

# **Order**

**On**

**True up for FY 2022-23,  
Annual Performance Review  
for FY 2023-24**

**&**

**ARR for FY 2024-25**

**For**

**M/s Gama Infraprop Pvt. Ltd.**

**March 28, 2024**

**Uttarakhand Electricity Regulatory Commission**

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

**Dehradun - 248171**

## Table of Contents

<b>1.</b>	<b>Background and Procedural History .....</b>	<b>4</b>
<b>2.</b>	<b>UPCL's Objections/Suggestions, Petitioner's Responses and Commission's Views .....</b>	<b>7</b>
<b>2.1</b>	<b>Additional Capitalisation .....</b>	<b>7</b>
2.1.1	UPCL's Comment .....	7
2.1.2	Petitioner's reply .....	7
2.1.3	Commission's view .....	7
<b>2.2</b>	<b>Operation &amp; Maintenance Expenses.....</b>	<b>8</b>
2.2.1	UPCL's Comment .....	8
2.2.2	Petitioner's reply .....	8
2.2.3	Commission's view .....	9
<b>2.3</b>	<b>Recovery of Annual Fixed Cost .....</b>	<b>9</b>
2.3.1	UPCL's Comment .....	9
2.3.2	Petitioner's reply .....	9
2.3.3	Commission's view .....	9
<b>3.</b>	<b>Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2022-23 .....</b>	<b>11</b>
<b>3.1</b>	<b>Impact of Sharing of Gains and Losses on account of Controllable Factors for FY 2022-23.....</b>	<b>12</b>
3.1.1	Physical Parameters.....	13
3.1.1.1	NAPAF.....	13
3.1.1.2	Energy Generation and Saleable Primary Energy .....	13
3.1.2	Financial Parameters .....	13
3.1.2.1	Capital Cost .....	13
3.1.2.2	Additional Capitalisation and De-capitalisation.....	14

3.1.2.3	Capital Structure.....	15
3.1.2.4	Depreciation .....	16
3.1.2.5	Interest and Finance charges .....	17
3.1.2.6	Return on Equity (RoE).....	19
3.1.2.7	Operation & Maintenance (O&M) Expenses .....	21
3.1.2.7.1	Truing up of O&M Expenses for FY 2022-23 .....	21
3.1.2.8	Interest on Working Capital.....	23
3.1.2.9	Non-Tariff Income .....	24
3.1.2.10	Annual Fixed Charges (AFC) for FY 2022-23.....	25
3.1.2.11	Capacity Charge and Energy Charge Rate (ECR) for FY 2022-23.....	26
<b>4.</b>	<b>Petitioner’s Submissions, Commission’s Analysis, Scrutiny and Conclusion on APR for FY 2023-24 .....</b>	<b>30</b>
<b>4.1</b>	<b>Annual Performance Review .....</b>	<b>30</b>
<b>5.</b>	<b>Petitioner’s Submissions, Commission’s Analysis, Scrutiny and Conclusion on ARR for FY 2024-25 .....</b>	<b>32</b>
<b>5.1</b>	<b>Physical Parameters .....</b>	<b>32</b>
5.1.1	NAPAF.....	32
5.1.2	Design Energy, Auxiliary Energy Consumption and Saleable Primary Energy .....	32
<b>5.2</b>	<b>Financial Parameters.....</b>	<b>32</b>
5.2.1	Capital Cost and Additional Capitalisation for FY 2024-25.....	32
5.2.2	Capital Structure.....	33
5.2.3	Depreciation.....	34
5.2.4	Return on Equity .....	35
5.2.5	Interest and Finance Charges .....	36
5.2.6	Operation & Maintenance (O&M) Expenses .....	38
5.2.7	Interest on Working Capital.....	39

5.2.8	Non-Tariff Income .....	40
5.2.9	Annual Fixed Charges for FY 2024-25 .....	41
5.2.10	Capacity Charge and Energy Charge Rate (ECR) for FY 2024-25 .....	41

### **List of Tables**

Table 3.1: Approved Gross Fixed Assets for FY 2022-23 (Rs. Crore) .....	15
Table 3.2: Financing for capitalisation for FY 2022-23 .....	16
Table 3.3: Depreciation claimed and approved for FY 2022-23 (Rs. Crore).....	17
Table 3.4: Interest on Normative Loan for FY 2022-23 (Rs. Crore) .....	19
Table 3.5: Return on Equity approved for FY 2022-23 (Rs. Crore).....	21
Table 3.6: O&M Expenses Approved After Sharing of Gains & Losses for FY 2022-23 (Rs. Crore) .....	23
Table 3.7: Annual Fixed Charges for FY 2022-23 approved by the Commission (Rs. Crore).....	26
Table 5.1: Approved Gross Fixed Assets for FY 2024-25 (Rs. Crore) .....	33
Table 5.2: Capital Structure for FY 2024-25 .....	34
Table 5.3: Depreciation approved by the Commission for FY 2024-25 (Rs. Crore) .....	35
Table 5.4: Return on Equity approved by the Commission for FY 2024-25 (Rs. Crore) .....	36
Table 5.5: Interest on Normative Loan Claimed and Approved for FY 2024-25 (Rs. Crore) .....	38
Table 5.6: O&M expenses approved by the Commission (Rs. Crore) .....	39
Table 5.7: Annual Fixed Charges for FY 2024-25 approved by the Commission .....	41

**Before**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Petition No.: 51 of 2023**

**In the Matter of:**

Petition filed by M/s Gama Infraprop Private Limited for True up for FY 2022-23, Annual Performance Review for FY 2023-24 and Revised Annual Revenue Requirement for FY 2024-25.

**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.L. Prasad**

**Member (Technical)**

**Date of Order: March 28, 2024**

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 31.03.2022 for the fourth Control Period from FY 2022-23 to FY 2024-25. Subsequently, the Commission had carried out the Annual Performance Review (APR) for FY 2022-23 vide its Order dated 30.03.2023.

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 2023 and hereinafter referred to as “Petition”), giving details of its revised projections of Aggregate Revenue Requirement (ARR) for FY 2024-25 and Annual Performance Review for FY 2023-24 on 05.12.2023. Through the above Petition, the Petitioner has also requested for true up of FY 2022-23 based on the audited accounts in accordance with UERC Tariff Regulations, 2021.

The Petition filed by the Petitioner had certain infirmities/deficiencies. The Commission, accordingly, vide its letter no. UERC/6/TF-705/2023-24/2023/952 dated 11.12.2023 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/02/2023 dated 19.12.2023 removed the critical deficiencies. Based on the submission dated 19.12.2023 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 2022-23, APR for FY 2023-24 and revised ARR for FY 2024-25 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 31.03.2022 and 30.03.2023.

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 Aggregate Revenue Requirement of M/s GIPL is recoverable from the beneficiary, i.e. 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 2022-23.
- Chapter 4- Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2023-24.
- Chapter 5- Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on ARR for FY 2024-25.



## 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 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. Thereafter, the Commission vide its Tariff Order dated 30.03.2022 carried out the true up of FY 2021-22 and approved ARR for FY 2023-24 alongwith APR for FY 2022-23.

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 2023-24 on 05.12.2023. Through the above Petition, M/s GIPL sought true up for FY 2022-23, APR for FY 2023-24 and ARR for FY 2024-25 based on the audited accounts for FY 2022-23 and revised projections for additional capitalisations for FY 2023-24 and FY 2024-25. The Commission vide its letter no. UERC/6/TF-705/2023-24/2023/952 dated 11.12.2023 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 19.12.2023 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 2022-23, APR for FY 2023-24 and revised ARR for FY 2024-25 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 MYT Order dated 31.03.2022 and Tariff Order dated 30.03.2023.

Based on the submission dated 19.12.2023 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 all invoices raised to Uttarakhand Power Corporation Ltd. (UPCL) for supply of electricity during FY 2022-23;
- Audited annual accounts and Trial Balance for FY 2022-23.
- Supporting documents Insurance policy and, Trial Balance for FY 2021-22.
- 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 proposals to UPCL vide letter no. UERC/6/TF-705/2023-24/2023/996 dated 28.12.2023.

UPCL vide its letter no. 538/UPCL/Comm/SE-II/B-II dated 06.02.2024 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/04/2024 dated 12.03.2024 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 true up for FY 2022-23, Annual Performance Review for FY 2023-24 and Aggregate Revenue Requirement for FY 2024-25. 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 Additional Capitalisation**

#### **2.1.1 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 should not be allowed. With regard to projected procurement of Initial Spares during FY 2023-24, UPCL submitted that the Petitioner has not submitted documentary evidence as directed by the Commission and, hence, procurement of initial spares is not legitimate.

#### **2.1.2 Petitioner's reply**

The Petitioner submitted that it has only incurred a very nominal amount of Rs. 0.028 Crore in FY 2022-23 for office equipment, Plant & Machinery and Plant's Building. The Petitioner has complied with all the queries with respect to the expenses incurred to the Commission. Further, the Petitioner had submitted the details pertaining to procurement of spares in Business Plan for the fourth Control Period from FY 2022-23 to FY 2024-25.

#### **2.1.3 Commission's view**

The Commission while carrying out the truing up for FY 2022-23 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 and expenditure incurred on buildings etc forms part of the plant.

## **2.2 Operation & Maintenance Expenses**

### **2.2.1 UPCL's Comment**

UPCL submitted that the Petitioner in its Petition while seeking true-up for FY 2022-23 submitted a saving of Rs. 23.62 Crore in the O&M expenses against the approved O&M expenses of Rs. 46.98 Crore as per UERC Tariff Regulations, 2021 and has requested to be allowed to retain Rs. 15.57 Crore as O&M expenses on account of 2/3<sup>rd</sup> of the saving as per the Regulations. UPCL submitted that as stated by the generator, the approved O&M expenses of Rs. 46.98 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 for the fiscal year 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 2023-24 and FY 2024-25, UPCL submitted that the O&M expenses claimed are amounting to Rs. 48.96 Crore and Rs. 51.03 Crore respectively which are exorbitant and hypothetical. UPCL submitted that the Petitioner has not informed about O&M works carried out or to be carried out by them till date which was the directions of the Commission vide its Tariff Order dated 18.04.2020 and 26.04.2021. The Petitioner has neither informed the basis of O&M expenses proposed for FY 2024-25 nor submitted the details of proposed O&M works.

### **2.2.2 Petitioner's reply**

The Petitioner submitted that it has not incurred any major O&M expenses which are HGPI of Gas Turbine and overhauling of major machines like STG, HRSG, ACC. The expenses incurred under O&M expenses of Rs. 12.26 Crore pertains majorly O&M operator STEAG Energy, Insurance, Salaries which are day to day expenses. Further, major expenses are incurred with aging of machine and once the machine approaches running hours, HGPI of Gas Turbine in FY 2023-24 will be done after prior intimation to the Commission and the Respondent.

### **2.2.3 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, 2021 after prudence analysis of actual O&M expenses incurred. Further, projected O&M expenses for FY 2024-25 has been approved in accordance with the provisions of UERC Tariff Regulations, 2021 subject to the condition that the same will be trued up while carrying out the truing up exercise for FY 2024-25 based on the actual O&M expenses incurred after prudence check.

## **2.3 Recovery of Annual Fixed Cost**

### **2.3.1 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 on 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.

### **2.3.2 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.

### **2.3.3 Commission's view**

Recovery of the annual fixed charged are being done in accordance with the principles laid down in the prevailing UERC Tariff Regulations and also the provisions of the PPA

entered into between the Petitioner and the Respondent and, hence, the Commission does not find any merit in deviating from the existing principles. Besides it is the practice prevalent across the county to ensure recovery of fixed charges based on NAPAF of the thermal power plants.

### 3. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2022-23

Regulation 12 of the UERC Tariff Regulations, 2021 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 2022-23 based on the audited annual accounts and has, accordingly, requested the Commission to carry out the truing up for FY 2022-23 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 2022-23.**

Regulation 14 of the UERC Tariff Regulations, 2021 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, 2021 requires a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenues subject to prudence check including 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, 2021 these are controllable expenses. Similarly, in accordance with the UERC Tariff Regulations, 2021, 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, 2021.

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, 2021.

### **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.”*

Accordingly, the Commission is of the view that the NAPAF of 85% approved for FY 2022-23 in the Tariff Order dated 31.03.2022 for the fourth Control Period shall continue to be applicable without any change.

#### **3.1.1.2 Energy Generation and Saleable Primary Energy**

The Commission in its Tariff Order dated 31.03.2022 on approval of Business Plan and Multi Year Tariff for the fourth Control Period from FY 2022-23 to FY 2024-25 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, 2021, auxiliary consumption of 2.50% has been considered. Accordingly, applying the NAPAF of 85% as specified in the Regulations and reducing the auxiliary power, the saleable energy works out as 776.80 MU for FY 2022-23. However, due to restrictions imposed by UPCL on power offtake due to which no electricity was generated/supplied by M/s GIPL to UPCL in FY 2022-23.

The Commission based on the provisionally verified declared capacity by SLDC, the generator's plant availability was more than 85% during FY 2022-23. M/s GIPL has also not sought any deviation in the approved design energy for FY 2022-23. Accordingly, the Commission decides to maintain the design energy and saleable primary energy as considered in the MYT Order dated 31.03.2022 for the Petitioner's plant.

### **3.1.2 Financial Parameters**

#### **3.1.2.1 Capital Cost**

Regulation 21 (2) of UERC Tariff Regulations, 2021 specifies as under:

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

- a) The capital cost admitted by the Commission prior to 01.04.2022 duly trued up as on 01.04.2022;*
- 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. 403.77 Crore as on 01.04.2023. The Commission vide its Tariff Order dated 30.03.2023 had approved the opening GFA and net additional capitalisation amounting to Rs. 402.85 Crore and Rs. 0.91 Crore respectively for FY 2021-22 for the contracted capacity of 107 MW. Accordingly, the Commission has considered the approved closing GFA, i.e. Rs. 403.77 Crore for FY 2021-22 as opening GFA for the purpose of truing up for FY 2022-23.

### **3.1.2.2 Additional Capitalisation and De-capitalisation**

Regulation 22(1) of UERC Tariff Regulations, 2021 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 1.4.2022 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. 0.010, 0.012 and 0.006 Crore each for Building, Plant & Machinery and Office Equipment respectively for FY 2022-23 in accordance with Regulation 22(2) of UERC Tariff Regulations, 2021. The works pertain to plant's canteen, purchase of air conditioner for control panel, and an office equipment.

Accordingly, based on the above, the Commission approves the additional capitalisation pertaining to Building, Air Conditioner and Office Equipment amounting to Rs. 0.028 Crore for the purpose of truing up of FY 2022-23 after prudence check.

Accordingly, based on the above discussion, the details of the trued-up capital cost for FY 2022-23 are as follows:

**Table 3.1: Approved Gross Fixed Assets for FY 2022-23 (Rs. Crore)**

Particulars	Opening GFA	Additional Capitalisation	De-capitalisation	Closing GFA
Land (Freehold Land)	7.503	0.000	0.00	7.503
Civil Works	29.103	0.010	0.00	29.113
Plant & Machinery	366.003	0.012	0.00	366.016
Furniture and Fixtures	0.212	0.000	0.00	0.212
Office Equipment & Others	0.087	0.006	0.00	0.092
Computers	0.052	0.000	0.00	0.052
Vehicles	0.807	0.000	0.00	0.807
<b>Total</b>	<b>403.77</b>	<b>0.028</b>	<b>0.00</b>	<b>403.79</b>

### 3.1.2.3 Capital Structure

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

*“...*

*(5) Any expenditure incurred or projected to be incurred on or after 1.4.2022 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 1.4.2022, Debt: Equity Ratio shall be as approved by the*

*Commission in the previous Orders.”*

The Petitioner has claimed the Debt-Equity Ratio of 81.16:18.84 as on 31.03.2022 as approved by the Commission vide its Tariff Order dated 30.03.2023 while carrying out the true up for FY 2021-22 and the Commission has considered the same Debt-Equity Ratio for the GFA.

Further, with regard to the additional capitalisation claimed for FY 2022-23, 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 2022-23 in the ratio of 70:30 in accordance with the UERC Tariff Regulations, 2021.

Capital structure for the GFA, additional capitalisation for FY 2022-23 is as follows:

**Table 3.2: Financing for capitalisation for FY 2022-23**

Particular	Opening Capital Structure as on 01.04.2022		Addition during year		Closing Capital Structure as on 31.03.2022	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	327.695	81.16	0.020	70.00	327.715	81.16
Equity	76.071	18.84	0.008	30.00	76.080	18.84
<b>Total</b>	<b>403.77</b>	<b>100.00</b>	<b>0.028</b>	<b>100.00</b>	<b>403.795</b>	<b>100.00</b>

### 3.1.2.4 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 of Rs. 20.42 Crore for FY 2022-23 considering the additional capitalisation at the beginning of the year and the depreciation rates specified by the Commission in its UERC Tariff Regulations, 2021. The Commission has calculated the weighted average rate of depreciation of 5.05% by applying the depreciation rates as specified in Appendix-II of UERC Tariff Regulations, 2021. Further, the Commission has worked out the depreciation of Rs. 20.40 Crore on the admissible average GFA of Rs. 403.78 Crore for FY 2022-23 by applying the weighted average rate of depreciation of 5.05%.

Depreciation, as approved in the Tariff Order dated 31.03.2022, claimed by the Petitioner and trued up for FY 2022-23 is as follows:

**Table 3.3: Depreciation claimed and approved for FY 2022-23 (Rs. Crore)**

Particular	Approved in Tariff Order dated 31.03.2022	Claimed by Petitioner	Approved after truing up
Opening Capital Cost	402.85	403.77	403.77
Addition during year	0.00	0.03	0.03
De-capitalisation	0.00	0.00	0.00
Closing Capital Cost	402.85	404.80	403.79
Average Capital Cost	402.85	-	403.78
Weighted Average rate of Depreciation	5.06%	-	5.05%
<b>Depreciation</b>	<b>20.38</b>	<b>20.42</b>	<b>20.40</b>

### 3.1.2.5 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 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. 24.11 Crore for FY 2022-23 for the purpose of truing up based on the weighted average rate of interest of 12.34% p.a. Further, the Petitioner has considered the entire additional capitalisation, i.e. Rs. 0.028 claimed for FY 2022-23 as addition to normative loan.

The Commission examined the audited annual accounts & Trial Balance for FY 2022-23 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. 185.67 Crore and Rs. 147.64 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. 185.69 Crore and Rs. 150.49 Crore respectively for FY 2022-23. With regard to variation in opening and closing debt for FY 2022-23, 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 2022-23 is Rs. 20.56 Crore. The Commission observed that the total interest amounting to Rs. 20.59 Crore has been charged to the P&L Statement for FY 2022-23 out of which Rs. 20.56 Crore pertains to long term borrowings. Accordingly, the Commission has considered interest of Rs. 20.56 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. 185.69 Crore and Rs. 150.49 Crore respectively and considering the interest paid on long term borrowings during the year, the weighted average rate of interest works out to 12.11% p.a. for FY 2022-23.

The Commission has considered the net opening normative loan of Rs. 205.35 Crore and repayment has been considered equal to the admissible depreciation, i.e. Rs. 20.40 Crore. Further, as mentioned earlier above in this Order, admissible net additional capitalisation for FY 2022-23 of Rs. 0.03 Crore has been considered in the ratio of 70:30 in accordance with the UERC Tariff Regulations, 2021. Accordingly, the Commission has considered net addition to normative loan amounting to Rs. 0.02 Crore.

Further, the Petitioner has claimed Bank Charges amounting to Rs. 0.86 Crore for FY 2022-23 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 3.4: Interest on Normative Loan for FY 2022-23 (Rs. Crore)**

Particular	Approved in Tariff Order dated 31.03.2022	Claimed by Petitioner	Approved after truing up
Gross Opening Normative Loan	325.82	328.08	327.70
Cumulative Repayment	122.52	122.42	122.34
Net Opening Normative Loan	203.30	205.67	205.35
Net Additional Capitalisation	0.00	0.03	0.02
Normative Repayment of loan	21.91	20.42	20.40
Net Closing Normative Loan	181.39	185.28	184.97
Average Normative Loan	192.35	195.47	195.16
Rate of Interest	12.19%	12.34%	12.11%
<b>Normative Interest</b>	<b>23.46</b>	<b>24.11</b>	<b>23.64</b>
Add: Financial charges	1.34	0.86	0.86
<b>Total Interest and Finance Charges</b>	<b>24.80</b>	<b>24.97</b>	<b>23.64</b>

### 3.1.2.6 Return on Equity (RoE)

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.*

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

The Petitioner has claimed the Return on Equity amounting to Rs. 11.79 Crore on the average equity for FY 2022-23 after considering actual additional capitalisation during FY 2022-23.

The Commission has allowed the Return on Equity on the opening equity base at the rate of 15.50%, after excluding additional capitalization after cut-off date beyond the original scope of work excluding additional capitalization due to change in law in accordance with the first proviso of Regulation 26(2) of UERC Tariff Regulations, 2021.

The Petitioner's plant was commissioned on 16.03.2016, therefore, in accordance with the sub-regulation (19) of Regulation 3 of the UERC Tariff Regulations, 2021 the cut-off date for the Petitioner's plant works out to 31.03.2019. The Commission had approved Equity additions amounting to Rs. 0.86 Crore during the true of FY 2019-20 to FY 2021-22, i.e. beyond the cut-off date. Out of the said addition to the Equity, an amount of Rs. 0.48 Crore pertains to procurement of GT Inlet Filter for improvement of performance during FY 2020-21. Since, the procurement of GT Inlet Filter is on account of suggestion given by the Commission for performance improvement vide its Order dated 05.04.2019, therefore, the same have not been excluded from the opening equity base for the purposes of allowing RoE for FY 2022-23.

In view of the above, the Commission has worked out the addition to Equity post cut-off date amounting to Rs. 0.38 Crore (Rs. 0.86 Crore – Rs. 0.48 Crore). Further, the Commission has approved Equity addition of Rs. 0.01 Crore for FY 2022-23. As discussed in subsequent paras of this Order, the Commission has approved rate of interest on loan capital as 12.11% for FY 2022-23. Accordingly, RoE has been allowed on the addition post cut-off date, as discussed above, at the rate of 12.11% in

accordance with the first proviso to sub-regulation (2) of Regulation 26 of UERC Tariff Regulations, 2021 on pro-rata basis after considering additional capitalization done during the year out of the equity capital.

The Return on Equity approved by the Commission for FY 2022-23 is given in the Table below:

**Table 3.5: Return on Equity approved for FY 2022-23 (Rs. Crore)**

Particular	Approved in Tariff Order dated 31.03.2022	Claimed by Petitioner	Approved after truing up
<b>(A) Equity within Original Scope of Work</b>			
Opening Equity	75.79	76.07	75.69
Net Addition during the year	0.00	0.03	0.00
Closing Equity	75.79	0.01	75.69
Rate of Return on Equity	15.50%	15.50%	15.50%
<b>Return on Equity</b>	<b>11.75</b>	<b>11.79</b>	<b>11.73</b>
<b>(B) Equity beyond Original Scope of Work</b>			
Opening Equity	-	-	0.38
Net Addition during the year	-	-	0.01
Closing Equity	-	-	0.39
Rate of Return on Equity	-	-	12.11%
<b>Return on Equity</b>	<b>-</b>	<b>-</b>	<b>0.05</b>
<b>Total RoE (A)+ (B)</b>	<b>11.75</b>	<b>11.79</b>	<b>11.78</b>

### 3.1.2.7 Operation & Maintenance (O&M) Expenses

#### 3.1.2.7.1 Truing up of O&M Expenses for FY 2022-23

Regulation 48(1) of UERC Tariff Regulations, 2021 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:*

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

“

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. 46.98 Crore for FY 2022-23 for the

contracted capacity of the Petitioner's Plant. The Petitioner submitted that the actual O&M expense of Rs. 23.62 Crore has been incurred during FY 2022-23.

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 office equipment' has increased to 0.40 Crore during FY 2022-23 against the expenses amounting to Rs. 0.07 Crore incurred during FY 2021-22. In the matter, the Petitioner submitted that the repair & maintenance pertaining to Office equipment and others items has increased due to repairing of computers and networking in the Control Room of plant area which is done in different phases and also of electrical fittings.

The Petitioner has claimed expenses amounting to Rs. 0.30 Crore during FY 2022-23 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.

Further, the Commission observed that the Petitioner has incurred expenses amounting to Rs. 0.09 Crore towards fees for e-tendering for NTPC Vidyut Vyapar Nigam Ltd. for supply of power from the non-contracted capacity. Therefore, the same has not been allowed as a pass through. Further, the Petitioner has claimed banking charges amounting to Rs. 0.86 Crore under the heads of O&M expenses. However, the Commission has allowed the same on actual basis with the Normative Interest on Loan, therefore, the same has not been considered here. Based on the above discussion, allowable O&M expenses, for the purpose of sharing, works out to Rs. 23.23 Crore against the claim of Rs. 23.62 Crore for FY 2022-23. Further, as per UERC Tariff Regulations, 2021 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, 2021 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) 1/3<sup>rd</sup> 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 above, O&M expenses have been considered as controllable factor, accordingly, the Commission has approved the total O&M expenses for FY 2022-23 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 2022-23 (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
23.61	23.23	46.98	23.75	15.84	39.07

Further, the Commission would like to state that, this being the last year of the fourth Control Period, the Commission may design separate norms for determining the O&M expenses of gas-based utilities in the upcoming control period commencing from FY 2025-26. While designing such norms, the Commission takes into account that, whether the operations of the utility has stabilized or not, reasonableness/requirement of the O&M expenses for smooth running of plant operations, technology of machinery used in the plant, staffing pattern of the utility, past year actual duly considering the outliers/ unusual variations etc. The Petitioner, therefore, is required to ensure that the expenses incurred under the head Operation and Maintenance expenses are incurred at reasonable levels considering the fact that the operations of the plant must have stabilized by now, i.e. almost during the 7 years period post commissioning of the plant in FY 2015-16.

### **3.1.2.8 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:*

- 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 2022-23.

### **3.1.2.9 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 contractors 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. 0.39 Crore as per the audited annual accounts for FY 2022-23. The Commission observed that as per Trial Balance for FY 2022-23 interest income is amounting to Rs. 0.39 Crore and Other Miscellaneous Incomes are Rs. 0.02 Crore. Accordingly, the Commission has approved the actual non-tariff income of Rs. 0.41 Crore for FY 2022-23 as per the audited accounts after prudence check.

#### **3.1.2.10 Annual Fixed Charges (AFC) for FY 2022-23**

Based on the above analysis, the Commission has worked out the approved figures of AFC for FY 2022-23. The summary of the same is as follows:

**Table 3.7: Annual Fixed Charges for FY 2022-23 approved by the Commission (Rs. Crore)**

Particulars	Tariff Order dated 31.03.2022	Claimed in Petition	Approved/ Trued up
Depreciation	20.38	20.42	20.40
Interest on Loan & Financial Cost	25.37	24.97	24.50
Return on Equity	11.75	11.79	11.78
O&M Expenses	46.98	23.62	39.07
Interest on Working Capital	0.00	0.00	0.00
<i>Less: Non-Tariff Income</i>	(0.64)	(0.39)	(0.41)
<b>Sub-Total</b>	<b>103.85</b>	<b>80.41</b>	<b>95.33</b>
True up for FY 2020-21 with carrying cost	(3.20)		(3.20)
<b>Total</b>	<b>100.65</b>	<b>80.41</b>	<b>92.13</b>

Accordingly, trued-up AFC for FY 2022-23 works out to Rs. 92.13 Crore against Rs. 100.65 Crore approved by the Commission vide its Tariff Order dated 31.03.2022. The Commission has worked out a surplus of Rs. 8.52 Crore for FY 2022-23 which works to Rs. 10.58 Crore with carrying cost to be recovered in FY 2024-25.

### 3.1.2.11 Capacity Charge and Energy Charge Rate (ECR) for FY 2022-23

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 2022-23.

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:*

$$CC_1 = (AFC/12) (PAF_1 / NAPAF) \text{ subject to ceiling of } (AFC/12)$$

$$CC_2 = (AFC/6) (PAF_2 / NAPAF) \text{ subject to ceiling of } ((AFC/6) - CC_1)$$

$$CC_3 = (AFC/4) (PAF_3 / NAPAF) \text{ subject to ceiling of } ((AFC/4) - (CC_1 + CC_2))$$

$CC_4 = (AFC/3) (PAF_4 / NAPAF)$  subject to ceiling of  $((AFC/3) - (CC_1 + CC_2 + CC_3))$

$CC_5 = (AFC \times 5/12) (PAF_5 / NAPAF)$  subject to ceiling of  $((AFC \times 5/12) - (CC_1 + CC_2 + CC_3 + CC_4))$

$CC_6 = (AFC/2) (PAF_6 / NAPAF)$  subject to ceiling of  $((AFC/2) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5))$

$CC_7 = (AFC \times 7/12) (PAF_7 / NAPAF)$  subject to ceiling of  $((AFC \times 7/12) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6))$

$CC_8 = (AFC \times 2/3) (PAF_8 / NAPAF)$  subject to ceiling of  $((AFC \times 2/3) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7))$

$CC_9 = (AFC \times 3/4) (PAF_9 / NAPAF)$  subject to ceiling of  $((AFC \times 3/4) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8))$

$CC_{10} = (AFC \times 5/6) (PAF_{10} / NAPAF)$  subject to ceiling of  $((AFC \times 5/6) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8 + CC_9))$

$CC_{11} = (AFC \times 11/12) (PAF_{11} / NAPAF)$  subject to ceiling of  $((AFC \times 11/12) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8 + CC_9 + CC_{10}))$

$CC_{12} = (AFC) (PAF_Y / NAPAF)$  subject to ceiling of  $((AFC) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8 + CC_9 + CC_{10} + CC_{11}))$

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  $n$ th 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:

$$NPAFM = 10000 \times \sum DC_i / \{ N \times IC \times (100 - AUX) \} \%$$

$$i = 1$$



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

$$ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$$

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 Energy Charge, it is pertinent to mention that the Petitioner's plant remained under shut down during FY 2022-23 due to backdown instructions from UPCL and, therefore, no fuel was procured by the Petitioner for electricity generation. Hence, the Commission has not carried out any truing up of energy charges for FY 2022-23.

## 4. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2023-24

### 4.1 Annual Performance Review

The Commission, vide its Tariff Order dated 30.03.2023, approved the Tariff for the Petitioner's Plant for FY 2023-24. 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 30.03.2023 had approved the AFC for FY 2023-24 for the Petitioner's plant. The Petitioner, in its present Petition, has proposed revision of estimates for FY 2023-24 based on the audited accounts for FY 2022-23 and revised estimates for FY 2023-24.

The Commission, in this Order, has carried out the Truing up for FY 2022-23 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 2022-23 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. 16.14 Crore in FY 2023-24 pertaining to Civil Work and Plant & Machinery (spares) amounting to Rs. 4.00 Crore and Rs. 12.14 Crore respectively. The Commission has gone through the submissions of the Petitioner and observed that out of the projected additional capitalisation of Rs. 16.14 Crore, only Rs. 0.34 Crore has been incurred on procurement of air conditioner and control panels for main plant control room. Accordingly, the Commission is of the view that the proposed additional capitalisation shall be allowed at the time of truing-up of FY 2023-24 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 2024-25**

### **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 2024-25 in the Tariff Order dated 31.03.2022 for 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 2024-25 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 MUs for FY 2024-25.

### **5.2 Financial Parameters**

#### **5.2.1 Capital Cost and Additional Capitalisation for FY 2024-25**

The Commission has not allowed any capitalisation for FY 2023-24 as the same will be approved based on the prudence check at the time of truing up proceedings for FY 2023-24.

Accordingly, opening capital cost for FY 2024-25 has been considered equivalent to the closing capital cost for FY 2022-23.

Further, the Petitioner has claimed additional capitalisation amounting to Rs. 10.20 Crore for FY 2024-25. The Petitioner has estimated capital additions in civil works pertaining to sheeting work in main plant building, development of shade in main plant building gate area, Medical Room and majorly in Plant & Machinery as also projected in business plan, i.e. related to procurement of consumables for HGPI of Gas Turbine and also critical spares of plant, VFD's, Emergency DG set etc.

The Commission vide its Tariff Order dated 30.03.2022 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. Accordingly, the Commission at this stage does not find any reason to approve any additional capitalisation for FY 2024-25 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 31.03.2023, i.e. Rs. 403.79 Crore after considering the additional capitalisation approved for FY 2022-23 has been considered as opening capital cost for FY 2024-25 and no additional capitalisation has been considered for FY 2024-25.

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

**Table 5.1: Approved Gross Fixed Assets for FY 2024-25 (Rs. Crore)**

Particulars	Opening GFA	Additional Capitalisation	Closing GFA
Land (Freehold Land)	7.50	0.00	7.50
Civil Works	29.11	0.00	29.11
Plant & Machinery	366.02	0.00	366.02
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
<b>Total</b>	<b>403.79</b>	<b>0.00</b>	<b>403.79</b>

### 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 paragraphs, since capital cost worked out as on 31.03.2023, i.e. Rs. 403.79 Crore has been considered as opening capital cost for FY 2024-25, accordingly, the capital structure for FY 2022-23 has also been considered for FY 2024-25. Details of the capital structure for FY 2024-25 claimed by the Petitioner and approved by the Commission is as follows:

**Table 5.2: Capital Structure for FY 2024-25**

Particular	Opening Capital Structure as on 01.04.2024		Addition during year		Closing Capital Structure as on 31.03.2025	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	327.71	81.16	0.00	00.00	327.71	81.16
Equity	76.08	18.84	0.00	00.00	76.08	18.84
<b>Total</b>	<b>403.79</b>	<b>100.00</b>	<b>0.00</b>	<b>00.00</b>	<b>403.79</b>	<b>100.00</b>

### 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 2024-25 based on the opening capital cost and proposed additional capitalisation for FY 2024-25. 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 2024-25. 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 2024-25 (Rs. Crore)**

Particulars	Approved in Tariff Order dated 31.03.2022	Claimed	Approved
Opening Capital Cost	402.85	419.94	403.79
Addition during year	0.00	10.20	0.00
Closing Capital Cost	402.85	430.14	403.79
Average Capital Cost	402.85	-	403.79
Weighted Average rate of Depreciation	5.06%	-	5.05%
<b>Depreciation</b>	<b>20.38</b>	<b>21.19</b>	<b>20.40</b>

#### 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



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

*..."*

The Petitioner has proposed additional capitalisation for FY 2024-25 amounting to Rs. 10.20 Crore for FY 2024-25 out of its equity. The Petitioner has claimed RoE of Rs. 12.78 Crore on average equity for FY 2024-25.

As discussed earlier, the additional capitalisation will be approved based on the actual expenditure 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 2024-25. 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 on 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 2024-25 (Rs. Crore)**

Particular	Approved in Tariff Order dated 31.03.2022	Claimed	Approved
<b>(A) Equity within Original Scope of Work</b>			
Opening Equity	75.79	80.92	75.69
Addition during the year	0.00	3.06	0.00
Closing Equity	75.79	83.98	75.69
Rate of Return on Equity	15.50%	15.50%	15.50%
<b>Return on Equity</b>	<b>11.75</b>	<b>12.78</b>	<b>11.73</b>
<b>(B) Equity within Original Scope of Work</b>			
Opening Equity	-	-	0.39
Net Addition during the year	-	-	0.00
Closing Equity	-	-	0.39
Rate of Return on Equity	-	-	12.11%
<b>Return on Equity</b>	-	-	<b>0.05</b>
<b>Total RoE (A)+ (B)</b>	-	-	<b>11.78</b>

### 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. 180.23 Crore for FY 2024-25. Further, the Petitioner has considered entire proposed additional capitalisation of Rs. 10.20 Crore as addition to normative loan and repayment equivalent to depreciation claimed, i.e. Rs. 21.70 Crore for FY 2024-25 to work out the closing normative loan amounting to Rs. 168.73 Crore. The Petitioner has claimed interest on normative loan of Rs. 22.25 Crore considering the weighted average rate of interest of 13.00%.

The Commission has considered the net closing normative loan of Rs. 184.97 Crore for FY 2022-23 as opening normative loan for FY 2023-24 and depreciation of Rs. 20.40 Crore approved for FY 2023-24 as repayment of normative loan as per applicable UERC Tariff Regulations, 2021 to work out the opening net normative loan, i.e. Rs. 164.57 Crore for FY 2024-25. Further, repayment has been considered equivalent to approved depreciation for FY 2024-25. Furthermore, weighted average rate

of interest as derived for FY 2022-23, i.e. 12.11% 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. 18.70 Crore for FY 2024-25.

The Petitioner has claimed Bank charges amounting to Rs. 1.34 Crore for FY 2024-25 as approved by the Commission vide its Tariff Order dated 31.03.2022 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 2024-25 as claimed by the Petitioner. However, the same will be reviewed at the time of truing up for FY 2024-25.

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 2024-25 (Rs. Crore)**

Particular	Approved in Tariff Order dated 31.03.2022	Claimed by Petitioner	Approved after truing up
Gross Opening Normative Loan	327.06	344.25	327.71
Cumulative Repayment	163.15	164.03	163.14
Net Opening Normative Loan	163.91	180.23	164.57
Additional Capitalisation	0.00	10.20	0.00
Normative Repayment of loan	20.38	21.70	20.40
Net Closing Normative Loan	143.53	168.73	144.17
Average Normative Loan	153.72	174.48	154.37
Rate of Interest	12.36%	13.00%	12.11%
<b>Normative Interest</b>	<b>18.99</b>	<b>22.25</b>	<b>18.70</b>
Add: Finance charges	1.34	1.34	1.34
<b>Total Interest and Finance Charges</b>	<b>20.33</b>	<b>23.59</b>	<b>20.04</b>

## 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:*

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 2024-25 is as follows:

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

Particular	FY 2024-25		
	Approved in Tariff Order dated 31.03.2023	Claimed	Approved
<b>O&amp;M expense</b>	51.03	51.03	51.03

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 2024-25.

### 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 contractors 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 2024-25. 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 2024-25

In accordance with the UERC Tariff Regulations, 2021, the Annual Fixed Charge (AFC) for FY 2024-25 as claimed and approved by the Commission is shown in the Table below:

**Table 5.7: Annual Fixed Charges for FY 2024-25 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	21.19	20.40
Interest on Loan and Finance charges	20.33	23.59	20.04
Return on Equity	11.75	12.78	11.78
O&M Expenses	51.03	51.03	51.03
Interest on Working Capital	0.00	0.00	0.00
Less: Non-Tariff Income	(0.64)	(0.64)	(0.64)
<b>Sub- Total</b>	<b>102.85</b>	<b>107.95</b>	<b>102.61</b>
True up for FY 2022-23 with carrying cost	0.00	0.00	(10.58)
<b>Total</b>	<b>102.85</b>	<b>107.95</b>	<b>92.03</b>

### 5.2.10 Capacity Charge and Energy Charge Rate (ECR) for FY 2024-25

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 2024-25 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:*

$$CC_1 = (AFC/12) (PAF_1 / NAPAF) \text{ subject to ceiling of } (AFC/12)$$

$$CC_2 = (AFC/6) (PAF_2 / NAPAF) \text{ subject to ceiling of } ((AFC/6) - CC_1)$$

$CC_3 = (AFC/4) (PAF_3 / NPAF)$  subject to ceiling of  $((AFC/4) - (CC_1 + CC_2))$

$CC_4 = (AFC/3) (PAF_4 / NPAF)$  subject to ceiling of  $((AFC/3) - (CC_1 + CC_2 + CC_3))$

$CC_5 = (AFC \times 5/12) (PAF_5 / NPAF)$  subject to ceiling of  $((AFC \times 5/12) - (CC_1 + CC_2 + CC_3 + CC_4))$

$CC_6 = (AFC/2) (PAF_6 / NPAF)$  subject to ceiling of  $((AFC/2) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5))$

$CC_7 = (AFC \times 7/12) (PAF_7 / NPAF)$  subject to ceiling of  $((AFC \times 7/12) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6))$

$CC_8 = (AFC \times 2/3) (PAF_8 / NPAF)$  subject to ceiling of  $((AFC \times 2/3) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7))$

$CC_9 = (AFC \times 3/4) (PAF_9 / NPAF)$  subject to ceiling of  $((AFC \times 3/4) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8))$

$CC_{10} = (AFC \times 5/6) (PAF_{10} / NPAF)$  subject to ceiling of  $((AFC \times 5/6) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8 + CC_9))$

$CC_{11} = (AFC \times 11/12) (PAF_{11} / NPAF)$  subject to ceiling of  $((AFC \times 11/12) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8 + CC_9 + CC_{10}))$

$CC_{12} = (AFC) (PAF_Y / NPAF)$  subject to ceiling of  $((AFC) - (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8 + CC_9 + CC_{10} + CC_{11}))$

*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.

$NPAF$  = Normative plant availability factor in percentage.

$PAF_N$  = Percent Plant availability factor achieved upto the end of the  $n$ th 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:

$$NPAFM = 10000 \times \sum DC_i / \{ N \times IC \times (100 - AUX) \} \%$$

$$i = 1$$

Where,

*AUX = Normative auxiliary energy consumption in percentage.*

*DC<sub>i</sub> = Average declared capacity (in ex-bus MW), for the i<sup>th</sup> 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:** DC<sub>i</sub> 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

$$ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$$

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 the 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 its 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 the 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.L. Prasad)**  
**Member (Technical)**

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