commission
Depreciation	20.38	22.67	20.40
Interest on Loan and Finance charges	22.85	27.83	22.97
Return on Equity	11.75	13.51	11.79
O&M Expenses	48.96	48.96	48.96
Interest on Working Capital	0.00	0.00	0.00
Less: Non-Tariff Income	0.64	0.64	0.64
Sub- Total	**103.31**	**112.32**	**103.48**
True up for FY 2021-22 with carrying cost	0.00	0.00	7.31
Total	**103.31**	**112.32**	**96.17**

5.2.10 *Capacity Charge and Energy Charge Rate (ECR) for FY 2023-24*

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 2023-24 attributable to its beneficiary.

Regulation 49 of UERC Tariff Regulations, 2021 specifies as follows:

*"**49. Computation and Payment of Annual Fixed Charges and Energy Charges for Thermal Generating Stations***

(1) The fixed cost of a thermal generating station shall be computed on annual basis, based on the norms specified under these Regulations, and recovered on monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share/allocation in the capacity of the generating station.

(2) The capacity charge (inclusive of incentive) payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:

CC_1= (AFC/12) (PAF_1 / NAPAF) subject to ceiling of (AFC/12)

CC2= (AFC/6) (PAF2 / NAPAF) subject to ceiling of ((AFC/6) – CC1)

CC3= (AFC/4) (PAF3 / NAPAF) subject to ceiling of ((AFC/4) – (CC1+CC2))

CC4= (AFC/3) (PAF4 / NAPAF) subject to ceiling of ((AFC/3) – (CC1+CC2+CC3))

CC5= (AFC x 5/12) (PAF5/NAPAF) subject to ceiling of ((AFC x 5/12) – (CC1+CC2+CC3+CC4))

CC6= (AFC/2) (PAF6/NAPAF) subject to ceiling of ((AFC/2) – (CC1+CC2+CC3+CC4+CC5))

CC7= (AFCx7/12) (PAF7/NAPAF) subject to ceiling of ((AFCx7/12)–(CC1+CC2+CC3+ CC4+CC5+CC6))

CC8=(AFCx2/3) (PAF8/NAPAF) subject to ceiling of ((AFCx2/3)–(CC1+CC2+CC3+CC4+CC5+CC6 +CC7))

CC9=(AFCx3/4) (PAF9/NAPAF) subject to ceiling of ((AFCx3/4))–(CC1+CC2+CC3+ CC4+CC5+CC6+ CC7+CC8))

CC10=(AFCx5/6) (PAF10/NAPAF) subject to ceiling of ((AFCx5/6)–(CC1+CC2+CC3+ CC4+CC5+CC6+ CC7+CC8+CC9))

CC11=(AFCx11/12) (PAF11/NAPAF) subject to ceiling of ((AFCx11/12)–(CC1+CC2+CC3+CC4 +CC5+CC6+CC7+CC8+CC9+CC10))

CC12=(AFC) (PAFY/NAPAF) subject to ceiling of ((AFC)–(CC1+CC2+CC3+CC4+CC5+ CC6+CC7+CC8+ CC9+CC10+CC11))

Provided that in case of generating station or unit thereof or transmission system or an element thereof, as the case may be, under shutdown due to Renovation and Modernisation, the generating company or the transmission licensee shall be allowed to recover part of AFC which shall include O&M expenses and interest on loan only.

Where,

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

NAPAF = Normative plant availability factor in percentage.

PAF_N *= Percent Plant availability factor achieved upto the end of the nth month.*

PAF_Y *= Percent Plant availability factor achieved during the Year.*

CC_1, CC_2, CC_3, CC_4, CC_5, CC_6, CC_7, CC_8, CC_9, CC_{10}, CC_{11} *and* CC_{12} *are the Capacity Charges of 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th and 12th months respectively.*

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

NPAFM = 10000 x Σ DCi / { N x IC x (100 - AUX) } %

i = 1

Where,

AUX = Normative auxiliary energy consumption in percentage.

DCi = Average declared capacity (in ex-bus MW), for the ith day of the period, i.e. the month or the year as the case may be, as certified by the State load dispatch centre after the day is over.

IC = Installed Capacity (in MW) of the generating station

N = Number of days during the period i.e. the month or the year as the case may be.

***Note:** DCi and IC shall exclude the capacity of generating units not declared under commercial operation. In case of a change in IC during the concerned period, its average value shall be taken.*

(4) Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in Regulation 47(2).

(5) The energy charge shall cover the primary fuel cost and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel price adjustment). Total Energy charge payable to the generating company for a month shall be:

(Energy charge rate in Rs./kWh) x {Scheduled energy (ex-bus) for the month in kWh.}

(6) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

(a) For gas and liquid fuel based stations

ECR = GHR x LPPF x 100 / {CVPF x (100 – AUX)}

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for gas and liquid fuel based stations.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

(7) *The generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel, i.e. natural gas, RLNG, liquid fuel etc., as per the forms specified at Annexure-I to these regulations:*

Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. natural gas, RLNG, liquid fuel etc., shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months.

(8) *The landed cost of fuel shall include price of fuel corresponding to the grade/quality /calorific value of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail/road/gas pipe line or any other means for the purpose of computation of energy charges."*

Based on the aforesaid Regulations, capacity charges and energy charges shall be recovered by the Petitioner from the Respondent corresponding to the contracted capacity.

Further, with regard to Energy charges, the Commission in the Tariff Order dated 26.04.2021 has observed as follows:

"In this regard, it is observed that there has been a delay on the part of UPCL in making timely payments to the gas based generators and one generator has raised the issue that carrying cost on incentive on account of GSHR should not be levied as payment is not received by it on time. Besides allowing recovery of energy charge to the Petitioner, through periodic billing on UPCL, at GSHR of 2007.4 kCal/kWh is resulting in over recovery of energy charges to the Petitioner in the relevant year which eventually the Petitioner is required to return at the time of truing-up of the respective year, as the actual GSHR is low as compared to the SHR of 2007.4 kCal/kWh used by the Petitioner for raising the periodic invoices on UPCL. Accordingly, the Commission is of the view that the Petitioner shall raise the periodic invoices on UPCL based on actual GSHR calculated by it on periodic basis, subject to condition that the same shall be restricted to GSHR of 2007.4 kCal/kWh as approved by the Commission in its Order dated 05.04.2019. Further, the Commission would like to clarify that the methodology for sharing of gain/loss on account of efficient operation with respect to achievement of the optimum actual Gross Station Heat Rate by the Generator shall remain unaltered."

Accordingly, in light of the above discussion and views taken by the Commission in Order dated 26.04.2021 with respect to recovery of energy charges by the Petitioner from UPCL, the Commission is of the view that the Petitioner shall raise the periodic invoices on UPCL based on actual GSHR calculated by it on periodic basis, subject to condition that the same shall be restricted to GSHR of 2007.4 kCal/kWh as approved by the Commission in its Order dated 05.04.2019. Further, the Commission would like to clarify that the methodology for sharing of gain/loss on account of efficient operation with respect to achievement of the optimum actual Gross Station Heat Rate by the Generator shall remain unaltered.

(M.K. Jain)
Member (Technical)

(D.P. Gairola)
Member (Law)/ Chairman (I/c)