Order

On

True up for FY 2021-22,
Annual Performance Review
for FY 2022-23
&
ARR for FY 2023-24
For
M/s Sravanthi Energy Pvt Ltd.

March 30, 2023

Uttarakhand Electricity Regulatory Commission

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

Dehradun – 248171

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Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No.: 50 of 2022

In the Matter of:

Petition filed by M/s Sravanthi Energy Pvt. Ltd. for True up of FY 2021-22, Annual Performance Review of FY 2022-23 and Annual Revenue Requirement for FY 2023-24.

In the Matter of:

M/s Sravanthi Energy Pvt. Ltd.
7th Floor, Building No. 9B,
DLF Cyber City, DLF Phase – III,
Gurugram, Haryana-122002. ...Petitioner

AND

In the Matter of:

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

Coram

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

Date of Order: March 30, 2023

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

In accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2018 (hereinafter referred to as "UERC Tariff Regulations, 2018") for the third Control

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

The Commission vide its Order dated 27.02.2019 approved the Business Plan and Multi Year Tariff for the third Control Period from FY 2019-20 to FY 2021-22. Further, the Commission vide its Order dated 26.04.2021 approved the ARR for FY 2021-22 alongwith the truing of FY 2019-20. Further, the Commission vide its Order dated 31.03.2022 approved the Business Plan and Multi Year Tariff for the fourth Control Period from FY 2022-23 to FY 2024-25.

In compliance with the provisions of the Act and Regulation 8(1) and Regulation 10(1) of UERC Tariff Regulations, 2021, M/s Sravanthi Energy Pvt. Ltd. (hereinafter referred to as "M/s SEPL" or "the Petitioner" or "the Generator") filed the Petition (Petition No. 50 of 2022 hereinafter referred to as the "Petition") giving details of its revised projections of Annual Fixed Charges (AFC) for FY 2023-24 and Annual Performance Review of FY 2022-23. Through the aforesaid Petition, the Petitioner also requested for truing up of FY 2021-22 based on the audited accounts in accordance with the UERC Tariff Regulations, 2018.

The Petition filed by the Petitioner had certain infirmities/deficiencies. The Commission, accordingly, vide its letter no. UERC/6/TF-666/2022-23/2022/1114 dated 09.12.2022 directed the Petitioner to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. M/s SEPL vide its submission dated 16.12.2022 removed the critical deficiencies and further vide its letter dated 23.12.2022 submitted additional information required for analysis of the Petition. Based on the submission dated 16.12.2022 made by M/s SEPL, the Commission provisionally admitted the Petition for further processing subject to the condition that M/s SEPL shall furnish any further information/clarifications as deemed necessary by the Commission during the analysis of the Petition, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

This Order, accordingly, relates to the Petition filed by M/s SEPL for true up of FY 2021-22, APR for FY 2022-23 and revised AFC for FY 2023-24 and is based on the original as well as all the subsequent submissions made by M/s SEPL during the course of the proceedings and the relevant findings contained in the Tariff Order dated 24.10.2017 and subsequent orders of 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 the 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 SEPL is recoverable from the beneficiary, i.e. UPCL. It is the endeavour of the Commission, to issue Tariff Orders for M/s SEPL 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 SEPL. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

Chapter 1 - Background and Procedural History.

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

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

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

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

1 Background and Procedural History

M/s SEPL is a company incorporated under the Companies Act, 1956. M/s SEPL is a generating company falling within the definition under sub-section 28 of Section 2 of the Electricity Act, 2003 (hereinafter referred to as the "Act") and has implemented a 428 MW gas based CCPP on build, own and operate basis in two phases of 214 MW (225 MW ISO) each, comprising of two gas turbine generator (GTG), each having a gross output of about 71.5 MW at site conditions, two heat recovery steam generators (HRSG) and one common steam turbine generator (STG) of about 71 MW capacity in both phases.

The name plate capacity of the gas-based Power Station is 450 MW (ISO condition) of two phases of 225 MW (ISO) each, 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 in both phases. However, at site conditions the power plant will have a gross capacity of 428 MW in two phases of 214 MW each. 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 30.04.2016 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 on long term basis for sale of 214 MW on gross capacity basis with the State licensee, i.e. UPCL and had achieved commercial operation of CCPP of Phase 1 comprising of two gas turbine and one steam turbine on 20.11.2016.

The Commission vide its Tariff Order dated 24.10.2017 approved the Business Plan and Multi Year Tariff of M/s SEPL for the contracted capacity from 20.11.2016 to 31.03.2017 and for the remaining two years of the second Control Period from FY 2017-18 to FY 2018-19. Further, the Commission vide its Tariff Order dated 27.02.2019 approved the Business Plan and Multi Year Tariff of M/s SEPL for contracted capacity for the third Control Period from FY 2019-20 to FY 2021-22. Further, the Commission vide its Tariff Order dated 31.03.2022 approved the Business Plan and Multi Year Tariff of M/s SEPL for contracted capacity for the fourth Control Period from FY 2022-23 to FY 2024-25. The Commission, in the approval of Business Plan for the fourth Control Period, approved the Capital Expenditure Plan, Capitalisation Plan, and trajectory of the performance parameters and, in the approval of MYT, approved the Aggregate Revenue Requirement for each year of the Control Period from FY 2022-23 to 2024-25, and also carried out the Truing up of FY 2020-21.

In accordance with Regulation 12 of the UERC Tariff Regulations, 2021, the Generating Company is required to file a Petition for Annual Performance Review by November 30 of every year. In compliance with the Regulations, M/s SEPL filed its Petition for Annual Performance Review for FY 2022-23 on 29.11.2022. Through the above Petition, M/s SEPL sought truing up for FY 2021-22, APR for FY 2022-23 and determination of AFC for FY 2023-24 based on the audited accounts for FY 2021-22.

The Commission vide its letter no. UERC/6/TF-666/2022-23/2022/1114 dated 09.12.2022 asked the Petitioner to submit certain relevant information in accordance with the Tariff Regulations, 2018 for the true-up of FY 2021-22. M/s SEPL was directed to rectify the said infirmities alongwith certain other deficiencies in the Petition and was also required to submit additional information necessary for admission of the Petition. M/s SEPL vide its submission dated 16.12.2022 removed the critical deficiencies. Based on the submission dated 16.12.2022 made by M/s SEPL, the Commission provisionally admitted the Petition on 28.12.2022.

Meanwhile, based on the scrutiny of the Petition submitted by M/s SEPL and replies submitted by the Petitioner, the Commission sought certain additional information/clarifications from the Petitioner from time to time which were necessary for the purpose of finalizing this Tariff Order.

In order to provide transparency in the process of tariff determination and give UPCL an opportunity to submit their objections/suggestions/comments on the proposals of M/s

Sravanthi Energy Pvt. Ltd., the Commission sent a copy of the tariff proposals to UPCL vide letter no. UERC/ 6/TF-666/2022-23/2022/1188 dated 28.12.2022.

UPCL vide its letter no. 459/UPCL/Com/GG-1/CE dated 03.02.2023 submitted its comments in the matter, which were forwarded to the Petitioner for seeking their response on the same. M/s SEPL vide its letter no. SEPL/UERC/2023 dated 16.02.2023 submitted its rejoinder on the comments filed by UPCL.

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

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

The Commission received suggestions/objections/comments from UPCL on the Petition filed by M/s SEPL for determination of Annual Fixed Charge for FY 2023-24, Annual Performance Review for FY 2022-23 alongwith truing up of FY 2021-22. The Commission further obtained replies from the Petitioner on the suggestions/objections/comments received from UPCL. For the sake of clarity, the objections raised by UPCL, and responses of the Petitioner have been summarized issue wise. In the subsequent Chapters of this Order, the Commission has kept in view the suggestions/objections/comments of UPCL and replies of the Petitioner while determining the AFC for M/s SEPL.

2.1 Sharing of Gain/(loss) on account of Station Heat Rate ("SHR").

2.1.1 UPCL's Comment

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

2.1.2 Petitioner's reply

In response to the same, M/s SEPL submitted that determination of normative SHR was recommended based on proper evaluation and the same has duly been concluded by the Commission vide its order dated 05.04.2019. The Petitioner submitted that there are various factors including better planning, minimal shutdowns, ensuring better plant availability with minimum disruptions due to technical backdowns, ensuring smooth and uninterrupted flow of natural gas, etc. The entire effort of the generator goes into ensuring that all the factors are kept in focus for the plant to achieve better than expected results. The Petitioner further submitted that the expenditure budgeted under Operation and Maintenance ("O&M") for a particular financial year is precisely to ensure that the plant is maintained as per the OEM standards and delivers on the efficiencies expected from it. The

Petitioner submitted that factoring all of the aspects that influence the SHR and much more that goes into the operations, it would be out of place to mention that the generator incurred a "hefty amount" on account of O&M given that the Petitioner delivered net savings in this regard for the FY 2021-22 to the extent of Rs. 4.72 Crore.

2.1.3 Commission's view

The Commission vide its Order dated 05.04.2019 had finalised the SHR for the Petitioner's plant, the relevant extract of the Order dated 05.04.2019 is reproduced hereunder:

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

The Commission has been allowing the recovery/refund of energy charges on the SHR determined after prudence analysis based on the applicable norms and principles laid down in the Regulations and orders of the Commission in this regard. Moreover, as far as question of spending hefty amount under O&M expenditure is concerned, the same is allowed by the Commission after prudence analysis of the expenses incurred and norms laid down in the Regulations.

2.2 Additional Capitalisation

2.2.1 UPCL's Comment

UPCL submitted that the Petitioner has not submitted any substantial evidence to show that the cost incurred on the additional capitalization of Rs. 0.68 Crore for FY 2021-22 and Rs. 0.12 Crore for FY 2022-23 would be attributable to any performance enhancement on the generation of the plant, and, therefore, the same cannot be allowed. UPCL further submitted that the generator is also required to demonstrate and justify the use of such additional capitalization incurred on the plant.

2.2.2 Petitioner's reply

In response to the same, the Petitioner submitted that the Regulations w.r.t. additional capitalization is unambiguous and plain reading of which itself clarifies that the additional capitalization may be admitted after prudence check if the said expenditure is necessary for "efficient operations rather than performance enhancement" as has been highlighted by UPCL. The Petitioner submitted that it is a rational acknowledgement of the fact that additional capex may be required to maintain the efficiency levels (i.e. preservation of the plant/ avoiding any deterioration) expected from the generating unit, however, UPCL has stretched the interpretation of the provisions to conclude that additional capital expenditure can only be allowed if there is a performance enhancement which is definitely not the intent of the Regulations.

2.2.3 Commission's view

The Commission while carrying out the truing up for FY 2021-22 as discussed in subsequent Chapters of this Order has carried out detailed analysis of additional capitalisation claimed by the Petitioner and allowed only those expenditure which were necessary for smooth running of the plant. Moreover, with regard to capital expenditure for FY 2022-23, the same shall be considered by the Commission at the time of truing up of the respective year.

2.3 Operation &Maintenance Expenses

2.3.1 UPCL's Comment

UPCL submitted that the Petitioner in its Petition while seeking true-up for FY 2021-22 has requested to consider Rs. 3.15 Crore on O&M expenses head on account of 2/3rd of the saving of Rs. 4.72 Crore against the approved O&M expenses of Rs. 90.18 Crore as per UERC Tariff Regulations, 2018. UPCL further submitted that as stated by the generator itself, the gas plant being cyclic in nature is required to undergo proper timely inspection of HGPI & MI to avoid extended forced outage. UPCL submitted that since the plant has been kept under shutdown since October 2021 onwards, therefore, the need for aforesaid inspections owing to the fact that plant mainly remained in shutdown is not required, as the purpose of these inspections mentioned by the Petitioner itself are related to the inspections when the plant is in running condition, therefore, the contention as stated in the Petition is merely an assumption and, therefore, the saving as claimed should not be allowed. UPCL further submitted that the Petitioner is required to demonstrate and portray the testing and inspection carried out by it in FY 2021-22 alongwith the break-up and justification of the cost incurred on O&M amounting to Rs. 85.46 Crore.

UPCL further submitted that with regard to FY 2022-23 & FY 2023-24 the O&M of Rs. 93.97 Crore & Rs. 97.93 Crore respectively as claimed should be restricted to minimum after prudence check by the Commission as the plant in FY 2022-23 remained under shutdown and information for carrying out this shutdown has also been served to the Petitioner well in advance, and, therefore, the expenses incurred on O&M should be logically less when the plant is not in operation. UPCL further submitted that from time to time it had informed the Commission regarding the power demand & availability position in the State and the State Based Gas Power Plant (M/s Shravanthi Energy Pvt. Ltd. (214 MW) & M/s Gamma Infraprop Pvt. Ltd. (107 MW)) were stranded due to non-availability of gas at reasonable rates in FY 2021-22 and the chances of getting the gas at viable prices in near future is also very bleak and considering the same, the O&M expenses should be restricted to bare minimum and optimum.

2.3.2 *Petitioner's reply*

In response to the same M/s SEPL submitted that it is imperative to highlight that the major overhaul ("HGPI") of the Gas Turbines happen only on completion of 24,000 hrs, which may happen either in the 3rd or the 4th year. The Petitioner further submitted that, irrespective of plant operations, the expenditure towards O&M is incurred for reasons summarised below:

I. Fixed Expenditure for Plant Maintenance

SEPL Combined Cycle Power Plant is state of the art power generation asset comprising of critical rotary and static equipment. The major equipment is listed below -

1. 6FA+e Gas Turbines & auxiliaries
2. Steam Turbine & auxiliaries
3. HRSG & auxiliaries
4. Air-cooled condenser & auxiliaries
5. Generator Transformer, Unit auxiliary transformers, distribution transformers
6. Water system comprising of a reservoir, water treatment plant, fire water system, ETP etc.
7. HT & LT switchgear, DC system, Inverters etc.
8. 220 KV switchyard

9. Network of piping (PCP & LP)
10. Network of cables
11. Distributed Control system, PLC
12. Other subsystems are required for the Generation and compliance.

The rotary and static equipment during standstill is being preserved as per OEM guidelines to protect the equipment from the effects of corrosion & other issues, for instance-

a. Gas Turbines –

1. Internals of the compressor, turbine and combustion chamber is maintained dry by an external dehumidifier.
2. Lube oil is circulated to maintain the health of the bearings.
3. Turning gear operation to maintain rotor integrity.
4. All auxiliaries are operated at a frequency to maintain the health of the equipment.
5. ELC machine in kidney loop is operated to maintain the health of Turbine oil.
6. Other checks as required by OEM.

b. Steam Turbine-

1. Lube oil circulation to maintain the health of bearings.
2. Centrifuge is operated as per the moisture parameter in the oil.
3. Turning gear operation to maintain rotor integrity.
4. All auxiliaries are operated at a frequency to maintain the health of the equipment.
5. Other checks as required by OEM.

c. HRSG-

1. The entire steam and water section (tubes, drum) is preserved as per OEM guidelines.
2. The flue gas section is maintained inert.
3. All auxiliaries (BFPS etc) are operated at a frequency to maintain the health of the equipment.
4. Other checks as required by OEM.

d. Others-

1. Power cycle piping internal, and gas pipeline internal are maintained inert by dry/ Nitrogen.
2. Air compressor internals are maintained inert.

3. All valves including MOV's & control valves are stroked at regular intervals to maintain health.
4. DM Plant, fire system, HVAC, and air systems are in continuous operation to meet the plant requirement.
5. All BOP auxiliaries are operated at a frequency to maintain their integrity.

Besides preservation, regular preventive maintenance is carried out as per the Maintenance schedule (based on OEM recommendations), and any defects noticed are corrected, including spares & consumables replacement. Some parts and consumables are replaced during Preventive maintenance as per Standard Maintenance Practices.

DM Plant operation & preservation has necessitated chemical (DM Plant, HRSG, ACW, CCW) consumption. Lab Analysis is being carried out at regular intervals to ensure the health of the equipment.

220 kV system, GT, UAT and other electrical systems are in charged condition to meet the Plant preservation, process, compliance and safety requirements.

Hence, the Operation and Maintenance team delivers their services of monitoring, carrying out preservation, and preventive & corrective maintenance irrespective of whether the Plant is standstill or generating.

All statutory compliances is carried out including HRSG hydro test in presence of the Deputy Inspector of Boilers, safety vessels, cranes & lifting tools & tackle testing by Competent authority.

To maintain the health of the Power plant, Equipment OEM recommended preservation practices, Preventive maintenance of equipment as per the schedule and day-to-day monitoring is strictly implemented. This is required to -

1. Maintain plant availability for start-up.
2. Identify incipient faults to prevent expensive repairs during startup.
3. Maintain internal health of rotary & static equipment, to prevent corrosion build-up. This is a must to prevent any unwanted recommissioning during startup. Such unwanted recommissioning activities are very expensive in terms of spares, repair and loss of availability.

4. Derive the design life of the Power plant equipment.
5. Maintain the health of Gas turbine & compressor rotor. Improper maintenance would necessitate complete turbine and compressor rotor & components.
6. Maintain the health of Heat recovery steam Generator tubes. Failure to maintain would cause tube failure during startup and operation. This will result in extended outages & costly maintenance.
7. Health of the 220kV system and downstream electrical system. The switchyard is in connection with the state grid. Improper maintenance and monitoring could affect the State grid.

The O&M team, security and other services teams are deployed to maintain the Plant equipment health & security to meet the requirement of availability and trouble-free operations after startup.

2.3.3 Commission's view

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

2.4 NAPAF

2.4.1 UPCL's Comment

UPCL submitted that the Petitioner has requested to fix the NAPAF as per the actual due to uncertainty of gas, and the same cannot be considered, being against the provisions of the Regulations, wherein the AFC has to be calculated by considering the NAPAF as 85%. UPCL further submitted that after having a long term PPA of 25 years, it is the responsibility of the Petitioner to arrange the gas for 25 years on a reasonable & viable price and if the Petitioner is unable to secure the long term arrangement of gas then there is no use of having the long term PPA. Moreover, the Petitioner is requesting for recovery of AFC in case of non-availability of gas while there may be a possibility that the Petitioner may associate any other inefficiency with the non-availability of gas to get the benefit. Further, if the recovery is assured for uncertainty of gas which would also mean uncertainty of the units produced, then it would mean that the Petitioner will any how get the recovery of its cost together with other benefits like RoE etc., and on the other hand the Respondent will have to bear the same without even having the requisite units of power, which would not only make the per unit power purchase costlier but also make the planning process of the Respondent ineffective and uncertain. UPCL further submitted that, it would be reasonable to consider the concern of the Respondent regarding non-availability of power in future in case of non-availability of fuel linkage to the Petitioner, that the recovery of total AFC should be considered through per unit basis of energy generated and not through the fixed charge component allowed in normal cases. It is quite understandable, that in case of non-supply of energy, Respondent would not only be affected by the shortage of power for which some costlier power needs to be arranged but also has to pay the fixed charges to the Petitioner. The PPA has been done by the purchaser to receive power and the generator who wants to have a long term PPA with the purchaser will have to fulfill the requirement of the purchaser and it is also pertinent to mention that in case of variation in schedule, the power purchase planning of the Respondent may be adversely affected and it will have to arrange the power on a very short period where there are wide chances that the Respondent may get costly power impacted by volatility of spot prices/prices in Day Ahead/Real time Market and through other Short Term arrangements. UPCL submitted that in case there is any deviation in the schedule then there should rather be a penalty clause, as for generator it has already been facilitated by defining its power as must-dispatch.

2.4.2 Petitioner's reply

The Petitioner submitted that the Tariff Regulations formulated by the Commission are sacrosanct and cannot be tweaked to create economic advantage or disadvantage for any stakeholder. The Regulations have evolved over the years and the provisions are principally aligned to the Regulations elsewhere in India. UPCL's suggestion towards linking of AFC to units generated vis-à-vis availability is completely flawed as it goes against the principles laid down by the Commission. The Petitioner submitted that the availability of gas has never been a point of concern as LNG is available in plenty besides smaller quantities of domestic gas, however, the price of gas is driven by several factors including geo-politics which remains outside the control of the generator. The price at which SEPL can procure gas from the market is the prerogative of UPCL. The methodology of two-part tariff is well established in the power sector in the country and the Regulations comprehensively define the mechanics of determination of the Fixed Charge and the Energy Charge. The Petitioner submitted that it has periodically provided proposal for procurement of fuel but the same has not been accepted by UPCL. This does not in any way imply that the plant is not available for generation - a factor which determines our qualification to receive the AFC. At any given stage, if UPCL accepts the price of gas and directs SEPL to generate power, the generating station would be available to produce and dispatch power to the State. Hence, "the possibility that the petitioner may associate any other inefficiency with the non-availability of gas to get the benefit" - does not arise.

2.4.3 Commission's view

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

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

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

"The scope of the Annual Performance Review shall be a comparison of the actual 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 current and/or 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 that the Annual Fixed Charges have been determined based on the audited accounts considering the relevant provisions of UERC MYT Regulations, 2018 for FY 2021-22, and has, accordingly, requested the Commission to carry out the truing up for FY 2021-22 alongwith the sharing of gains and losses.

3.1.1 *Impact of Sharing of Gains & Losses on account of Controllable Factors for FY 2021-22*

Regulation 14 of the UERC Tariff Regulations, 2018 specify 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."

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

O&M expenses comprises of the major portion of AFC of M/s SEPL 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 Tariff Order dated 24.10.2017, 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 and makes payment within 3 days. Further as discussed in Tariff Order dated 18.04.2020, 26.04.2021 and 31.03.2022, interest on working capital was not allowed by the Commission for the purpose of truing up of FY 2018-19, 2019-20 and FY 2020-21 respectively for the same reason. M/s SEPL in the current Petition submitted that the Petitioner does not charge any interest on working capital in accordance with the Commission's Order dated 18.04.2020 subject to receipt of funds within the specified time frame as provided in the said Order and, any delay in receipt of funds is being addressed separately on the quantum of Late Payment Surcharge in accordance with the Commission's Order dated 23.03.2021. Further, the performance parameter namely Station Heat Rate and Auxiliary consumption are controllable in nature and, accordingly, the Commission as discussed in subsequent paras of this Order has carried out the truing up of the same and sharing of losses or gains has been done accordingly. 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.

3.1.2 Physical Parameters

3.1.2.1 NAPAF

The Commission vide its Order dated 20.07.2016 on approval of the PPA for the Petitioner's plant approved the NAPAF, in accordance with Regulation 54 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."

Subsequently, the Commission in the Tariff Order dated 27.02.2019 approved the NAPAF of 85% for the third Control Period.

The Petitioner in the current Petition has not sought any deviation from the NAPAF approved by the Commission and, accordingly, the Commission is of the view that the NAPAF of 85% approved in the Tariff Order dated 27.02.2019 for the third Control Period shall continue to be applicable without any change for FY 2021-22.

3.1.2.2 Energy Generation and Saleable Primary Energy

The Commission in its MYT Order dated 27.02.2019 on approval of the 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 214 MW. Further, in accordance with Regulation 47(4)(i) of the Tariff Regulations, 2018, auxiliary consumption of 2.5% has been considered. Accordingly, applying the PLF of 85% as discussed hereto above and reducing the auxiliary consumption, the saleable energy works out as 1553.61 MU for FY 2021-22.

M/s SEPL in its Petition has submitted the actual saleable energy for FY 2021-22 as 632.27 MUs which in turn translates to a Plant Load Factor of 34.59%. 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 85% for FY 2021-22, however, during the year, the actual Gross Generation was 649.63 MUs and the Plant Load Factor which is determined based on the output was 34.65%. The Petitioner submitted that this was primarily due to restrictions imposed by Uttarakhand Power Corporation Ltd (UPCL) on power offtake due to high prices of LNG in the global markets for the period October, 2021 till March, 2022. The Petitioner further submitted that, similarly, for Year to Date (April-Sept 2022), the actual Gross Generation of power has been Nil MUs.

The Commission analysed the submissions made by M/s SEPL in this regard and observed that based on the provisionally verified declared capacity by SLDC, the generator's plant availability was more than 85% during FY 2021-22. M/s SEPL has also not sought any deviation in the approved design energy for FY 2021-22. Accordingly, the Commission decides to consider the design energy and saleable primary energy for FY 2021-22 as approved in the Tariff Order dated 27.02.2019 for the Petitioner's plant.

3.1.3 Financial Parameters

3.1.3.1 Capital Cost

With regard to the Capital Cost of the 225 MW CCPP of M/s SEPL (Phase I) on the date of its Commercial Operation (COD), the Commission in its Tariff Order dated 24.10.2017 had approved the Capital Cost as on COD as Rs. 1192.41 Crore as follows.

Table 3.1: Approved Capital Cost for Phase 1 of M/s SEPL as on COD (Rs. Crore)

Particulars	Approved
Freehold Land	4.08
Civil Works	101.37
Plant & Machinery	1085.07
Other Fixed Assets	
- Vehicle	0.50
- Furniture & Fixture, Office Equipment's etc.	1.14
- Computers	0.26
Total Capital Cost	**1192.41**

Further, financing of the approved capital cost of Phase 1 of the Power Station as on COD has been considered in line with the Tariff Order dated 24.10.2017 and is shown in the Table below:

Table 3.2: Financing for Phase 1 as on COD (Rs. Crore)

Particulars	Approved (Rs. in Crore)	Percentage (%)
Debt	857.31	71.90
Equity	335.10	28.10
Total Loan and Equity	**1192.41**	**100.00**

The Commission in the earlier Tariff Orders had approved Nil net additional capitalisation for FY 2016-17, net additional capitalisation of Rs. 0.78 Crore during FY 2017-18, net additional capitalisation of Rs. 0.70 Crore during FY 2018-19, net additional capitalization of Rs. 0.17 Crore during FY 2019-20 and net additional capitalization of Rs. 15.50 Crore during FY 2020-21 for Phase 1 of the Petitioner's plant. Further, as discussed in the subsequent paras of this Order, the Commission has revisited the provisionally approved additional capitalization for FY 2020-21 w.r.t. plant & machinery, as a result of the same revised net additional capitalization for FY 2020-21 worked out to Rs. 21.98 Crore. Accordingly, the Commission has considered the approved closing capital cost of FY 2020-21 of Rs. 1216.03 Crore (after revision) as opening capital cost for the purpose of truing up of FY 2021-22.

3.1.3.2 Additional Capitalisation and De-capitalisation

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

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

a) Undischarged liabilities;

b) Works deferred for execution;

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

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

e) On account of change in law.

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

(2) The capital expenditure of the following nature actually incurred after the cut-off date may be admitted by the Commission, subject to prudence check:

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

b) Change in law;

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

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

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

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

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

g) 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 become 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.

(iv) 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."

Regulation 24(5) of UERC Tariff Regulations 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."

The Petitioner has claimed an additional capitalisation of Rs. 0.68 Crore for FY 2021-22 in accordance with Regulation 22 of UERC Tariff Regulations, 2018 as detailed in the Table below:

Table 3.3: Additional Capitalisation claimed for FY 2021-22 (Rs. Crore)

S.No.	Particulars	Amount
1.	Building & Major Civil Works	0.16
2.	Plant & Machinery	0.42
3.	Furniture & Fixtures, Office Equipments & Others	0.09
4.	Computers	0.01
Total		**0.68**

The Commission analysed the claims of the Petitioner and observed that the same are in accordance with the audited financial statement of FY 2021-22 as submitted by the Petitioner. The Petitioner submitted that the same have been incurred to ensure efficient and seamless running of the plant operations and/or maintenance. Hence, the Commission, accordingly, approves the net additional capitalisation of Rs. 0.68 Crore as claimed by the Petitioner for FY 2021-22 in accordance with the Regulations.

Apart from above, the Petitioner has also requested for re-evaluation in relation to insurance proceeds provided in the Order dated 31.03.2022 on approval of Business Plan and Multi Year Tariff Petition of the Petitioner company for the fourth Control Period (FY 2022-23 to FY 2024-25).

The Commission in the Tariff Order dated 31.03.2022 with respect to replacement of damaged components from Phase II to Phase I of the Petitioner project and subsequent receipt of Insurance proceeds thereon held as under:

"…

On analysing the submissions made by the Petitioner and further discussions, the information w.r.t. the above transaction can be summarized as follows:

Table 3.4: Summary of information w.r.t. damaged GT Parts in Phase 1 (Rs. Crore)

S.No	Particulars	Amount
1.	Value of De-capitalised Asset as claimed by the Petitioner in FY 2020-21 (after rectification)	28.15
2.	Value of new asset purchased as replacement of damaged asset	30.94
3.	Insurance proceeds received in FY 2020-21	24.76
4.	Insurance proceeds received in FY 2021-22	5.96
5.	Accumulated depreciation on assets decapitalized as claimed by the Petitioner from CoD till FY 2019-20 (after rectification)	5.16

The Commission worked out the accumulated depreciation w.r.t. the assets decapitalised based on the depreciation approved by the Commission under the head plant and machinery from the date of Commissioning till the end of FY 2019-20 & applicable average depreciation in FY 2020-21 till the date of decapitalization, which works out to Rs. 5.70 Crore against the Petitioner's claim of Rs. 5.16 Crore (till FY 2019-20). The WDV of the decapitalised asset after considering the accumulated depreciation of Rs. 5.70 Crore and considering 90% depreciable value, works out to Rs. 19.64 Crore (Rs. 28.15 Crore x 90% - Rs. 5.70 Crore) as on the date of decapitalization.

Sub-clause (3) of Regulation 22 of MYT Regulations, 2018 reads as under:

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

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

"(6) In case of de-capitalization of assets in respect of generating station or unit thereof or distribution licensee or SLDC or transmission system or element thereof, ***the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.****"*

In view of the above quoted Regulations, principles of MYT Regulations, 2018 and past practices of the Commission, the cost of decapitalised asset amounting to Rs. 28.15 Crore has been reduced from the gross fixed assets in FY 2020-21 and the accumulated depreciation thereon of Rs. 5.70 Crore has been reduced from cumulative depreciation for the purposes of computing the remaining depreciable value.

Further, the loan and equity corresponding to the decapitalised asset, in the Debt-Equity ratio of 71.90 : 28.10 as on CoD, amounting to Rs. 20.24 Crore Debt and Rs. 7.91 Crore Equity has been deducted from outstanding loan and the equity in FY 2020-21. Further, the debt component of the decapitalised asset amounting to Rs. 20.24 Crore has been reduced by the accumulated depreciation on the decapitalised asset till the date of decapitalisation amounting to Rs. 5.70 Crore for the purposes of deduction from the outstanding loan in FY 2020-21, as the same represents normative repayment of loan related to decapitalised asset till the date of decapitalisation. Therefore, the loan balance has been reduced by Rs. 14.54 Crore (Rs. 20.24 Crore – Rs. 5.70 Crore) in FY 2020-21 on account of decapitalised asset. The impact of the same has been considered at subsequent paras of this Order while dealing with Interest on Loan Capital and Return on Equity.

Further, w.r.t. the loss on account of remaining amount of WDV w.r.t. the decapitalised asset, i.e. Rs. 19.64 Crore, the Commission is of the view that the said loss on account of the decapitalised asset was due to unforeseen circumstances and beyond the control of the Petitioner, therefore, the same shall be adjusted from the insurance proceeds received against the decapitalised asset. The Petitioner has received insurance proceeds against the damaged assets amounting to Rs. 24.76 Crore and Rs. 5.96 Crore in FY 2020-21 and FY 2021-22 respectively. In this regard, the Commission is of the view that the amount of insurance proceeds received in excess of WDV of the damaged assets shall be added to the NTI of the respective year in which the same has been received, i.e. Rs. 5.12 Crore (Rs. 24.76 Crore - Rs. 19.64 Crore) in FY 2020-21 and Rs. 5.96 Crore in FY 2021-22.

Further, against the damaged components of GT the Petitioner has procured assets amounting to Rs. 30.94 Crore in FY 2020-21, which have been installed by the Petitioner in Phase II of its project, and accordingly, the Petitioner has increased CWIP of Phase II by the cost of newly procured assets, i.e. Rs. 30.94 Crore. The Petitioner also submitted that in FY 2020-21, after passing out the rectification entries in its books of accounts in FY 2021-22, it had reduced the CWIP of Phase II by Rs. 28.15 Crore and increased the gross block of assets in Phase I with the same amount. In this regard, based on the submission made by the Petitioner, the Commission observed that the original value of components transferred by the Petitioner from Phase II to Phase I of its project was Rs. 21.67 Crore. The Petitioner has further increased the said value of components transferred from Phase II to Phase I of its project to include costs towards supply, civil services and soft costs, and has, accordingly, revised the value of the components transferred from Phase II to Phase I of the project from Rs. 21.67 Crore to Rs. 28.15 Crore. In this regard, the Commission is of the view that the increase in value of transferred components cannot be verified as the capital expenditure of Phase II of the Petitioner's project is unapproved as far as regulatory regime is concerned. Moreover, it is also not clear whether or not the expenses related to mantling and dismantling of the GT components transferred from Phase II to Phase I of the Petitioner's project have already been claimed by *the Petitioner in the years of actual transfer, i.e. year 2016 and year 2019. In view of the above, for the purposes of current tariff proceedings, the Commission is provisionally allowing Rs. 21.67 Crore as additional capitalisation in FY 2020-21 on account of parts of GT transferred from Phase II to Phase I of the Petitioner's project. The Commission also directs the Petitioner, in case it seeks variation in the value of transferred components provisionally considered by the Commission as discussed above, to submit a detailed justification alongwith the basis for arriving at the value of Rs. 28.15 Crore on account of components transferred from Phase II to Phase I of the Petitioner's project, and also to demonstrate before the Commission based on the documentary evidences that whether or not the cost of mantling and dismantling of these components have already been claimed in the past by the Petitioner in Phase I of its project, in the next tariff filing, based on which the Commission shall take a final view in the matter.*

Here it is pertinent to note that the decapitalization of parts of GT in FY 2020-21, is on account of damages that took place in the year 2016 and year 2019 as submitted by the Petitioner. The Petitioner submitted that the damaged components of Gas Turbine Generator were cannibalized from Phase 2 in the year 2016 and year 2019 for seamless operations, and no accounting entry was passed during those years. The Commission in this regard is of the view that no adjustment w.r.t the past years, i.e. year 2016 & year 2019, is required in this Order as the damage to GT in those years did not affect the operation of the plant since the Petitioner arranged the replacement of damaged parts from Phase 2 of its project to keep the GT running in the respective years. Moreover, the Petitioner has also not passed any accounting entries during the respective years to capture the same."

The Petitioner in the current Petition submitted that the parts that were damaged did not have any salvage value and hence, applying 90% depreciable value of the relevant asset prima facie may not be prudent and hence, may be corrected to 100%. Applying the same to the adjustments towards the insurance proceeds to determine the excess that should be treated as Non-Tariff Income should reduce from Rs 5.96 Crore as directed for FY 2021-22 by 10% that was kept aside as salvage value. The Petitioner proposed the adjustment on account of the same in FY 2021-22 as follows:

a. Gross Block Decapitalized (as per SEPL workings) : Rs. 28.15 Crore
b. 90% of the asset : Rs. 25.34 Crore
c. Accumulated Depreciation : Rs. 5.70 Crore
d. To be written off and adjusted against Insurance in P&L : Rs. 19.64 Crore
e. Add: 10% salvage value disallowed : Rs. 2.82 Crore
f. Total value of asset write off to be adjusted against Insurance : Rs. 22.46 Crore
g. Total Insurance Proceeds (Tranche 1 & 2) : Rs. 30.72 Crore
h. Total NTI recognized : Rs. 8.26 Crore

i. Less: NTI recognized in FY 2020-21 as per UERC Order : Rs. 5.13 Crore

j. Balance NTI to be recognized in FY 2021-22 : Rs. 3.13 Crore

The Commission analysed the submissions made by the Petitioner in this regard and finds the justification given by the Petitioner to be logical as the assets were completely damaged and were also covered under the insurance claim, therefore, salvage value for the Petitioner company for the same would be Nil. The Commission, accordingly, adjusts the Non-Tariff Income for FY 2021-22 with the salvage value of the damaged assets which works out to Rs. 2.81 Crore (Rs. 28.15 Crore * 10%). The adjustment w.r.t. the same has been discussed in the subsequent paras of this Order while dealing with the NTI for FY 2021-22.

The Petitioner through the current Petition further submitted that the additional capitalization for transfer of asset from Phase 2 to Phase 1 has been considered at Rs. 21.67 Crore by the Commission, however, for the purpose of decapitalization, the Commission has considered the same as Rs. 28.15 Crore. The Petitioner submitted that all the assets in Phase 2 are Capital Work in Progress and the capitalization in the books and corresponding allocation of overheads has not taken place. Further, since the turbines and the overheads pertaining to 225 MW (Phase II) have been of similar nature, therefore, the cost of the replaced parts can safely be considered as the same even though it may be slightly more than that of Phase 1. The Petitioner further submitted that the procurement of fresh GT parts that were damaged in Phase 1 were procured at the prevailing prices amounting to Rs. 30.92 Crore and considering the best interest of the State and the consumers of the State using the power, instead of offering the actual cost of Rs. 30.92 Crore (excluding mantling and assembling/ installation charges), SEPL offered to replace the damaged parts at the same historical cost which pertained to the parts that were originally bought in 2010-11 at Rs. 28.15 Crore. The Petitioner also submitted certificate from its auditors in support of the values claimed by it. The Petitioner further submitted that in the absence of allocation of overheads in Phase 2 resulting in disallowance of the costs as claimed by it, i.e. Rs. 28.15 Crore, the procurement cost of relevant parts in FY 2020-21, i.e. 30.92 Crore may be considered by the Commission.

The Commission analysed the submissions made by the Petitioner and based on the information submitted by it and further discussion held with its officials, the Commission observed that the additional capitalization of Rs. 21.67 Crore under the head plant & machinery provisionally allowed by the Commission in FY 2020-21 does not reflect the correct values of the said components for the two reasons, firstly there ought to be some overheads that needs to be allocated to arrive at correct value of the assets (which in the absence of approved cost of Phase II of the Petitioner's project cannot be worked out), and secondly the replacement cost of these components, as submitted by the Petitioner, procured in FY 2020-21 is Rs. 30.94 Crore (excluding mantling and assembling/ installation charges). The Commission further observed that, the Petitioner has already claimed the costs incurred on mantling and dismantling w.r.t. to replacement of parts in GT in the respective years when the GT was damaged and parts were cannibalized from Phase 2 to Phase 1 of the Petitioner's project. The Petitioner also clarified that said costs being incremental in nature were incurred purely for the purposes of cannibalization

The Commission, in the absence of approved capital cost of Phase II of the Petitioner's project, is placing reliance on the workings provided by the Petitioner, certificate from its statutory auditors to support the claim made by the Petitioner and also the fact that GT's of both Phase I and Phase II of the Petitioner's project are similar in all respects and were procured around the same time. The Commission analysed the information and justification submitted by the Petitioner in support of its claim and is of the view that capitalization in FY 2020-21 on account of components transferred from Phase II to Phase I of the Petitioners project be revised from provisional cost of Rs. 21.67 Crore allowed vide T.O. dated 31.03.2022 to Rs. 28.15 Crore to include the overhead cost based on the approved capital cost of Phase I of the Petitioner's project. The statutory auditor of the Petitioner has also certified the value of Rs. 28.15 Crore as correct amount for the purposes of the above adjustment. The Commission worked out the impact of above adjustment in truing up of FY 2020-21 which worked out to Rs. 0.44 Crore and the same shall be allowed to be recovered alongwith the AFC for FY 2023-24.

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

Table 3.4: Trued up Capital Cost for FY 2021-22 (Rs. Crore)

Particulars	Opening GFA as on 01.04.2021	Additional Capitalisation approved for FY 2021-22	Decapitalization approved for FY 2021-22	Closing GFA as on 31.03.2022
Freehold Land	4.08	-		4.08
Civil Works	101.37	0.16		101.52
Plant & Machinery	1107.32*	0.42		1107.74
Vehicles	1.25	0.00		1.25
Furniture & Fixtures, Office equipments etc.	1.57	0.09		1.66
Computers	0.45	0.01		0.47
Total	**1216.03**	**0.68**	**0.00**	**1216.71**

value after revision of the amount of additional capitalization for FY 2020-21

3.1.3.3 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 Commission has considered the Debt-Equity Ratio of 71.83:28.17 for capital cost as on 01.04.2021 which was approved in the Tariff Order dated 31.03.2022 while approving the truing up for FY 2020-21. Further, as discussed in previous paras of this Order, the Commission has revised the provisionally allowed additional capitalisation of FY 2020-21 under the head Plant & Machinery from Rs. 21.67 Crore to Rs. 28.15 Crore. On account of said revision, the revised Debt-Equity ratio of 71.82:28.18 for capital cost as on 01.04.2021 has been considered by the Commission for the purpose of truing-up of FY 2021-22. Further, with regard to the additional capitalisation claimed for FY 2021-22, the Petitioner submitted that the expenses for the procurement of assets were done out of the revenues of the Company. Accordingly, the Commission has considered the financing of additional capitalisation incurred for FY 2021-22 in the Debt-Equity ratio of 70:30, as per UERC Tariff Regulations, 2018.

Accordingly, in view of the above, the Capital structure for the capital cost as on 01.04.2021 and additional capitalisation & decapitalisation for FY 2021-22 is as follows:

Table 3.5: Detail of Financing of Capital Cost Allowed for FY 2021-22

Particular	Opening as on 01.04.2021		Addition during the year		Decapitalisation during the year		Closing as on 31.03.2022	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	873.31*	71.82%*	0.48	70.00%	0.00	0.00	873.78	71.82%
Equity	342.72*	28.18%*	0.20	30.00%	0.00	0.00	342.93	28.18%
Total	**1216.03**	**100.00**	**0.68**	**100.00**	**0.00**	**0.00**	**1216.71**	**100.00**

value after revision of the amount of additional capitalization for FY 2020-21

3.1.3.4 Depreciation

Regulation 28 of UERC Tariff Regulations 2018 specifies as follows:

"(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.

Provided that in case of generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of site;

Provided further that the capital cost of the assets of the generating station for the purpose of computation of depreciable value for the purpose of determination of tariff under these regulations shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

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

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

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

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

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

(5) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(6) In case of de-capitalization of assets in respect of generating station or unit thereof or distribution licensee or SLDC or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its

useful services"

The Petitioner has claimed depreciation of Rs. 62.48 Crore for FY 2021-22 based on the actual expenditure capitalised in its books of account, and also on additional capitalisation from COD till FY 2021-22.

The Commission has calculated the weighted average rate of depreciation of 5.11% by applying the depreciation rates as specified in Appendix-II of UERC Tariff Regulations, 2018 on the GFA base of the Petitioner. Accordingly, the Commission has worked out the depreciation of Rs. 62.16 Crore against the admissible average GFA of Rs. 1216.37 Crore during FY 2021-22 by applying the weighted average rate of depreciation of 5.11%.

Based on the above discussed approach, the summary of depreciation as approved in Tariff Order dated 26.04.2021, claimed by the Petitioner and as approved now by the Commission for FY 2021-22 after truing up is shown in the Table given below:

Table 3.6: Depreciation for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order dated 26.04.2021 for FY 2021-22	Claimed	Approved after truing up
Depreciation	60.96	62.48	62.16

3.1.3.5 *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 amount 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 rate of 15.5% 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. 52.02 Crore for FY 2021-22. The Commission has allowed the Return on Equity on the opening equity base at the rate of 15.50%. The Return on Equity approved by the Commission for FY 2021-22 is given in the Table below:

Table 3.7: Return on Equity for FY 2021-22 (Rs. Crore)

Particular	Approved in Tariff Order dated 26.04.2021	Claimed by Petitioner	Approved after truing-up
Return on Equity	52.02	52.02	53.12

3.1.3.6 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 01.04.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.03.2019 from the approved 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. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalization of such asset.

...

(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.

(7) The Generating Company or the Transmission Licensee or the Distribution Licensee, or the SLDC as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings on interest shall be shared between the beneficiaries and the Generating Company or the Transmission Licensee or the Distribution Licensee or the SLDC, as the case may be, in the ratio

of 1:2.

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

…"

The Petitioner has claimed interest on normative loan of Rs. 183.52 Crore for FY 2021-22 for the purpose of truing up based on the weighted average rate of interest of 13.50% p.a. The Petitioner submitted that Capital expenditure approved by the Commission has been lower than the actual capital expenditure, hence, interest cost being incurred would always be higher than the approved cost as the financing structure applied by the Commission is on the approved capex. The Petitioner submitted that for the computation of the AFC, they have provided the actual interest cost in accordance with the books of accounts and the same shall form the basis for projections for the future years.

The Commission has considered the normative loan worked out as on 31.03.2021 as opening normative loan for FY 2021-22 and repayment has been considered equal to the admissible depreciation, i.e. Rs. 62.16 Crore. Also, as discussed hereto above, the Commission has approved additional capitalisation of Rs. 0.68 Crore for FY 2021-22. Further, as discussed in the preceding paras of this Order, the additional capitalization of Rs. 0.68 Crore in FY 2021-22 has been funded through the debt-equity ratio of 70:30, i.e. debt of Rs. 0.48 Crore and equity of Rs. 0.20 Crore. Accordingly, net addition to normative loan has been considered as Rs. 0.48 Crore as per UERC Tariff Regulations, 2018.

The Commission sought information w.r.t. the term loan accounted for by the Petitioner in its books of accounts and observed that for the loans related to Phase I of the project the weighted average rate of interest on the basis of interest accounted by the Petitioner in its books works out to 13.55% for FY 2021-22 after excluding liquidated damages and penal interest levied in previous years.

The Commission, in line with the approach taken in the tariff Order dated 26.04.2021, observed that a similarly placed gas-based generator, namely M/s Gama Infraprop Pvt. Ltd. has incurred interest for FY 2021-22 at the rate of 12.37%. Accordingly, the Commission finds no reason to allow higher interest rate to the Petitioner company than that incurred by M/s Gama Infraprop Pvt. Ltd, and hence, the interest expenses for FY 2021-22 has been trued up at the rate of 12.37%.

The Commission, accordingly, approves the interest on loan capital as Rs. 72.19 Crore for FY 2021-22.

Furthermore, the Petitioner has claimed Bank Charges and BG/LC Commission charges amounting to Rs. 0.08 Crore for FY 2021-22 under Operation & Maintenance expenses. The expenses are of the nature of financing charges and hence, have not been considered as a part of Operation & Maintenance expenses, rather the same is allowable separately under the head Interest on Loan Capital as finance charges, under UERC Tariff Regulations. Accordingly, the Commission, approves Rs. 0.08 crore as finance charges for FY 2021-22.

Based on the above considerations and UERC Tariff Regulations, 2018, the Commission has approved the interest expenses for FY 2021-22 for Phase 1 of the Petitioner's project as shown in the Table below:

Table 3.8 Interest on Loan as approved for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order dated 26.04.2021 for FY 2021-22	Claimed by Petitioner	Approved after truing up for FY 2021-22
FY 2021-22	69.76	183.52	72.19
Add: Financing Charges for FY 2021-22	-	-	0.08
Total Interest & Finance Charges	**69.76**	**183.52**	**72.26**

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

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

Regarding the Operation and Maintenance expenses, Regulation 48(1) of the UERC Tariff Regulations, 2018, 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 normative O&M expenses of Rs. 90.18 Crore for FY 2021-22 for 214 MW capacity of the Petitioner's plant.

The Petitioner submitted that it had spent an amount of Rs. 85.53 Crore towards O&M expenses in FY 2021-22 as per the audited accounts, and, accordingly, claimed an amount of Rs. 88.63 Crore (after sharing of gain/loss) for the purpose of true up of O&M expenses in FY 2021-22. Further, the Petitioner submitted the separate details of employee, R&M and A&G expenses.

The Commission analysed the submission made by the Petitioner and sought information/justification for major variations in O&M expenses under various heads vis-à-vis FY 2020-21.

In response to the same the Petitioner submitted that w.r.t. variation in repair & maintenance expenditure (plant & machinery), the variation is on account of the major overhaul of gas turbines which took place in FY 2020-21, wherein majority of the works were completed in the relevant financial year, and only a marginal spill over of the same was in FY 2021-22. The Petitioner submitted that the extraordinary increase due to HGPI, in FY 2020-21 reflects increased expenses on account of R&M which was substantially lower in FY 2021-22.

Further, w.r.t. the variation in expenditure under the head consumption of stores and spares, the Petitioner submitted that due to supply chain issues and domestic inflationary pressures, the cost of materials in relation to spares have increased, which has been a global phenomenon wherein the commodity prices have increased substantially. The Petitioner further submitted that the period of operations in FY 2021-22 was 6 months as compared to 4 months of operations in FY 2020-21, due to which the expenditure under this head has increased in FY 2021-22.

Further, w.r.t. the variation in expenditure under the head legal & professional expenses, the Petitioner submitted that the expenses have reduced as the matter in relation to GAIL moved from Arbitration and APTEL to Supreme Court. The Petitioner submitted that the number of hearings in the said matter have substantially reduced thereby leading to substantial reduction in counsel fees.

The Commission analysed the submissions made by the Petitioner in this regard and is of the view that the reason submitted for increase in O&M expenses under the respective heads appears to be justified. Further, as discussed above, bank charges & BG/LC commission charges of Rs. 0.08 Crore included in the Operation & Maintenance Expenses claimed by the Petitioner, has been allowed separately by the Commission as finance charges under Interest on Loan Capital.

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

Table 3.9: O&M Expenses Approved After Sharing of Gains and Losses for FY 2021-22 (Rs. Crore)

Particulars	Actual Claimed in the Petition	Adjusted claim considered for sharing	Normative approved now	Efficiency gain/(loss)	Generator Share	Net Entitlement
O&M Expenses		A	B	C=B-A	D=2/3xC	E=A+D
FY 2021-22	85.53	85.46	90.18	4.72	3.15	88.61

3.1.3.8 *Interest on Working Capital*

Regulation 33 (1) of UERC Tariff Regulations, 2018 specifies as follows:

"…

a) 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.

…"

As discussed in the Tariff Order dated 24.10.2017, the Commission vide its Order dated 17.04.2017 allowed the Petitioner to forego interest on working capital in lieu of non-chargeability of rebate by UPCL while making payment of generation bills raised by the Petitioner. The relevant extract of the Tariff Order dated 24.10.2017 is reproduced hereunder:

"However, the Petitioner vide its letter dated 07.04.2017 submitted that it intends to forego interest on working capital in case UPCL does not charge rebate on their energy bills. The Commission evaluated the submissions made by the Petitioner and observed that it would be in the interest of consumer of the State if Petitioner's proposal is accepted in this regard since with the implementation of this arrangement there will be net reduction in generation tariff of the Petitioner and consequent reduction in power purchase cost of UPCL resulting in the decrease of retail/consumer tariffs. In this regard, the Commission vide its Order dated 17.04.2017 had allowed the Petitioner (M/s SEPL) to forego interest on working capital in lieu of non-chargeability of rebate by UPCL while making payment of generation bills raised by M/s SEPL. Relevant extract of the above mentioned Order is as follows:

"From the above illustration, it is clear that there will be net saving in cost of power purchase to the tune of about Rs. 13 Crore per year or Rs. 1 Crore p.m. under the arrangement that UPCL does not charge rebate to M/s SEPL and in turn M/s SEPL foregoes interest on working capital. However, this arrangement will only be applicable to M/s SEPL as other Gas based generators in the State have not given their option to this effect. Keeping in view, the overall benefit to UPCL and consumers of the State, the Commission allows implementation of the above arrangement between UPCL and M/s SEPL. The Commission also advices other Gas based generators to explore the option forwarded by M/s SEPL in the interest of UPCL and consumers of the State.

Accordingly, the direction issued by the Commission vide its Order dated 25.01.2017 regarding non-applicability of provision of rebate till 31.03.2017 and deduction of rebate by UPCL thereafter, shall be limited to only two Gas based generators namely M/s GIPL and M/s Beta Infratech for whom the provision relating to deduction of rebate by UPCL on the energy bills shall be governed in accordance with the original PPA approved by the Commission. However, the Respondents will be at liberty to raise the fortnightly bills to UPCL corresponding to fuel bills raised by M/s GAIL in accordance with the principles laid down in the Commission's Order dated 25.01.2017."

The Petitioner has also filed a separate Petition dated 04.03.2021 before the Commission seeking necessary directions to UPCL for releasing interest on delay in payments of its energy invoices for FY 2018-19 & FY 2019-20. The Commission on the said Petition had vide its Order dated 23.03.2021 directed both the Petitioner and UPCL to amicably settle the issue between themselves as per the provisions of the PPA by 31.05.2021, and bring up the dispute, if any remaining unresolved, before the Commission after exhausting the remedies available under the provisions of the PPA under Section 86(1)(f) of the Act. The relevant portion of the Order dated 23.03.2021 is reproduced hereunder:

"…

The Commission directs the Petitioner and the Respondent to amicably settle the issue between themselves as per the provisions of the PPA by 31.05.2021. The parties may bring up the dispute, if any remaining unresolved, before the Commission after exhausting the remedies available under the provisions of the PPA under Section 86(1)(f) of the Act.

…"

The Petitioner has also not claimed any Interest on Working Capital in its current Petition and submitted that any delay in receipt of funds is being addressed separately on the quantum of Late Payment Surcharge in accordance with the Order dated 23.03.2021 of the Commission.

Accordingly, in line with the decision taken in the Tariff Order dated 24.10.2017 and aforesaid discussions, interest on working capital is not being allowed for the purpose of truing up of FY 2021-22.

3.1.3.9 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 an amount of Rs. 0.02 Crore as NTI for FY 2021-22. The Petitioner submitted that interest earned on FDs have been kept outside the purview of NTI in accordance with the MYT Regulations as the same is earned from monies accumulated over the years on account of RoE.

In this regard, the Commission, in line with the approach adopted in the Tariff Order dated 31.03.2022, compared the average investment made by the Petitioner against the average RoE allowed till date, after deducting the additional capitalization in the respective years as the Petitioner had been claiming that post CoD, the capitalizations have been funded entirely out of its internal resources. Further, the Commission also reduced the O&M expenses disallowed to the Petitioner in respective years, which the Petitioner is expected to meet out of its own equity. The Commission observed that the average investment made by the Petitioner in FY 2021-22 is lower than the average RoE available with it till the end of FY 2021-22, and, therefore, the interest on average investment as discussed below has been reduced from the NTI for the purposes of truing up of FY 2021-22.

The Commission analysed the investment details submitted by the Petitioner and observed that it is investing its funds on rolling basis based on surplus funds available with it. Accordingly, the Commission worked out the Average Investment made by the Petitioner in FY 2021-22 and the weighted average rate of interest in the respective year as shown in the Table below:

Table 3.10 Summary of Investment made by the Petitioner (Rs. Crore)

Particulars	FY 2021-22
Average Investment as per FD details submitted by the Petitioner	118.81
Corresponding interest on above FDs as per audited accounts	2.93
Average Rate of Interest	2.47%

Further, the Petitioner has claimed that the interest earned on investment made out of RoE amounts to Rs. 2.89 Crore after reversal of excess provision of Rs. 0.05 Crore made in the previous years. The Petitioner submitted that these FDs were maintained with AXIS Bank, and due to account turned NPA, axis bank was not accruing interest, and after much deliberation, Axis bank gave the full & final interest as per their workings which was accepted by the Petitioner and, accordingly, it reversed the excess interest in their books in FY 2021-22. The Commission in the past has considered the interest income for the purpose of NTI as per the claims made by the Petitioner based on its audited accounts, and accepts the adjustment made by the Petitioner on account of reversal of excess provision made by it, and accordingly, considers Rs. 2.89 Crore as average interest earned by Petitioner out of investments made from the average RoE available with it as discussed above.

The Petitioner further submitted that Phase I of 225 MW suffered damages twice in its Gas Turbine, and in the interest of business, SEPL replaced the damaged parts from Phase II plant and lodged an insurance claim with the insurance company, against which it had received Rs. 24.76 Crore during FY 2020-21 and Rs. 5.96 Crore in FY 2021-22 from Insurance Company towards insurance claims against damaged Gas Turbine Parts of Phase I of its Kashipur Power Plant. The Petitioner, as discussed in preceding paras, has requested for re-assessment of the treatment of insurance proceeds leading to recognition of NTI for the relevant financial year.

In this regard, as discussed in the previous paras of this Order, the Commission has agreed to adjust the Non-Tariff Income for FY 2021-22 with the salvage value of the damaged assets which works out to Rs. 2.81 Crore (Rs. 28.15 Crore * 10%). Accordingly, the Commission has reduced the NTI of FY 2021-22 by Rs. 2.81 Crore being the salvage value considered by the Commission of the assets decapitalised in FY 2020-21.

Further, as discussed in the Tariff Order dated 31.03.2022 the part of the insurance proceeds amounting to Rs. 5.96 Crore received in FY 2021-22 against the assets decapitalised in FY 2020-21 has been considered to be a part of NTI for the purpose of reduction of AFC in the respective year of receipt of the same, i.e. FY 2021-22. The relevant extract of the Tariff Order dated 31.03.2022 is reproduced hereunder:

"4.1

…

Further, as discussed in the preceding paras, the Petitioner has received part of the insurance proceeds amounting to Rs. 5.96 Crore in FY 2021-22, against the assets decapitalized in the books of accounts in FY 2020-21 on account of damaged components of GT. The Commission, as discussed before, shall consider the impact of the same while carrying out truing up of FY 2021-22 by adding the amount of insurance proceeds received to the NTI of FY 2021-22."

Accordingly, in view of the above discussions, the NTI for FY 2021-22 as approved by the Commission is as follows:

Table 3.11 Non-Tariff Income for FY 2021-22

Particulars	Amount (Rs. Crore)
Interest Income Bank Deposit	2.89
Interest Income Security Deposit	0.04
Interest income from ICD's & Income tax refund	0.71
Scrap Sale	0.16
Receipt of insurance proceeds	5.96
Less: Interest on funds invested out of RoE (Rs. 2.93 Crore – Rs. 0.05 Crore)	(2.89)
Less: Salvage value of assets decapitalised in FY 2020-21	(2.81)
Net Non-Tariff Income for FY 2021-22	**4.05**

In view of above, the Commission approves Rs. 4.05 Crore as NTI for FY 2021-22 against Rs. 0.02 Crore claimed by the Petitioner.

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

Based on the above analysis, the Commission has worked out the approved figures of Gross AFC for FY 2021-22 after truing up. The summary of Gross AFC for FY 2021-22 is as shown in the Table below:

Table 3.12: Annual Fixed Charges for FY 2021-22 (Rs. Crore)

Particulars	Approved in T.O. dated 26.04.2021	Claimed by the Petitioner	Approved after truing up
Depreciation	60.96	62.48	62.16
Interest on Loan & Financial Cost	69.76	183.52	72.26
Interest on Working Capital	-	-	-
O&M expenses	90.18	88.63	88.61
RoE	52.02	52.02	53.12
Total Annual Fixed Costs	**272.92**	**386.65**	**276.15**
NTI	0.04	0.02	4.05
Net AFC	**272.88**	**386.63**	**272.10**

Accordingly, trued-up AFC for FY 2021-22 works out to Rs. 272.10 Crore. The surplus for FY 2021-22 alongwith the carrying cost works out to Rs. 0.97 Crore, and the same shall be adjusted in the AFC of FY 2023-24.

3.1.4 Capacity Charge for FY 2021-22 and Energy Charge Rate (ECR) for FY 2021-22

Based on the above analysis for all the heads of expenses of AFC, the Commission has after truing up, approved the Annual Fixed Charges (AFC) of the Petitioner attributable to its beneficiary for FY 2021-22.

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

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

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.

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:

CC1= (AFC/12) (PAF1 / 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.

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

PAFY = Percent Plant availability factor achieved during the Year.

CC1, CC2, CC3, CC4, CC5, CC6, CC7, CC8, CC9, CC10, CC11 and CC12 are the Capacity Charges of 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th and 12th months respectively.

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.

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).

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.}

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:

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.

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.

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."

As discussed in the Commission's Order dated 05.04.2019, based on the report of the independent Consultant appointed for the purpose of determination of Gross Station Heat Rate of the gas based plants of M/s SEPL and M/s GIPL, the Commission approved the Design Station

Heat rate as 1911.809 kCal/kWh and Gross SHR as 2007.4 kCal/kWh for the Petitioner's plant in accordance with the Regulations. Further, it is to be noted that SHR is a controllable factor which can be optimised through efficient operations. As per MYT Regulations, variation in respect of controllable factor is subject to sharing of gain/loss, on account of efficient operation with respect to achievement of optimum actual SHR by the Petitioner. As per the aforesaid Order dated 05.04.2019, the Petitioner will be eligible for incentive on account of lower SHR if the same is below 1988.05 kCal/kWh and disincentive if the actual SHR exceeds 2007.4 kCal/kWh, however, there will be no incentive or disincentive in the range of 1988.05 kCal/kWh to 2007.4 kCal/kWh. The relevant extract of the Order dated 05.04.2019 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."

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 from the Petitioner's plant, and other relevant information, that was required to work out the actual SHR and actual Auxiliary Energy Consumption (AUX), of the respective years as per UERC Tariff Regulations, 2018 for the purpose of truing up of the Energy Charges for FY 2021-22.

The Commission on the basis of the documents/information submitted by the Petitioner worked out the actual SHR as 1944.510 kCal/kWh for FY 2021-22, as 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. Similarly, based on the energy generation data, the Commission worked out the actual auxiliary consumption as 2.672% for FY 2021-22, as against the Normative auxiliary consumption of 2.5% as provided in the Tariff Regulations. In accordance with the UERC Tariff Regulations, 2018, Auxiliary Energy Consumption and SHR are controllable factors, and, therefore, financial impact of efficiency/inefficiency on the performance of the generator on these counts is to be shared between the generator and distribution licensee.

As can be seen from above, for FY 2021-22, the actual SHR, i.e. 1944.510 kCal/kWh is below the Normative SHR approved by the Commission, and also the actual auxiliary consumption, i.e. 2.672% is higher than the Normative auxiliary consumption provided in the Regulations, therefore, sharing of gain/loss has been carried out for both the SHR and Auxiliary Consumption as per the Regulations. In accordance with the UERC Tariff Regulations, 2018, the detailed computation of actual performance parameters, i.e. SHR and Auxiliary Energy Consumption vis-à-vis norms approved by the Commission alongwith sharing of gain/losses is shown in the Table below:

Table 3.13: Truing-up of Energy Charge for FY 2021-22

Particulars		Unit	FY 2021-22
CVPF (Weighted average GCV of fuel)		Kcal/SCM	9,406.39
Gas Consumption (SM3)		SM3	13,42,93,700
Total Fuel cost		Rs.	2,90,73,23,444
LPPF (Total Gas bill amount/ Total Gas taken during the month)		Rs./ SM3	21.65
Gross annual Generation		MU	649.63
Energy Sent out	A	MU	632.27
Station Heat Rate (Actual)		kCal/kWh	1,944.510
Station Heat Rate (Normative)		kCal/kWh	1,988.050
Auxiliary Consumption (Actual)		%'age	2.67%
Auxiliary Consumption (Normative)		%'age	2.50%
Energy Charge Rate (Normative)	B	Rs./kWh	4.693
Energy Charge Rate (Actual)	C	Rs./kWh	4.598
Energy charges to be recovered (Normative ECR)	D=A*B	Rs.	2,96,72,61,788
Energy charges to be recovered (Actual ECR)	E=A*C	Rs.	2,90,71,95,760
(Gain)/Loss	F=E-D		(6,00,66,028)
Sharing of Gain (1/3 of Gain)	G=1/3*F	Rs.	(2,00,22,009)
Energy Charge after sharing	H=D+F	Rs.	2,94,72,39,779
Energy Charge already claimed by SEPL	I	Rs.	2,90,54,21,450
Balance to be recovered or (refund)	J=H-I	Rs.	4,18,18,329

Accordingly, based on the above Table, net amount to be recovered from UPCL on account of truing-up of energy charges, works out to Rs. 4.18 Crore for FY 2021-22 which alongwith the carrying cost works out to Rs. 5.18 Crore, which shall be adjusted by the Petitioner in twelve equal instalments starting from April, 2023 in the monthly invoices to be raised on UPCL.

Here it is pertinent to mention that initially the Petitioner claimed in its Petition that it had already claimed Energy Charges from UPCL for FY 2021-22 to the tune of Rs. 290.73 Crore, which it later revised to Rs. 290.24 Crore for FY 2021-22 through a separate submission. The Petitioner informed that earlier it was raising bills on actual Auxiliary Consumption percentage of respective months, however, on objection being raised by UPCL it revised the bills based on normative Auxiliary Consumption percentage of 2.50%. In this regard, the Commission observed that UPCL in its Commercial data (Com Data) for FY 2021-22 had shown that w.r.t. to energy scheduled by it from M/s SEPL it had incurred Energy Charges of Rs. 290.54 Crore. The Commission, for the purposes of truing up of FY 2021-22 had considered the figures appearing in the (Com data) of UPCL, i.e. Rs. 290.54 Crore, as Energy Charges already claimed by M/s SEPL in FY 2021-22 from UPCL, and advises both the Petitioner and the Respondent that, in case of any discrepancy, they may approach the Commission for necessary directions after duly reconciling the accounts between themselves.

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

4.1 Capital Cost

The Commission, vide its MYT Order dated 31.03.2022, approved the Tariff for the Petitioner's plant for the fourth Control Period, i.e. FY 2022-23 to FY 2024-25. Regulation 12(3) of the UERC Tariff Regulations, 2021 stipulates that under the MYT framework, the performance of the generating company shall be subject to Annual Performance Review.

Regulation 12(3) of the UERC Tariff Regulations, 2021 specifies as under:

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

e) 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;

f) 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).

g) Revision of estimates for the current and/or ensuing financial year, if required, based on audited financial results for the previous financial year;

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

"

The Commission subsequently vide its Tariff Order dated 31.03.2022, on approval of AFC for FY 2022-23, had approved the AFC based on the approved capital cost as on COD, i.e. 20.11.2016 and further additional capitalization allowed by the Commission in the subsequent Orders. The Petitioner, in the present Petition, has proposed revision of estimates for FY 2022-23 based on the audited accounts for FY 2021-22.

The Commission, in this Order, has carried out the Truing up for FY 2021-22 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 2022-23 based on the audited accounts for that year and give effect on this account during the proceedings for determination of AFC for FY 2024-25.

Further, the Commission observed that the Petitioner has projected a substantial increase in O&M expenses for FY 2022-23 as compared to the actuals claimed for truing up of FY 2021-22, with major increase noticeable under the head Repair & Maintenance Expenses, Employee Cost, and Corporate Office Expenses allocated. The Commission asked the Petitioner to submit reasons/justification for the same, in response to which the Petitioner submitted that against the budgeted cost of Rs. 90.18 Crore in FY 2021-22, SEPL incurred Rs. 85.33 Crore, however, the overall increase in the total budgeted cost in FY 2022-23 is 4.20% as compared to FY 2021-22. The Petitioner further submitted that the budgeted expenditure estimated for FY 2022-23 is only placeholder budget and considering that the plant has not been in operations, and they are aiming to deliver savings on O&M Costs. The Petitioner further submitted that post Covid, the commodity prices have also shot up significantly for the materials/ supply due to the European conflict which has significantly impacted the supply chain across the world, and coupled with supply chain constraints, domestic inflation has also influenced the increase in prices resulting in increased cost of procurement.

In this regard, the Commission advices the Petitioner that it should strive to incur expenditure prudently and should not attempt to incur wasteful expenditure upto the normative level, and its claims would be allowed at the time of truing-up after prudence analysis of the expenditure incurred.

Further, the Petitioner has claimed additional capitalization of Rs. 0.12 Crore for FY 2022-23 under the head Plant & Machinery amounting to Rs. 0.02 Crore, Office Equipment & Others amounting to Rs. 0.01 Crore and vehicles amounting to Rs. 0.09 Crore.

The Commission has gone through the submission of the Petitioner, and regarding additional capitalization in FY 2022-23, the Commission is of the view that the same shall be allowed at the time of truing-up of FY 2022-23 based on the actual expenditure incurred and after carrying out prudence check of the same, which is in line with the views taken by the Commission in the Business Plan approved for the fourth Control Period vide Order dated 31.03.2022.

Further, the Commission directs the Petitioner to give prior information to UPCL before incurring any major capital expenditure or any major repair & maintenance in its plant and UPCL will be at liberty to physically verify the claims of the Petitioner so as to avoid any dispute in future regarding the claims of the Petitioner. The Petitioner is also required to maintain documentary evidence in the form of Photographs etc. in support of such works to be executed by it, and submit the same before the Commission at the time truing-up of respective year.

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

5.1 Annual Performance Review

The Commission, vide its MYT Order dated 31.03.2022, approved the Multi Year Tariff for the Petitioner for the fourth Control Period from FY 2022-23 to FY 2024-25. Regulation 12(3) of the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2021 stipulates that under the MYT framework, the performance of the generating company shall be subject to Annual Performance Review.

Regulation 12(3) of the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2021 specifies as under:

"The scope of the Annual Performance Review shall be a comparison of the actual 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 current and/or 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.

"

The Commission, vide its Tariff Order dated 31.03.2022, on approval of Business Plan and MYT Petition for the fourth Control Period from FY 2022-23 to FY 2024-25 approved the AFC for the fourth Control Period based on the approved capital cost as on COD, i.e. 20.11.2016, additional capitalization allowed in subsequent Orders of the Commission and the provisions of UERC Tariff Regulations, 2021. The Petitioner, in this Petition, proposed revision of estimates for FY 2023-24 based on the audited accounts for FY 2021-22 and revised estimates for FY 2022-23.

The Commission, in this Order, has carried out the Truing up for FY 2021-22 for the Petitioner's 225 MW CCPP in accordance with the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2018. Further, the Commission, under the provisions of Regulation 12(3) of the UERC Tariff Regulations, 2021, has revised the AFC for FY 2023-24. The approach adopted by the Commission in the approval of each element of ARR for FY 2023-24 is elaborated in the subsequent paragraphs.

5.2 Physical Parameters

5.2.1 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 24.10.2017, the Commission while approving the PPA for the Petitioner's plant has approved the NAPAF as follows:

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

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

5.2.2 Design Energy, Auxiliary Energy Consumption and Saleable Primary Energy

The Petitioner in its Petition has projected energy generation from its 225 MW CCPP as 1557.86 MU for FY 2023-24. The Commission in the Tariff Order dated 31.03.2022 for the fourth Control Period had approved the energy generation for FY 2023-24 as 1553.61 MU for FY 2023-24 from the Petitioner's plant. The Commission analysed the submission made by the Petitioner and observed that the Petitioner has considered 29 days in February, 2024 (being a leap year) for the purposes of calculating energy generation. In this regard, the Commission is of the view that adjustment on this account is not necessitated at this juncture and the adjustment if any shall be carried out at the time of truing up of the respective year.

Accordingly, the Commission approves saleable primary energy after deducting the normative auxiliary consumption of 2.5% as 1553.61 MU for FY 2023-24.

5.3 Financial Parameters

5.3.1 Additional Capitalisation

The Commission vide its Tariff Order dated 31.03.2022 on approval of the Business Plan and Tariff Petition of the Petitioner for the fourth Control Period from FY 2022-23 to FY 2024-25, had decided to consider the additional capitalisation at the time of truing up of the respective years based on the actual expenditure incurred as per the audited accounts in accordance with the prevailing Regulations as amended from time to time.

In the present Petition, the Petitioner has claimed Nil additional capitalisation in FY 2023-24. The Petitioner further submitted that it plans to procure the balance Initial Spares in FY 2024-25, and the actual expenditure incurred under this head may be approved during true-up in the ensuing/ relevant Financial Year subject to prudence check by the Commission.

The Commission has noted the submission made by the Petitioner, and accordingly, continuing with the methodology adopted by the Commission in the Tariff Order dated 24.10.2017 and subsequent orders of the Commission, the capitalization, if any, shall be considered based on the actual expenditure incurred in the relevant year, after prudence check and in accordance with the Regulations. Accordingly, the Commission approves nil additional capitalisation for FY 2023-24.

Accordingly, capital cost worked out as on 31.03.2022, i.e. Rs. 1216.71 Crore after considering the net additional capitalisation approved for FY 2021-22 has been considered as opening capital cost for FY 2023-24. Further, as discussed above, no additional capitalisation has been considered for FY 2022-23 which shall, however, be reviewed at the time of truing up of the respective financial year.

5.3.2 *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.

…

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

As regards the depreciation for FY 2023-24, the Commission has determined the depreciation considering the approved GFA base and asset class wise rates of depreciation specified in UERC Tariff Regulations, 2021. Accordingly, the depreciation approved by the Commission for FY 2023-24 is as shown in the Table given below:

Table 5.1: Depreciation Charges for FY 2023-24 (Rs. Crore)

Particular	Approved in MYT Order dt. 31.03.2022	Claimed	Approved in this Order
Depreciation	61.80	62.62	62.17

5.3.3 *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.

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

..."

As discussed earlier, the additional capitalisation will be approved based on the actual expenditure incurred at the time of truing up of the respective year. Accordingly, the Commission has allowed the Return on Equity based on the opening capital cost of FY 2023-24. Details of the Return on Equity claimed and approved is as follows:

Table 5.2: Return on Equity for FY 2023-24 (Rs. Crore)

Particulars	Approved in MYT Order dated 31.03.2022	Claimed	Approved in this Order
Return on Equity	52.82	55.47	53.15

5.3.4 *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. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalization of such asset.

...

(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.

(1) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
Provided that on account of additional capitalization during the year, interest on additional loan shall be calculated on pro-rata basis.

..."s

The Petitioner has considered the opening loan balance for FY 2023-24 as Rs. 1285.96 Crore. Further, the Petitioner has considered the weighted average rate of interest as 13.50% for FY 2023-24.

The interest rate of 12.37% as approved by the Commission for truing up of FY 2021-22 as discussed in previous paras of this Order has been considered for working out the interest on normative loan for FY 2023-24.

The Commission has considered the closing loan balance of FY 2021-22 as opening loan balance for FY 2022-23. The Commission has considered the depreciation for FY 2022-23 as the normative repayment for the year. The Commission has considered the closing loan balance for FY 2022-23 as the opening loan balance for FY 2023-24. As discussed in previous paras of this Order, the Commission has decided to approve the additional capitalisation on actual basis and, accordingly, the Commission has not considered any addition to loan during FY 2023-24. The Commission has considered the normative repayment equivalent to the approved depreciation for FY 2023-24. The interest rate of 12.37%, as discussed above, has been considered to compute the interest on the average loan balance for FY 2023-24 which shall, however, be reviewed at the time of truing up of respective year.

Accordingly, based on above discussion, the interest on loan approved by the Commission for the FY 2023-24 is as shown in the Table given below:

Table 5.3: Interest on Loan for FY 2023-24 (Rs. Crore)

Particular	Approved in MYT Order dt. 31.03.2022	Claimed	Approved in this Order
Interest on Loan	56.31	169.38	56.84

5.3.5 *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 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, the normative O&M expenses approved for FY 2023-24 in the Tariff Order dated 31.03.2022 for fourth Control Period shall continue to be applicable without any change. Based on the above, the normative O&M expenses approved by the Commission for FY 2023-24 are as follows:

Table 5.4: O&M Expenses for FY 2023-24 (Rs. Crore)

Particulars	Approved in Tariff Order dt. 31.03.2022	Claimed	Approved in this Order
O&M Expenses	97.93	97.92	97.93

5.3.6 *Interest on Working Capital*

The Petitioner submitted that it does not charge any interest on working capital in accordance with the Order of the Commission dated 18.04.2020 subject to receipt of funds within the specified time frame as provided in the said Order, and any delay in receipt of funds is being addressed separately on the quantum of Late Payment Surcharge in accordance with the Commission's Order dated 23.03.2021.

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

"…

a) 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.*

…"

As discussed in the Tariff Order dated 24.10.2017, the Commission vide its Order dated 17.04.2017 allowed the Petitioner to forego interest on working capital in lieu of non-chargeability of rebate by UPCL while making payment of generation bills raised by the Petitioner. Further, on the issue of delayed payment of generation bills by UPCL, the Petitioner has filed a separate Petition in the matter on which necessary directions have been given vide Commission's Order dated 23.03.2021.

Accordingly, in line with the decision taken in the Tariff Order dated 24.10.2017 and aforesaid discussions, the Commission has not considered any interest on working capital while approving AFC for FY 2023-24 for the Petitioner's plant.

5.3.7 *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 not proposed any non-tariff income in FY 2023-24. In the absence of any yardstick for estimating the non-tariff income of the Petitioner, the Commission provisionally accepts the same while approving the AFC for FY 2023-24 for the Petitioner's project. However, the same shall be reviewed based on the actual audited accounts during true up of respective years.

5.3.8 Annual Fixed Charges, 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) for FY 2023-24 attributable to its beneficiary.

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

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

(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 actually 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 {Actual energy supplied (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."

The summary of Annual Fixed Charge approved by the Commission for FY 2023-24 of the fourth Control Period is given in the Table below:

Table 5.5: Approved AFC for FY 2023-24 (Rs. Crore)

Depreciation	Interest on Loan	Interest on working Capital	O&M Expenses	RoE	Gross Annual Fixed Cost	Non-Tariff Income	Truing up of AFC for FY 2021-22	Revision in truing up of FY 2020-21	Net AFC
62.17	56.84	0.00	97.93	53.15	270.09	0.00	(-) 0.97	0.44	269.56

The capacity charges and energy charges shall be recovered by the Petitioner from the Respondent corresponding to the contracted capacity in accordance with the provisions of the UERC Tariff Regulations, 2021.

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

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

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

(M.K. Jain)
Member (Technical)

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