Order

On

Approval of Business Plan and Multi Year Tariff Petition

For

M/s Gama Infraprop Pvt. Ltd.

For

Fourth Control Period

(FY 2022-23 to FY 2024-25)

March 31, 2022

Uttarakhand Electricity Regulatory Commission

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

Dehradun – 248171

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Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No.: 64 of 2021

And

Petition No.: 65 of 2021

In the Matter of:

Petition filed by M/s Gama Infraprop Pvt. Ltd. for determination of Multi Year Tariff for the fourth Control Period from FY 2022-23 to FY 2024-25, Annual Performance Review of FY 2021-22 and truing up of FY 2020-21.

AND

In the Matter of:

Petition filed by M/s Gama Infraprop Pvt. Ltd. for approval of Business Plan for the fourth Control Period from FY 2022-23 to 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.K. Jain **Member (Technical)**

Date of Order: March 31, 2022

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

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

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

In compliance with the provisions of the Act and Regulation 8(1) and Regulation 10(1) 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 separate Petitions for approval of its Business Plan for the fourth Control Period from FY 2022-23 to FY 2024-25 (Petition No. 65 of 2021 hereinafter referred to as the "Business Plan Petition") and Multi Year Tariff Petition (Petition No. 64 of 2021 hereinafter referred to as the "MYT Petition") on 30.11.2021. The Petitioner, in its Business Plan Petition, has submitted the Capital Investment Plan, Financing Plan and trajectory of performance parameters for the fourth Control Period. Further, through the MYT Petition, the Petitioner has submitted the detailed calculations of its projected Aggregate Revenue Requirement for the fourth Control Period from FY 2022-23 to FY 2024-25 in accordance with the UERC Tariff Regulations, 2021. Through the MYT Petition, the Petitioner has also requested for true up of FY 2020-21 based on the audited accounts alongwith APR for FY 2021-22 in accordance with UERC Tariff Regulations, 2018.

The MYT Petition filed by the Petitioner had certain infirmities/deficiencies. The Commission, accordingly, vide its letter no. UERC/6/TF-629/2021-22/2011/903 dated 08.12.2021 directed the Petitioner to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. M/s GIPL vide its letter no. GIPL/UERC/ TRUE-UP/03/2021 dated 21.12.2021 removed the critical deficiencies. Based on the submission dated 21.12.2021 made by M/s GIPL, the Commission provisionally admitted the Business Plan Petition and MYT 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 Business Plan Petition and the MYT Petition filed by M/s GIPL for approval of Business Plan and determination of Aggregate Revenue Requirement (ARR) and MYT for the fourth Control Period from FY 2022-23 to FY 2024-25 and Annual Performance Review for FY 2021-22 alongwith truing up for FY 2020-21 and is based on the original as well as subsequent submission made by M/s GIPL during the course of the proceedings and the relevant findings contained in the Tariff Order dated 18.04.2020 and Order dated 26.04.2021 issued by the Commission.

Tariff determination being the most vital function of the Commission, it has been the practice of the Commission to elaborate in detail the procedure and to explain the underlying principles in determination of tariffs. Accordingly, in the present Order also, in line with past practices, the Commission has tried to elaborate the procedure and principles followed by it in determining the ARR of the generator. The 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 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Business Plan for the fourth Control Period.

Chapter 3 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2020-21.

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

Chapter 5 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on MYT for the fourth Control Period.

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 Act and has developed a 214 MW gas based CCPP comprising of two gas turbine generator (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.

In accordance with the provisions of the Act and Regulation 8(1) and Regulation 10(1) of UERC Tariff Regulations, 2021, the Generating Companies are required to submit a Business Plan Petition and MYT Petition for determination of Aggregate Revenue Requirement latest by November 30 for the ensuing year before the Commission. M/s GIPL in compliance to the Regulations submitted the Business Plan Petition and MYT Petition for the fourth Control Period from FY 2022-23 to FY 2024-25 alongwith the true up of expenses for FY 2020-21 based on the audited books of accounts on 30.11.2021.

The Commission vide its letter no. UERC/6/TF-629/2021-22/2011/903 dated 08.12.2021 directed the Petitioner to submit the certain relevant information for the true-up of FY 2020-21 and APR for FY 2021-22 in accordance with the UERC Tariff Regulations, 2018 and MYT for the fourth Control Period in accordance with the UERC Tariff Regulations, 2021. M/s GIPL was directed to rectify the said infirmities alongwith certain other deficiencies in the Petition and was also required to submit certain additional information necessary for admission of the Petition. M/s GIPL vide its letter no. GIPL/UERC/ TRUE-UP/03/2021 dated 21.12.2021 removed the critical deficiencies. Based on the submission dated 21.12.2021 made by M/s GIPL, the Commission provisionally admitted the Petition for further processing subject to the condition that M/s GIPL shall furnish any further information/clarification as deemed necessary by the Commission during the processing of the Petitions within the time frame, as may be stipulated by the Commission, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

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

- Copy of primary fuel invoices raised by Gas supplier.
- Copy of all invoices raised to Uttarakhand Power Corporation Ltd. (UPCL) for supply of electricity during FY 2020-21;
- Supporting documents w.r.t. GCV, Trial Balance for FY 2020-21, Insurance policy.
- Details of Actual O&M expenses incurred.

In order to provide transparency to the process of tariff determination and give UPCL an opportunity to submit its objections/suggestions/comments on the proposals of M/s GIPL, the Commission sent the copy of the tariff proposals to UPCL vide letter no. UERC/6/TF-630/2020-21/2018/968 and letter no. UERC/6/TF-629/2020-21/2018/970 dated 24.12.2021.

However, the Commission has not received any objections/suggestions/comments from UPCL in this regard till the date of Order.

The submissions made by M/s GIPL in the Petitions 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 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Business Plan for the fourth Control Period

2.1 Statutory Requirement

The Commission has notified the UERC Tariff Regulations, 2021 on 14.09.2021 applicable for determination of Tariff for the fourth Control Period from FY 2022-23 to FY 2024-25.

As regards the Multi Year Tariff Framework, Regulation 4 of UERC Tariff Regulations, 2021 specifies as follows:

*"**4. Multi Year Framework***

The Multiyear tariff framework shall be based on the following:-

a) Business plan submitted by the applicant for the entire control period for the approval of the Commission prior to the beginning of the control period;

b) Applicant's forecast of expected ARR for each year of the control period, based on reasonable assumptions and financial & operational principles/parameters laid down under these Regulations submitted alongwith the MYT petition for determination of Aggregate Revenue Requirement and Tariffs for first year of the control period;

c) Review of control period ending on 31.03.2022 shall also be taken up alongwith the ARR/Tariff petition for the first year of ensuing control period;

d) Trajectory for specific parameters as may be stipulated by the Commission based on submissions made by the Licensee, actual performance data of the Applicants and performance achieved by similarly placed utilities;

e) Annual review of performance shall be conducted vis-à-vis the approved forecast and categorization of variations in performance into controllable factors and uncontrollable factors;

f) Sharing of excess profit or loss due to controllable and uncontrollable factors as per provisions of these Regulations."

2.2 Business Plan for the fourth Control Period

Regarding Business Plan, Regulation 8 of UERC Tariff Regulations, 2021 specifies as follows:

"**8. Business Plan**

(1) An Applicant shall submit, under affidavit and as per the UERC Conduct of Business Regulations as

amended from time to time, a Business Plan by November 30th, 2021, for the Control Period of three (3) financial years from April 1, 2022 to March 31, 2025;

a) *The Business Plan for the Generating Company shall be for the entire control period and shall, interalia, contain:*

(i) *Capital investment plan, which shall include details of the investments planned by the Generating Company for existing stations alongwith its cost-benefit analysis, yearly phasing of capital expenditure alongwith the source of funding, financing plan and corresponding capitalisation schedule. This plan shall be commensurate with R&M schemes and proposed efficiency improvements for various plants of the company;*

(ii) *The capital investment plan shall show separately, on-going projects that will spill over into the years under review, and new projects (along with justification) that will commence in the years under review but may be completed within or beyond the tariff period;*

(iii) *The Generating Company shall submit plant-wise details of the capital structure and cost of financing (interest on debt and return on equity), after considering the existing market conditions, terms of the existing loan agreements, risks associated in generation business and creditworthiness;*

(iv) *Details related to major shut down of machines, if any;*

(v) *Trajectory of performance parameters*

…

(2) *The Applicant shall also submit the details in respect of its manpower planning for the Control Period as part of Business Plan.*

(3) *The Commission shall scrutinize and approve the business plan after following the due consultation process."*

In accordance with Regulation 8 of the UERC Tariff Regulations, 2021, M/s GIPL submitted the Business Plan for the fourth Control Period from FY 2022-23 to FY 2024-25. M/s GIPL in its Business Plan Petition and subsequent submissions has submitted the trajectory of Performance parameters, Capitalization Plan and Financing Plan for the fourth Control Period from FY 2022-23 to FY 2024-25. The Petitioner's submissions and the Commission's analysis on approval of the Business Plan submitted by M/s GIPL for the fourth Control Period from FY 2022-23 to FY 2024-25 are detailed below:

2.2.1 *Proposed Additional Capitalisation*

With regard to additional capitalisation, the Petitioner has proposed the following additional capitalisation for the fourth Control Period from FY 2022-23 to FY 2024-25:

Table 2.1: Proposed Additional Capitalisation for the fourth Control Period (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	Claimed under head
Land	-	-	-	-
Civil Works	4.00	4.00	2.00	Regulation 22
Plant & Machinery (Transmission Line)	7.00	-	-	Regulation 22
Plant & Machinery (Spares)	10.00	10.00	5.00	Regulation 22
Plant & Machinery (Others)	6.55	1.80	3.00	Regulation 22
Furniture and Fixtures	0.20	-	0.05	Regulation 22
Office Equipment & Others	0.10	-	0.05	Regulation 22
Computers	0.10	-	-	Regulation 22
Vehicles	0.25	-	0.10	Regulation 22
Total	**28.20**	**15.80**	**10.20**	

With regard to Additional capitalisation, Regulation 22 of UERC Tariff Regulations, 2021 specifies as follows:

*"**22. Additional Capitalisation and De-capitalisation***

1) *The following capital expenditure within the original scope of work actually incurred or projected to be incurred after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*
    a) *Undischarged liabilities;*
    b) *Works deferred for execution;*
    c) *Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 21(11);*
    d) *Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
    e) *On account of change in law.*

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

2) *The capital expenditure of the following nature actually incurred after the cut-off date may be admitted by the Commission, subject to prudence check:*
    a) *Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*
    b) *Change in law;*

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

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

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

f) *In case of hydro generating stations, any additional expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company), including due to geological surprises, after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;*

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

g) *In case of transmission and distribution system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard, equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has bhecome necessary for successful and efficient operation of transmission or distribution system:*

h) *In case of replacement of any asset/equipment (e.g. transformer, circuit breaker, C.T.,P.T. etc.) on account of non-performance/failure of the same, the following approach shall be adopted:*

   (i) *In case of non-performance/failure of assets/equipment, it shall be sent to Store for assessment to check whether it is repairable or not at zero cost;*

   (ii) *In case the asset is repairable, then such asset/equipment shall not be retired from Books of Assets.*

   Provided, proper tracking should be available for the material like location, asset number etc.

   (iii) *In case the asset is not repairable, then following process shall be carried out:*

   - *The asset is retired from the Books of Assets, at depreciated value.*
   - *Transfer the failed assets/equipments from failed to scrap material.*

- *Dismantle it into of scrap inventory like iron, brass etc.*
- *Build up scrap inventory.*

Provided, exercise of dismantling of scrap inventory and build-up of scrap inventory shall be done simultaneously. Dismantled scrap value would be decided on the basis of last scrap sale value. Control Account (Dismantling) will be expense account. Difference of Control account, i.e. either profit or loss shall be booked accordingly.

In case a new asset/equipment is issued, then it will be issued at weighted average cost and capitalized respectively, and accordingly, new asset would be created and corresponding entries shall be done in the Books of Accounts.

3) *In case of de-capitalisation of assets of a generating company or the distribution licensee or the transmission licensee or SLDC, as the case may be, the original cost of such asset as on the date of de-capitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised.*
4) *Any addition/modification to the existing assets exceeding Rs. 2.50 Crore in case of distribution licensees and Rs. 5 Crore in case of generating companies/transmission licensees shall be taken up only after prior approval of the Commission. The investment approval applications covered under this sub-regulation are excluded from the application of proviso to Sub-regulation (2) of Regulation 10 of UERC (Conduct of Business) Regulations, 2014 in so far as the requirement of submission of documentary evidence with respect to the approval of BoD is concerned."*

As the plant was put under commercial operation in the first Control Period, hence, the cut-off date shall be determined as per Regulation 3(21) of MYT Regulations, 2011 which specifies as under:

"'Cut-off Date' means 31st March of the year closing after two years of the year of commercial operation of the project,, and in case the project is declared under commercial operation in the last quarter of a year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation."

The Petitioner's plant was put under commercial operation w.e.f. 16.03.2016. Accordingly, as per the aforesaid definition, the cut-off date of the plant works out to 31.03.2019 and proposed expenditure claimed for the fourth Control Period shall fall under Regulation 22(2) of the UERC Tariff Regulations, 2021.

With regard to the proposed additional capitalisation, the Petitioner submitted that the projected civil works for FY 2022-23 to FY 2024-25 are related to construction of new drainage system surrounding the plant's boundaries so as to avoid damage to plant boundary due to water clogging during heavy rainfall, maintenance of boundary wall. Further, projected transmission line work related to shifting of a tower connecting the transmission line from plant to PTCUL's Mahuakheraganj S/s. A new tower will be erected in Land already purchased by the Petitioner. Further, the Petitioner has also planned to procure initial spares during the fourth Control Period.

The Commission vide its Tariff Order dated 27.02.2019 on approval of the Business Plan and Tariff Petition of the Petitioner for the third Control Period from FY 2019-20 to FY 2021-22, had decided to consider the additional capitalisation at the time of truing up of the respective years based on the audited accounts and as per the prevailing Regulations. Further, with respect to the cost of Initial Spares to be allowed as additional capitalisation, the Commission has already taken a view in this regard in the Tariff Order dated 16.05.2017 that such capitalisation shall be reviewed at the time of truing up based on the actual expenditure subject to the ceiling limit specified under the Regulations.

Furthermore, with regard to additional capitalisation, Regulation 22(4) of UERC Tariff Regulations, 2021 specifies as follows:

> "*Any addition/modification to the existing assets exceeding Rs. 2.50 Crore in case of distribution licensees and Rs. 5 Crore in case of generating companies/transmission licensees shall be taken up only after prior approval of the Commission. The investment approval applications covered under this sub-regulation are excluded from the application of proviso to Sub-regulation (2) of Regulation 10 of UERC (Conduct of Business) Regulations, 2014 in so far as the requirement of submission of documentary evidence with respect to the approval of BoD is concerned.*"

Accordingly, in view of the above regulation, the Petitioner is required to obtain prior approval of the Commission before incurring any capital expenditure exceeding Rs. 5 Crore for the plant. Accordingly, the Commission at this stage does not find any reason to approve any additional capitalisation for the fourth Control Period 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.

2.2.2 Financing Plan

The Petitioner submitted that the capital expenditure to be incurred in FY 2022-23, FY 2023-24 and FY 2024-25 are to be financed by a mix of debt and equity in the ratio of 70:30. As mentioned above, the Commission has not considered the additional capitalisation for the fourth Control Period. However, based on the actual admissible additional capitalisation and actual financing, truing up will be done for the purpose of determination of Tariff.

2.2.3 Major shutdown plan for the plant

2.2.3.1 Maintenance plan

The Petitioner submitted that the availability of a generating unit is dependent on the outages considered for the unit, both forced and planned. The well thought & planned maintenance Program will result in the maximum equipment availability and optimization of maintenance costs. The forced outages are minimized by having a robust maintenance plan, the planned outages are necessary for the smooth functioning of the unit with improved reliability & availability. Either or all the following is included in an outage:

- Schedule Preventive Measures.
- Audit History based Maintenance.
- Overall Operational Constraints.
- Technological Up-gradation.
- Performance Improvement Measures.
- Statutory Compliances.
- Life Sustenance, Extension, Enhancement Actions.

The proposed outage plan for the project during the Control Period is shown in the Tables below:

Table 2.2: Maintenance schedule for FY 2022-23

Month	Gas Turbine / HRSG		Steam Turbine	
	Details	Outage Hours	Details	Outage Hours
Apr, 2022	---	0	-	---
May, 2022	Offline/online water wash	36	-	Offline/online water wash
Jun, 2022	---	0	-	---
Jul, 2022	Offline/online water wash	36	-	Offline/online water wash
Aug, 2022	---	0	-	---
Sep, 2022	Offline/online water wash	36	-	Offline/online water wash
Oct, 2022	---	0	-	---
Nov, 2022	---	0	-	---
Dec, 2022	Offline/online water wash		-	Offline/online water wash
Jan, 2023	HRSG, Annual Inspection-Hydro test Shutdown:4 days	96	-	HRSG, Annual Inspection-Hydro test Shutdown:4 days
Feb, 2023	---	0	-	---
Mar, 2023	Offline/online water wash	36	-	Offline/online water wash
Yearly		**240**		

Table 2.3: Maintenance schedule for FY 2023-24

Month	Gas Turbine / HRSG		Steam Turbine	
	Details	Outage Hours	Details	Outage Hours
Apr, 2023	---	0	-	0
May, 2023	Offline/online water wash	36	-	0
Jun, 2023	---	0	-	0
Jul, 2023	Offline/online water wash	36	-	0
Aug, 2023	---	0	-	0
Sep, 2023	a. GT HGPI & Load Gear Box Inspection b. HRSG Overhaul,S c. HRSG, Annual Inspection - Hydro test, d. STG Bearing Inspection, e. ACC Foam Cleaning and Inspection	720	-	0
Oct, 2023	Offline/onlinewater wash	0	-	0
Nov, 2023	---	0	-	0
Dec, 2023	---	0	-	0
Jan, 2024	Offline/online water wash	36	-	0
Feb, 2024	---	0	-	0
Mar, 2024	---	0	-	0
Yearly		828		0

Table 2.4: Maintenance schedule for FY 2024-25

Month	Gas Turbine / HRSG		Steam Turbine	
	Details	Outage Hours	Details	Outage Hours
Apr, 2024	---	0	-	0
May, 2024	Offline/online water wash	36	-	0
Jun, 2024	Offline/online water wash	0	-	0
Jul, 2024	---	36	-	0
Aug, 2024	Offline/online water wash	0	-	0
Sep, 2024	---	36	-	0
Oct, 2024	Offline/online water wash	0	-	0
Nov, 2024	---	0	-	0
Dec, 2024	Offline/online water wash	96	-	0
Jan, 2025	HRSG, Annual Inspection - Hydro test	-	-	0
Feb, 2025	---	0	-	0
Mar, 2025	Steam Turbine & Generator Overhauling, HRSG Overhauling, ACC foam cleaning and Inspection,	36	-	0
Yearly		240		0

2.2.3.2 *Trajectory of Performance Parameters*

The Petitioner submitted that in light of the maintenance schedule planned for Phase 1, i.e. contracted capacity, as detailed above, the plant is expected to follow the trajectory of performance parameters as detailed in the Table given below:

Table 2.5: Trajectory of performance parameters

Parameters	Unit	FY 2022-23	FY 2023-24	FY 2024-25
		Projected	Projected	Projected
Number of days		365	366	365
Installed capacity	MW	107	107	107
Aux. (Normative)	%	2.50%	2.50%	2.50%
Availability (Normative)	%	85%	85%	85%
Gross Generation Normative	MU	796.72	798.90	796.72
Auxiliary Consumption	MU	19.92	19.97	19.92
Net Generation Normative	MU	776.80	778.93	776.80

The Commission has accepted the submissions made by the Petitioner for maintenance schedule and corresponding shutdown hours of its plant. However, the Petitioner is directed to have proper communication well in advance with both Distribution Licensee as well Transmission Licensee in the State so as to avoid any dispute that may occur due to disturbance in the demand/ supply of power of Distribution Licensee and also due to transmission capacity constraint or any other related issues with the Transmission Licensee.

In this regard, the Commission would like to advise the Petitioner and the Respondent to finalise the said Maintenance plan amongst them so as to ensure that supply position in the State is not impacted because of the same and submit the same to the Commission within two months from the date of the Order.

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

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

*"12. **Annual Performance Review***

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

(2) The Applicant shall under affidavit and as per the UERC Conduct of Business Regulations as amended from time to time, make an application for Annual Performance Review by November 30th of every year;

…

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

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

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

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

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

In its present filings, the Petitioner has submitted the data related to its expenses and revenues for FY 2020-21 based on the audited annual accounts and has, accordingly, requested the Commission to carry out the truing up for FY 2020-21 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 2020-21.

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

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

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

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

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

The UERC Tariff Regulations, 2018 require a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenues subject to prudence check including pass through of impact of uncontrollable factors.

O&M expenses comprises of the major portion of AFC of M/s GIPL and are within the control of the Petitioner and, moreover, in accordance with UERC Tariff Regulations, 2018 these are controllable expenses. Similarly, in accordance with the UERC Tariff Regulations, 2018, the variation in working capital requirements is also a controllable factor. However, as discussed in the previous Tariff Orders for the Petitioner, the interest on working capital (IWC) was not included in the annual fixed charges (AFC) allowable to the Petitioner based on the Petitioner's submission that it intended to forego the same in case UPCL does not charge rebate on their energy bills and make payments as specified by the Commission vide its Order dated 17.04.2017 read with provisions of the PPA. Further, performance parameters namely, Station Heat Rate and Auxiliary Consumption are controllable factors and, accordingly, as discussed in the subsequent paragraphs of this Tariff Order, the Commission has carried out the truing up of the same and sharing of loss or gain, as the case may be, in accordance with UERC Tariff Regulations, 2018.

M/s GIPL in the current Petition has requested the Commission to approve the interest amounting to Rs. 0.46 Crore paid to fuel supplier on account of delayed payment made by UPCL.

Further, the Petitioner submitted that it has availed the Bill Discounting Facility from Lender Bank against Letter of Credit by UPCL since the outstanding payment from UPCL against monthly power invoices as on 01.04.2020 was Rs. 101.65 Crore. The Petitioner had to utilise the facility from lending banker so as to meet out the expenses of gas purchase and day to day expenses of the plant. In this regard, the Petitioner submitted that it was charged with interest on BDLC facility in FY 2019-20 amounting to Rs. 0.807 Crore, however, the Petitioner inadvertently missed the same during the true-up for FY 2019-20. The Petitioner requested the Commission to allow the said interest payment alongwith the interest charges, i.e. Rs. 0.810 Crore against BDLC facility for FY 2020-21.

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 the UERC Tariff Regulations, 2018, these are controllable expenses. Similarly, in accordance with the UERC Tariff Regulations, 2018, the variation in working capital requirement is also a controllable factor. However, as discussed in the Order dated 16.05.2017, 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 intends to forego the same in case UPCL does not charge rebate on their energy bills. 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.

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

3.1.1 Physical Parameters

3.1.1.1 NAPAF

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

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

The Commission in its Tariff Order dated 27.02.2019 had considered the NAPAF of 85% in accordance with the UERC Tariff Regulations, 2018 for the entire third Control Period. The Commission is of the view that the NAPAF of 85% approved for the third Control Period in Tariff

Order dated 27.02.2019 shall continue to be applicable without any change for FY 2020-21.

3.1.1.2 Energy Generation and Saleable Primary Energy

The Commission in its Tariff Order dated 27.02.2019 on approval of Business Plan and Multi Year Tariff for the third Control Period from FY 2019-20 to FY 2021-22 had approved the Design Energy based on the contracted capacity of 107 MW. Further, in accordance with Regulation 47(4)(i) of the Tariff Regulations, 2018, auxiliary consumption of 2.50% has been considered. Accordingly, applying the NAPLF of 85% as specified in the Regulations and reducing the auxiliary power, the saleable energy works out as 776.80 MU for FY 2020-21. M/s GIPL has not sought any deviation in the approved saleable energy for FY 2020-21.

M/s GIPL in its submission has submitted the actual saleable energy for FY 2020-21 as 225.93 MUs which in turn translates to a PLF of 24.11%. In this regard, the Petitioner submitted that, the Plant Availability Factor, i.e. the period for which the plant was available for generation of power (irrespective of the actual generation) was 97.50% for FY 2020-21. However, during the year, the actual Gross Generation was 229.93 MUs and the Plant Load Factor which is determined based on output was 24.11%. The Petitioner submitted that this was primarily due to restrictions imposed by UPCL on power offtake due to which the loss in gross generation of power during FY 2020-21 was 550.87 MUs. The Petitioner further submitted that if the loss of generation is taken into account, then the PLF shall be at its normal level of 85%. The Petitioner further submitted that if units not generated due to back-down are also considered then the PLF shall be at its normal level of 85% and match up the Normative Plant Availability Factor.

The Commission analysed the submissions made by M/s GIPL in this regard and observed that based on the provisionally verified declared capacity by SLDC, the generator's plant availability was more than 85% during FY 2020-21. M/s GIPL has also not sought any deviation in the approved design energy for FY 2020-21. Accordingly, the Commission decides to maintain the design energy and saleable primary energy as considered in the MYT Order dated 16.05.2017 for the Petitioner's plant.

3.1.2 Financial Parameters

3.1.2.1 Capital Cost

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

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

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

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

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

The Petitioner has claimed an opening GFA amounting to Rs. 401.13 Crore as on 01.04.2020. The Commission, vide its Tariff Order dated 26.04.2021 had approved the opening GFA and net additional capitalisation amounting to Rs. 401.07 Crore and Rs. 0.06 Crore respectively for FY 2019-20 for the contracted capacity of 107 MW. Accordingly, the Commission has considered the approved closing GFA, i.e. Rs. 401.13 Crore (Rs. 401.07 Crore *plus* Rs. 0.06 Crore) for FY 2019-20 as opening GFA for the purpose of truing up for FY 2020-21.

3.1.2.2 Additional Capitalisation and De-capitalisation

Regulation 22(1) of UERC Tariff Regulations, 2018 specifies as under:

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

a) Undischarged liabilities;

b) Works deferred for execution;

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

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

e) On account of change in law.

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

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

"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by

the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the matter specified in Regulation 22 and 23 of these Regulations."

In its Petition, the Petitioner claimed an additional capitalisation of Rs. 1.59 Crore, Rs. 0.01 Crore and Rs. 0.12 Crore pertaining to Air Filter House, Computers and Vehicles respectively for FY 2020-21 in accordance with Regulation 22(2) of UERC Tariff Regulations, 2018. The Petitioner submitted that the Commission vide Order dated 05.04.2019 had directed the Petitioner to follow the suggestions given by the Consultant for improvement of Station Heat Rate which included modification of Inlet Air Filtration system with the provision of Pulsation/Static type Inlet Air Filter arrangement. Accordingly, based on the suggestions of the Consultant, Air Filter House has been procured during FY 2020-21. The Commission approves the additional capitalisation of Rs. 1.73 Crore as claimed by the Petitioner for the purpose of truing up of FY 2020-21 after prudence check.

Accordingly, based on the above discussion, the details of the trued-up capital cost for FY 2020-21 are as follows:

Table 3.1: Approved Gross Fixed Assets for FY 2020-21 (Rs. Crore)

Particulars	Opening GFA	Additional Capitalisation	De-capitalisation	Closing GFA
Land (Freehold Land)	6.76	0.00	0.00	6.76
Civil Works	29.10	0.00	0.00	29.10
Plant & Machinery	364.39	1.59	0.00	365.98
Furniture and Fixtures	0.21	0.00	0.00	0.21
Office Equipment & Others	0.09	0.00	0.00	0.09
Computers	0.03	0.01	0.00	0.04
Vehicles	0.54	0.12	0.00	0.67
Total	**401.13**	**1.73**	**0.00**	**402.85**

3.1.2.3 *Capital Structure*

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

"...

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

(6) In case of Generating Company, Transmission Licensee, Distribution Licensee, or SLDC where

investments have been made prior to 1.4.2019, Debt: Equity Ratio shall be as approved by the Commission in the previous Orders."

The Petitioner has claimed the Debt-Equity Ratio of 81.24:18.76 as on 31.03.2020 as approved by the Commission vide its Tariff Order dated 26.04.2021 while carrying out the truing up for FY 2019-20. The Commission has considered the same Debt-Equity Ratio for the GFA considered as on 01.04.2020.

Further, with regard to the additional capitalisation claimed for FY 2020-21, the Petitioner submitted that the expenses for the procurement of assets were done through the revenues of the Company. However, the Commission observed from the audited annual accounts for FY 2020-21 that a car loan amounting to Rs. 0.09 Crore has been taken. Accordingly, the actual Debt-Equity ratio works out to 5.21:94.86 for additional capitalisation. 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 2020-21 in the ratio of 70:30 in accordance with the UERC Tariff Regulations, 2018.

Capital structure for the GFA and additional capitalisation for FY 2020-21 is as follows:

Table 3.2: Financing for capitalisation for FY 2020-21

Particular	Opening Capital Structure as on 01.04.2020		Addition during year		Closing Capital Structure as on 31.03.2021	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	325.855	81.24	1.21	70.00	327.065	81.19
Equity	75.271	18.76	0.52	30.00	75.790	18.81
Total	**401.126**	**100.00**	**1.73**	**100.00**	**402.854**	**100.00**

3.1.2.4 Depreciation

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

"28. Depreciation

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

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

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to

maximum of 90% of the capital cost of the asset.

...

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

..."

The Petitioner has claimed depreciation of Rs. 20.39 Crore for FY 2020-21 considering the additional capitalisation at the beginning of the year and the depreciation rates specified by the Commission in its UERC Tariff Regulations, 2018. The Commission has calculated the weighted average rate of depreciation of 5.06% by applying the depreciation rates as specified in Appendix-II of UERC Tariff Regulations, 2018. Further, the Commission has worked out the depreciation of Rs. 20.34 Crore on the admissible average GFA of Rs. 401.99 Crore for FY 2020-21 by applying the weighted average rate of depreciation of 5.06%.

Depreciation, as approved in the Tariff Order dated 18.04.2020, claimed by the Petitioner and trued up for FY 2020-21 is as follows:

Table 3.3: Depreciation approved for FY 2020-21 (Rs. Crore)

Particular	Approved in Tariff Order dated 18.04.2020	Claimed by Petitioner	Approved after truing up
Opening Capital Cost	401.07	401.12	401.13
Addition during year	0.00	1.73	1.73
Closing Capital Cost	401.07	402.85	402.85
Average Capital Cost	401.07	-	401.99
Weighted Average rate of Depreciation	5.06%	-	5.06%
Depreciation	**20.28**	**20.39**	**20.34**

3.1.2.5 *Return on Equity (RoE)*

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

*"**26. Return on Equity***

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

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

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

16.50% for the storage type hydro generating stations and run of river generating station with pondage and distribution licensee on a post-tax basis."

The Petitioner has claimed the Return on Equity amounting to Rs. 11.81 Crore on the average equity for FY 2020-21 after considering actual additional capitalisation during FY 2020-21. The Commission has allowed the Return on Equity on the opening equity base at the rate of 15.50% in accordance with the Tariff Regulations, 2018. The Return on Equity approved by the Commission for FY 2020-21 is given in the Table below:

Table 3.4: Return on Equity approved for FY 2020-21 (Rs. Crore)

Particular	Approved in Tariff Order dated 18.04.2020	Claimed by Petitioner	Approved after truing up
Opening Equity	75.25	75.35	75.27
Addition during the year	0.00	1.73	0.52
Closing Equity	75.25	77.08	75.79
Rate of Return on Equity	15.50%	15.50%	15.50%
Return on Equity	**11.66**	**11.81**	**11.67**

3.1.2.6 *Interest and Finance charges*

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

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

(1) The loans arrived at in the manner indicated in Regulation 24 shall be considered as gross normative loan for calculation of interest on loan.

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

(3) The repayment for each year of the Control Period shall be deemed to be equal to the depreciation allowed for that year.

...

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available wheighted average rate of interest shall be considered.

Provided further that if the generating station or the transmission system or the distribution system *or SLDC, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the Transmission Licensee or the Distribution Licensee or SLDC as a whole shall be considered.*

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

…"

The Petitioner has claimed interest on normative loan of Rs. 29.49 Crore for FY 2020-21 for the purpose of truing up based on the weighted average rate of interest of 12.60% p.a. Further, the Petitioner has not considered any amount of addition to normative loan corresponding to additional capitalisation of Rs. 1.73 Crore for FY 2020-21.

The Commission examined the audited annual accounts & Trial Balance for FY 2020-21 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. 270.99 Crore and Rs. 250.31 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. 277.43 Crore and Rs. 254.30 Crore respectively for FY 2020-21. With regard to variation in opening and closing debt for FY 2020-21, 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 2020-21 is Rs. 32.85 Crore. The Commission observed that the total interest amounting to Rs. 35.28 Crore has been charged to the P&L Statement for FY 2020-21 out of which Rs. 32.85 Crore pertains to long term borrowings. Accordingly, the Commission has considered interest of Rs. 32.85 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. 277.43 Crore and Rs. 254.30 Crore respectively and considering the interest paid on long term borrowings during the year, the weighted average rate of interest works out to 12.36% p.a. for FY 2020-21.

The Commission has considered the net opening normative loan of Rs. 244.19 Crore and repayment has been considered equal to the admissible depreciation, i.e. Rs. 20.34 Crore. Further, as mentioned earlier above in this Order, additional capitalisation for FY 2020-21 of Rs. 1.73 Crore has been considered in the ratio of 70:30 in accordance with the UERC Tariff Regulations, 2018 whereas the Petitioner has not considered any addition to the normative loan for the purpose of determination of interest on normative loan. Accordingly, the Commission has considered addition to normative loan amounting to Rs. 1.21 Crore.

Further, the Petitioner has claimed Bank Charges amounting to Rs. 1.24 Crore for FY 2020-21 as finance charges. The Commission has gone through the detailed breakup of the bank charges and finds the same in order.

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

Table 3.5: Interest on Normative Loan for FY 2020-21 (Rs. Crore)

Particular	Approved in Tariff Order dated 18.04.2020	Claimed by Petitioner	Approved after truing up
Gross Opening Normative Loan	325.82	325.82	325.85
Cumulative Repayment	81.66	81.66	81.66
Net Opening Normative Loan	244.16	244.16	244.19
Additional Capitalisation	0.00	0.00	1.21
Normative Repayment of loan	20.28	20.39	20.34
Net Closing Normative Loan	223.88	223.77	225.07
Average Normative Loan	234.02	233.97	234.63
Rate of Interest	12.40%	12.60%	12.36%
Normative Interest	**29.02**	**29.49**	**28.99**
Add: Financial charges	1.34	1.24	1.24
Total Interest and Finance Charges	**30.36**	**39.24**	**30.23**

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

3.1.2.7.1 *Truing up of O&M Expenses for FY 2020-21*

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

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

(In Rs. Lakh/MW)

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

"

Based on the applicable norms of O&M expenses for combined cycle generating station, the Commission had approved the normative O&M expenses of Rs. 42.20 Crore for FY 2020-21 for the contracted capacity of the Petitioner's Plant. The Petitioner submitted that the actual O&M expense of Rs. 28.57 Crore has been incurred during FY 2020-21.

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 Plant & Machinery' and 'Electricity Charges' have increased to 19.87 Crore and Rs. 1.18 Crore respectively during FY 2020-21 against the expenses amounting to Rs. 16.28 Crore and 0.32 Crore incurred during FY 2019-20. In the matter, the Petitioner submitted that there had been an increase in cost of operation by O&M Contractor, lube oil repairs and repair & maintenance of HP/LP bypass system are the major works because of which Repair & Maintenance expenses under the head of Plant & Machinery has increased. Further, electricity expenses increased due to backdown instructions from UPCL as during backdown of the Plant, electricity was imported from UPCL. The Plant was under backdown from April 2020 to November 2020, i.e. 8 months during FY 2020-21 against two months in FY 2019-20 which lead to increase in import of electricity. The Petitioner has claimed a donation amounting to Rs. 0.15 Crore during FY 2020-21 under the head of Corporate Social Responsibility. In the matter, the Commission is of the view that expenses pertaining to CSR/Donation are not necessary to be incurred for the successful running of the plant but are incurred to meet the statutory requirement under the Companies Act, 2013 out of the profits. Accordingly, such expenses are to be met out of profit and if such expenses are allowed in the ARR, it would indirectly mean that such expenses are being loaded on to the consumers and are not borne by the Petitioner. Hence, the same is disallowed.

Based on the above discussion, allowable O&M expenses for the purpose of sharing works out to Rs. 28.42 Crore against the claim of Rs. 28.57 Crore for FY 2020-21. Further, as per UERC Tariff Regulations, 2018 the variation in normative and actual O&M expenses shall be considered as part of gain/loss on account of controllable factors.

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

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

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

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

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

As discussed in Para 3.1 above, O&M expenses have been considered as controllable factor, accordingly, the Commission has approved the total O&M expenses for FY 2020-21 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 2020-21 (Rs. Crore)

Actual Claimed in the Petition	Adjusted claim considered for sharing	Normative approved now	Efficiency gain/(loss)	Generator Share	Net Entitlement
A	B	C	D=C-B	E=2/3xD	F=B+E
28.57	28.42	42.20	13.78	9.19	37.61

3.1.2.8 Interest on Working Capital

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

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

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

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

c) Operation and maintenance expenses for one month;

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

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

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

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

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

Accordingly, in line with the decision taken in the Tariff Order dated 16.05.2017 and aforesaid discussions, interest on working capital is not being allowed for the purpose of truing up of FY 2020-21.

Further, the Petitioner referring to the Commission's Order dated 17.04.2017 submitted that the payment of invoices was directed to be paid within three working days from the date of submission of invoices and in lieu of the same the Petitioner had forgone interest on working capital. However, the Petitioner incurred an extra burden of penal interest on delayed payment towards supply of Gas from GAIL of an amount of Rs. 0.46 Crore on account of delay in payment by UPCL.

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

> *"4 Accordingly, it is hereby decided that:*
>
> *4.1 All the gas based generators may raise fortnightly Gas Supply Bills on UPCL on actual basis as is being received from GAIL/supplier of gas. The final monthly bill would be raised by the generator after the month is over based on the Joint Meter Reading in accordance with the procedure laid down in the PPA duly adjusting the aforesaid amount already realized from UPCL for the first fortnight of the month.*
>
> *4.2 UPCL shall not deduct any rebate from bills of M/s SEPL and shall make the payment to the generator within*

3 working days from the date of receipt of such bills.

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

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

The Petitioner submitted that it had to make fuel payment to the supplier with alternate arrangements to continue the plant generation in a situation where UPCL outstanding remains approximately Rs. 100 Crore and there were other necessary outstanding payments of venders, salaries and O&M Contractor. Therefore, it had availed Bill Discounting Facility from the lender bank against the Letter of Credit issued by UPCL during FY 2019-20 and FY 2020-21. The Petitioner further submitted that on many events, the payment to banks against the discounted bills could not be honoured on time because of delay in payment by UPCL. The Petitioner submitted that the lender bank levied interest against Bill Discounting facility amounting to Rs. 0.807 Crore and Rs. 0.810 Crore for FY 2019-20 and FY 2020-21 respectively.

The Commission analysed invoices raised to UPCL by the Petitioner alongwith the details of payments made by UPCL to the Petitioner, fuel bills of gas supplier honoured by the Petitioner to check the genuineness of the claim of the Petitioner and bill discounted by the Petitioner and payment against the discounted bill. The Commission observed that payments are not being honoured by the UPCL within the time limit specified by the Commission in the Order dated 17.04.2017. After analysing all the documents, the Commission observed that the interest levied by the gas supplier during FY 2019-20 was amounting to Rs. 3.31 Crore which has reduced to Rs. 0.46 Crore during FY 2020-21. Further, for the smooth operation of the plant, the Petitioner has to incur expenses towards operations and maintenance. The bill discounting facility provided the Petitioner the funds to manage its operation as well as payment to its vendors/fuel supplier. The Commission is of the view that the Petitioner had to avail the facility of bill discounting due to delay in payments by UPCL. Accordingly, the Commission allows the Petitioner to recover interest levied by bank against bill discounting facility amounting to Rs. 0.807 Crore and Rs. 0.810 Crore for FY 2019-20 and FY 2020-21 respectively from UPCL alongwith interest amounting to Rs. 0.46 Crore levied by fuel supplier on account of delay in payment. However, no carrying cost shall be allowed on the interest pertaining to FY 2019-20. Further, **the Commission once again directs UPCL to make the payment to the Petitioner within 3 working days from the date of receipt of such bills without deducting any rebate in lieu of relinquishment of IWC by the Petitioner.**

3.1.2.9 Non-Tariff Income

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

"46. Non Tariff Income

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

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

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

a) Income from rent of land or buildings;

b) Income from sale of scrap;

c) Income from statutory investments;

d) Interest on delayed or deferred payment on bills;

e) Interest on advances to suppliers/contractors;

f) Rental from staff quarters;

g) Rental from contractors;

h) Income from hire charges from contactors and others;

i) Income from advertisements, etc.;

j) Any other non- tariff income.

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

The Petitioner has claimed other income amounting to Rs. 0.73 Crore as per the audited annual accounts for FY 2020-21. The Commission has approved the actual non-tariff income of Rs. 0.73 Crore for FY 2020-21 as per the audited accounts after prudence check.

3.1.2.10 Annual Fixed Charges (AFC) for FY 2020-21

Based on the above analysis, the Commission has worked out the approved figures of AFC for FY 2020-21. The summary of the same is as follows:

Table 3.7: Annual Fixed Charges for FY 2020-21 approved by the Commission (Rs. Crore)

Particulars	Tariff Order dated 18.04.2020	Claimed in Petition	Approved/ Trued up
Depreciation	20.28	20.39	20.34
Interest on Loan & Financial Cost	30.36	30.73	30.23
Return on Equity	11.66	11.81	11.67
O&M Expenses	42.20	37.66	37.61
Interest on Working Capital	0.00	0.00	-
Less: Non-Tariff Income	0.76	0.73	0.73
Sub-Total	**103.75**	**99.86**	**99.11**
Interest charged by fuel supplier due to delay by UPCL	0.00	0.46	0.46
Interest charged by Bank due to delay in payment towards discounted bill for FY 2020-21	0.00	1.62	0.81
Total	**103.75**	**101.94**	**100.38**

Accordingly, trued-up AFC for FY 2020-21 works out to Rs. 100.38 Crore against Rs. 103.75 Crore approved by the Commission vide its Tariff Order dated 18.04.2020. The Commission has worked out a surplus of Rs. 3.37 Crore for FY 2020-21 which works to Rs. 4.01 Crore with carrying cost to be recovered in FY 2021-22. Further, as discussed above under Para 3.1.2.8, interest amounting to Rs. 0.807 Crore pertaining to interest on BLCD due to delay in payment shall be allowed to the Petitioner, to be recovered from UPCL, without carrying cost. Accordingly, net surplus amount to be adjusted against the ARR of FY 2022-23 works out to Rs. 3.20 Crore after adjusting the interest levied by bank on delayed payment of bill discounted for FY 2019-20.

3.1.2.11 Capacity Charge and Energy Charge Rate (ECR) for FY 2020-21

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 2020-21.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Provided that in case of generating station or unit thereof or transmission system or an element thereof, as the case may be, under shutdown due to Renovation and

Modernisation, the generating company or the transmission licensee shall be allowed to recover part of AFC which shall include O&M expenses and interest on loan only.

Where,

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

NAPAF = Normative plant availability factor in percentage.

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

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

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

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

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

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

(5) The energy charge shall cover the primary fuel cost and shall be payable by every beneficiary

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

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

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

(a) For gas and liquid fuel based stations

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

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

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

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

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

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

…

…

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

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

For the purpose of truing up of the Energy Charges for FY 2020-21, the Commission analysed the invoices raised by the fuel supplier for supply of fuel to the Petitioner's plant, gross generation as well as net generation of the Petitioner's plant for the aforesaid period and other relevant information that was required to work out the actual SHR and actual Auxiliary Energy Consumption (AUX) of the respective year as per the UERC Tariff Regulations, 2018.

Based on the analysis of the documents provided by the Petitioner, actual SHR works out to 1962.456 kCal/kWh for FY 2020-21 against the normative SHR, i.e. 1988.05 kCal/kWh to 2007.40 kCal/kWh approved by the Commission for the purposes of sharing of gain/losses on this account. Since the actual SHR is less than 1988.05 kCal/kWh, the Petitioner is entitled for incentives on account of lower SHR as per the aforesaid suo-moto Order. Further, based on the generation data, the Commission observed that the actual auxiliary consumption is 2.009% for FY 2020-21 against the Normative auxiliary consumption of 2.50% in accordance with the UERC Tariff Regulations, 2018.

In accordance with the UERC Tariff Regulations, 2018, auxiliary consumption and SHR are controllable factors and, therefore, financial impact of efficiency/inefficiency in the performance of the generator on these counts is to be shared between the generator and the distribution licensee. Accordingly, the Commission has determined the energy charges for FY 2020-21 based on the actual SHR and actual auxiliary consumption vis-a-vis normative SHR and normative auxiliary consumption, to share the gain/losses of lower SHR and lower actual auxiliary consumption than normative levels. In accordance with the UERC Tariff Regulations, 2018, the detailed computation of actual performance parameters, i.e. SHR and auxiliary consumption vis-à-vis norms approved by the Commission alongwith sharing of gains/losses is shown in the Table below:

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

Particulars	Unit	FY 2020-21
CVPF (Weighted average GCV of fuel)	Kcal/SCM	9330.87
Gas Consumption (SM3)	SM3	4,83,58,795.00
Total Fuel cost	Rs.	95,63,00,886.00
LPPF (Total Gas bill amount/ Total Gas taken during the month)	Rs./ SM3	19.78
Gross annual Generation	kWh	22,99,31,000.00
Actual Station Heat Rate	kCal/kWh	1,962.456
Normative Station Heat Rate	kCal/kWh	1988.05
Actual Auxiliary Energy Consumption	%	2.009%
Normative Auxiliary Energy Consumption	%	2.50%
Actual Energy Charge Rate **(a)**	Rs./kWh	4.244
Normative Energy Charge Rate **(b)**	Rs./kWh	4.321
Energy Sent out **(A)**	kWh	22,53,11,000.00
Energy Charges to be recovered at Actual Energy Charge Rate **(B) = (A)*(a)**	Rs.	95,63,00,886.00
Energy Charges to be recovered at Normative Energy Charge Rate **(C)= (B)*(b)**	Rs.	97,36,48,414.85

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

Particulars	Unit	FY 2020-21
Gain/(Loss) **(D) = (C)-(B)**	Rs.	1,73,47,528.85
Sharing of Gain *(2/3 of Gain/loss)* **(D)**	Rs.	1,15,65,019.24
Energy Charges after sharing **(E)=(B)+(D)**	Rs.	96,78,65,905.24
Actual Energy charges already recovered **(F)**	Rs.	98,32,03,587.00
Balance amount to be recovered or (refund) (E)-(F)	**Rs.**	(1,53,37,681.76)

Accordingly, Energy Charges after sharing works out to Rs. 96.79 Crore against Rs. 98.32 Crore recovered by the Petitioner for FY 2020-21. The Commission has worked out a surplus of Rs. 1.53 Crore for FY 2020-21 which works to Rs. 1.81 Crore with carrying cost. Accordingly, **the energy charges to be refunded to UPCL works out to Rs. 1.81 Crore, which shall be adjusted by the Petitioner in twelve equal instalments starting from April, 2022 in the monthly invoices to be raised on UPCL.**

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

4.1 Annual Performance Review

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

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

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

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

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

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

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

The Commission vide its Tariff Order dated 27.02.2019, on approval of Business Plan and MYT Petition for the third Control Period from FY 2019-20 to FY 2021-22, had approved the AFC for the Control Period. The Petitioner, in its present Petition, has proposed revision of estimates for FY 2021-22 based on the audited accounts for FY 2020-21 and revised estimates for FY 2021-22.

The Commission, in this Order, has carried out the Truing up for FY 2020-21 in accordance with the UERC Tariff Regulations, 2018. In accordance with Regulation 12(3) of the UERC Tariff Regulations, 2018, the scope of annual performance review is limited to the revision of estimates for the ensuing year, if required, based on the audited financial results for the previous year and does not provide for the revision of estimates for the current year and give effect on this account in the estimates of the ensuing year. Accordingly, the Commission shall carry out the truing up of FY 2021-22 based on the audited accounts for that year and give effect on this account during the proceedings for determination of AFC for FY 2023-24.

Further, the Petitioner has claimed additional capitalization of Rs. 1.65 Crore in FY 2021-22. The Commission has gone through the submission of the Petitioner, and regarding additional capitalization in FY 2021-22, the Commission is of the view that the same shall be allowed at the time of truing-up of FY 2021-22 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 third Control Period vide Order dated 27.02.2019 and subsequent orders of the Commission as discussed above.

5 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on MYT for the fourth Control Period

With regard to Multi Year Tariff, Regulation 10 of UERC Tariff Regulations, 2021 specifies as follows:

"10. MYT Petition for the Control Period

(1) xxx

(2) xxx

(3) xxx

(4) After examining the application, the Commission shall either-

a) Pass an order approving the forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges for the Control Period, subject to such modifications and conditions as it may specify in the said Order; or

b) Reject the application for reasons to be recorded in writing.

Provided that the applicant shall be given a reasonable opportunity of being heard before rejecting his application.

(5) In its MYT Order, the Commission shall specify the variables included in the Aggregate Revenue Requirement and expected revenue from tariff and charges of the applicant that shall be reviewed by the Commission as part of the Annual Performance Review;

Provided that such variables shall be limited to the major items of cost and revenue forecast of the applicant that in the Commission's opinion could have a material impact on the cost of supply of electricity to consumers in the State over the Control Period:

Provided further that the variables, as may be stipulated by the Commission under Regulations below, shall form part of the Annual Performance Review, unless exempted by the Commission from such review in its Order."

Accordingly, in accordance with the aforesaid Regulations, the Commission, based on the financial and physical parameters, has approved the Annual Fixed Charges for each year of the third Control Period from FY 2022-23 to FY 2024-25 based on the approved capital cost for the respective year.

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 the third Control Period in the Tariff Order dated 27.02.2019 shall continue to be applicable for the fourth Control Period from FY 2022-23 to FY 2024-25 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 in line with the energy generation approved by the Commission in its Tariff Order dated 27.02.2019 for the third Control Period.

Accordingly, the Commission approves saleable primary energy net off auxiliary consumption as 776.80 MUs for the fourth Control Period from FY 2022-23 to FY 2024-25.

5.2 Financial Parameters

5.2.1 Additional Capitalisation for the fourth Control Period

As discussed under the Chapter of Business Plan for the fourth Control Period, the Commission has decided to consider the additional capitalisation at the time of truing up of the respective years based on the audited accounts and as per prevailing Regulations as amended from time to time. Accordingly, proposed additional capitalisation for the fourth Control Period has been considered as nil, however, the same will be reviewed at the time of truing up of the respective years.

In the present Petition, the Petitioner has proposed additional capitalisation of Rs. 1.65 Crore for FY 2021-22. However, as discussed earlier in this Order, the Commission shall approve the additional capitalisation on actual basis at the time of truing of respective year. Therefore, GFA approved as on 31.03.2021 has been considered as opening GFA for FY 2022-23. Accordingly, GFA as on 31.03.2021 has been worked out to Rs. 402.85 Crore after considering the additional capitalisation approved for FY 2020-21, and the same has been considered as opening GFA for FY 2022-23. The same shall be reviewed at the time of truing up of the respective financial year of the fourth Control Period based on the audited annual accounts.

5.2.2 *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 from FY 2022-23 to FY 2024-25 based on the opening capital cost and proposed additional capitalisation for the respective financial year of the fourth Control Period. 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 the fourth Control Period. Details of the depreciation claimed and approved for the fourth Control Period is as follows:

Table 5.1: Depreciation approved by the Commission for the fourth Control Period from FY 2022-23 to FY 2024-25 (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening Capital Cost	404.47	402.85	432.67	402.85	448.47	402.85
Addition during year	28.20	0.00	15.80	0.00	10.20	0.00
Closing Capital Cost	432.67	402.85	448.47	402.85	458.67	402.85
Average Capital Cost	-	402.85	-	402.85	-	402.85
Weighted Average rate of Depreciation	-	5.06%	-	5.06%	-	5.06%
Depreciation	**21.91**	**20.38**	**22.66**	**20.38**	**23.17**	**20.38**

5.2.3 *Return on Equity*

Regulation 26 of the UERC Tariff Regulations, 2021 specifies as follows:

*"**26. Return on Equity***

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

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

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

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

..."

The Petitioner has proposed additional capitalisation for the fourth Control Period in its Business Plan Petition amounting to Rs. 28.20 Crore, Rs. 15.80 Crore and Rs. 10.20 Crore for FY 2022-23, FY 2023-24 and FY 2024-25 respectively out of its equity. The Petitioner has claimed RoE of Rs. 14.39 Crore, 17.80 Crore and Rs. 19.81 Crore on average equity for respective years of the fourth

Control Period.

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

Table 5.2: Return on Equity approved by the Commission for the fourth Control Period from FY 2022-23 to FY 2024-25 (Rs. Crore)

Particular	FY 2022-23		FY 2023-34		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Opening Equity	78.73	75.79	106.93	75.79	122.73	75.79
Addition during the year	28.20	0.00	15.80	0.00	10.20	0.00
Closing Equity	106.93	75.79	122.73	75.79	132.93	75.79
Rate of Return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	**14.39**	**11.75**	**17.80**	**11.75**	**19.81**	**11.75**

5.2.4 *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. 203.30 Crore for FY 2022-23. The Petitioner has not considered any addition to the normative loan corresponding to the proposed additional capitalisation for the fourth Control Period and repayment of normative loan has been considered equivalent to the depreciation claimed.

The Commission has considered the closing loan balance of FY 2020-21 as opening loan balance for FY 2021-22. The Commission has considered the depreciation for FY 2021-22 as the normative repayment for the year. The Commission has considered the closing loan balance for FY 2021-22 as the opening loan balance for FY 2022-23. As discussed under the Chapter of Business Plan for the fourth Control Period, the Commission has decided to approve the additional capitalisation on actual basis, therefore, the Commission has not considered any addition to loan during each year of the fourth Control Period. The Commission has considered the normative repayment equivalent to the approved depreciation for each year of the fourth Control Period. Further, the Commission has considered the weighted average rate of interest of 12.36% approved for FY 2020-21 for the fourth Control Period from FY 2022-23 to FY 2024-25 in accordance with the past practice, however, the same shall be trued up based on actuals.

Further, the Petitioner has claimed Bank charges amounting to Rs. 1.34 Crore each for the respective financial years of the fourth Control Period. The Commission has decided to provisionally approve the Bank Charges for the fourth Control Period as claimed by the Petitioner for the respective years. However, the same shall be trued up based on the actual audited accounts for the respective years.

Accordingly, based on the above discussion, the Interest and Finance charges approved by the Commission for the fourth Control Period from FY 2022-23 to FY 2024-25 are as shown in the

Table given below:

Table 5.3: Interest on Loan approved by the Commission for the fourth Control Period from FY 2022-23 to FY 2024-25 (Rs. Crore)

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Allowable	Claimed	Allowable	Claimed	Allowable
Gross Opening Normative Loan	325.82	327.06	325.82	327.06	325.82	327.06
Cumulative Repayment	122.52	122.38	144.43	142.77	167.09	163.15
Net Opening Normative Loan	203.30	204.68	181.39	184.30	158.73	163.91
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00	0.00
Normative Repayment of loan	21.91	20.38	22.66	20.38	23.17	20.38
Net Closing Normative Loan	181.39	184.30	158.73	163.91	135.56	143.53
Average Normative Loan	192.35	194.49	170.06	174.11	147.15	153.72
Rate of Interest	12.19%	12.36%	12.19%	12.36%	12.19%	12.36%
Normative Interest	**23.46**	**24.03**	**20.74**	**21.51**	**17.94**	**18.99**
Add: Finance Charges	1.34	1.34	1.34	1.34	1.34	1.34
Interest and Finance Charges	**24.80**	**31.47**	**22.08**	**22.85**	**19.28**	**20.33**

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

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

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

(In Rs. Lakh/MW)

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

"

Accordingly, based on the applicable O&M norms, the normative O&M expenses claimed and allowed by the Commission for the fourth Control Period from FY 2022-23 to FY 2024-25 follows:

Table 5.4: O&M expenses approved by the Commission for FY 2022-23 to FY 2024-25 (Rs. Crore)

Particular	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
O&M expense	46.98	46.98	48.96	48.96	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.

5.2.6 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 the fourth Control Period from FY 2022-23 to FY 2024-25.

5.2.7 Non-Tariff Income

Regulation 46 of UERC Tariff Regulations, 2021 specifies as follows:

"46. Non Tariff Income

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

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

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

a) Income from rent of land or buildings;

b) Income from sale of scrap;

c) Income from statutory investments;

d) Interest on delayed or deferred payment on bills;

e) Interest on advances to suppliers/contractors;

f) Rental from staff quarters;

g) Rental from contractors;

h) Income from hire charges from contactors and others;

i) Income from advertisements, etc.;

j) Any other non- tariff income.

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

The Petitioner has proposed non-tariff income of Rs. 0.64 Crore for each financial year of the fourth Control Period from FY 2022-23 to FY 2024-25. In the absence of any yardstick for estimating the non-tariff income of the Petitioner, the Commission provisionally accepts the same for the Control Period. However, the same shall be trued up based on the actual audited accounts for the respective year.

5.2.8 Annual Fixed Charges for the fourth Control Period from FY 2022-23 to FY 2024-25

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

Table 5.5: Annual Fixed Charges approved by the Commission for FY 2022-23 to FY 2024-25 (Rs. Crore)

Annual Fixed Charges	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Depreciation	21.15	20.38	21.75	20.38	22.46	20.38
Interest on Loan	32.62	24.03	29.86	21.51	27.02	18.99
Bank Charges	2.29	1.34	2.29	1.34	2.29	1.34
Return on Equity	11.66	11.75	11.66	11.75	11.66	11.75
O&M Expenses	39.49	46.98	42.20	48.96	45.10	51.03
Interest on Working Capital	0.00	0.00	0.00	0.00	0.00	0.00
Less: Non-Tariff Income	1.19	0.64	1.19	0.64	1.19	0.64
AFC	**106.01**	**103.85**	**106.57**	**103.31**	**107.34**	**102.85**
True up impact with carrying cost for FY 2017-18	0.00	(3.20)	0.00	0.00	0.00	0.00
Total Annual Fixed charges	**106.01**	**100.65**	**106.57**	**103.31**	**107.34**	**102.85**

5.2.9 *Capacity Charge and Energy Charge Rate (ECR) for FY 2022-23, FY 2023-24 and 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 the fourth Control Period attributable to its beneficiary.

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

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

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

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

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

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

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

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

CC5= (AFC x 5/12) (PAF5/NAPAF) subject to ceiling of ((AFC x 5/12) –

(CC1+CC2+CC3+CC4))

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

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

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

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

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

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

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

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

Where,

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

NAPAF = Normative plant availability factor in percentage.

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

PAF_Y = Percent Plant availability factor achieved during the Year.

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

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

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

i = 1

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

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

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

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

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

(a) For gas and liquid fuel based stations

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

(7) The generating company shall provide to the beneficiaries of the generating station the details of parameters of GCV and price of fuel, i.e. natural gas, RLNG, liquid fuel etc., as per the forms

specified at Annexure-I to these regulations:

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

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

Based on the aforesaid Regulations, capacity charges and energy charges shall be recovered by the Petitioner from the Respondent corresponding to the contracted capacity. Further, with regard to the Energy charges, as discussed in Chapter-3 and suo-moto Order dated 28.11.2017, the Petitioner is provisionally allowed to recover energy charges at actual gas bills raised by the gas supplier till the finalisation of Gross SHR for the Petitioner's plant. However, the ECR shall be reviewed based on the approved Gross SHR and, accordingly, adjustment required, if any, shall be given effect to in the subsequent Order.

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