

Order

On

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

&

ARR for FY 2024-25

For

M/s Sravanthi Energy Pvt Ltd.

March 28, 2024

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 2023

In the Matter of:

Petition filed by M/s Sravanthi Energy Pvt. Ltd. for True up of FY 2022-23, Annual Performance Review of FY 2023-24 and Annual Revenue Requirement for FY 2024-25.

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.L. Prasad

Member (Technical)

Date of Order: March 28, 2024

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

In accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of 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 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 2023 hereinafter referred to as the “Petition”) giving details of its revised projections of Annual Fixed Charges (AFC) for FY 2024-25 and Annual Performance Review of FY 2023-24. Through the aforesaid Petition, the Petitioner also requested for truing up of FY 2022-23 based on the audited accounts in accordance with the UERC Tariff Regulations, 2021.

The Petition filed by the Petitioner had certain infirmities/deficiencies. The Commission, accordingly, vide its letter no. UERC/6/TF-703/2023-24/2023/917 dated 05.12.2023 directed the Petitioner to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. M/s SEPL vide its submission dated 13.12.2023 removed the critical deficiencies and further vide its letter dated 26.12.2023 submitted additional information required for analysis of the Petition. Based on the submission dated 13.12.2023 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 2022-23, APR for FY 2023-24 and revised AFC for FY 2024-25 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 2022-23.
- Chapter 4 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2023-24.
- Chapter 5 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on ARR for FY 2024-25.

1. Background and Procedural History

M/s 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.

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 2023-24 on 30.11.2023. Through the above Petition, M/s SEPL sought true-up for FY 2022-23, APR for FY 2023-24 and determination of AFC for FY 2024-25 based on the audited accounts for FY 2022-23.

The Commission vide its letter no. UERC/6/TF-703/2023-24/2023/917 dated 05.12.2023 asked the Petitioner to submit certain relevant information in accordance with the Tariff Regulations, 2021 for the true-up of FY 2022-23. 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 13.12.2023 removed the critical deficiencies. Based on the submission dated 13.12.2023 made by M/s SEPL, the Commission provisionally admitted the Petition on 28.12.2023.

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-703/2023-24/2023/1000 dated 28.12.2023.

UPCL vide its letter no. 662/UPCL/Comm/SE-II/B-II dated 09.02.2024 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/2024 dated 23.02.2024 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 2024-25, Annual Performance Review for FY 2023-24 alongwith trueing up of FY 2022-23. 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 Additional Capitalisation

2.1.1 UPCL's Comment

UPCL submitted that, the Petitioner in its Petition while seeking True-up for FY 2022-23 has requested to allow additional capitalization of Rs 0.19 Crore and projected the additional capitalization of Rs 0.57 Crore for FY 2023-24 & Rs. 20 Crore for FY 2024-25 on account of additional capitalization including the planning for procuring the balance initial spares in FY 2024-25. UPCL submitted that the generator has not given any substantial evidence to show that the cost incurred on the same will attribute to only 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.

2.1.2 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.

The Petitioner further submitted that in terms of materiality of the expenditure, it did not warrant a prior approval as the highest value of the item spent towards capex has been Rs. 5.5 Lakhs for tractor purchase and the justification for the same has been comprehensively provided to the Commission for prudence analysis.

2.1.3 Commission's view

The Commission while carrying out the truing up for FY 2022-23 as discussed in subsequent Chapters of this Order has carried out detailed analysis of additional capitalisation claimed by the Petitioner and allowed only those expenditure which were necessary for smooth running of the plant in accordance with the MYT Regulations. Moreover, with regard to capital expenditure for FY 2023-24 and FY 2024-25, the same shall be considered by the Commission at the time of truing up of the respective year in line with the past practices.

2.2 Operation & Maintenance Expenses

2.2.1 UPCL's Comment

UPCL submitted that the Petitioner in its Petition while seeking true-up for FY 2022-23 has submitted a saving of Rs. 12.98 Crore in the O&M expenses against the approved O&M expenses of Rs. 93.97 Crore and has requested to be allowed to retain Rs. 8.65 Crore as O&M expenses on account of 2/3rd of the saving as per the Regulations. UPCL further submitted that it is also to mention that the approved O&M expenses of Rs. 93.97 Crore is only threshold limit which cannot be considered as allowed, and, hence, cannot be considered as a base. UPCL further submitted that the plant remained under shutdown in this fiscal year, and, therefore, the need for O&M works was substantially reduced, and even otherwise the same may be allowed only after prudence check. Moreover, the Petitioner is required to demonstrate and portray the testing, inspection and details of O&M works carried out by it in FY 2022-23 alongwith the break-up and justification on the cost incurred

on O&M head.

UPCL, with regard to O&M expenses for FY 2023-24 of Rs 97.93 Crore, submitted that the plant was scheduled for operation for the period April, 2023 to June, 2023, and subsequently from December, 2023 as per the proposal of the Petitioner with certain spill over periods considering the viable rate of gas at that time. UPCL submitted that the Commission from time to time has also directed UPCL to do optimal power purchase by replacing expensive gas-based power, and, hence, the optimal power management by procuring cost effective power from short-term sources cannot be termed as back down especially when the Petitioner is already offering the spillover period in its own offer. UPCL further submitted that the Petitioner has not informed about the O&M works carried out or to be carried out by them till date which was the directions of the Commission vide the tariff Order of the Petitioner dated 18.04.2020 & 26.04.2021. UPCL submitted that the Petitioner has not informed UPCL about the maintenance works falling under O&M head which is non-compliance of the directions of the Commission and considering the same O&M expenses should be restricted to bare minimum and optimum. UPCL further submitted that the Petitioner is required to demonstrate and portray the testing, inspection and details of O&M works carried out by it in FY 2023-24 alongwith the break-up and justification on the costs incurred on O&M head.

Further, UPCL w.r.t. O&M expenses of Rs. 102.06 Crore proposed by the Petitioner for FY 2024-25 submitted that the same is exorbitant and hypothetical, whereby O&M expenses seems to be on higher side in reference to the normative O&M expenses mentioned in the MYT Regulation 2021. UPCL submitted that it is apparent that O&M expenses proposed/portrayed and incurred has a variation and this variation is being passed on as gain as per MYT Regulations to the Petitioner from the initial tariffs when situation of back down of plant was not there, and, hence, it is pertinent to mention that proper planning of O&M works at the end of Petitioner is severely lacking and the Petitioner is merely trying to justify the deviation/difference by stating the reason of back down of the plant. Moreover, the O&M expenses is one of the major portion of the AFC of the Petitioner and UPCL has to bear the hefty burden of AFC even on non-operation of the plant as Gas rates seems less viable in current scenario and other comparatively cheaper options of power are available. UPCL submitted that the Commission may direct the Petitioner to give prior information to

UPCL before proposing as well as incurring major O&M works, so that the licensee will be at liberty to physically verify the claims of the Petitioner in order to avoid any dispute in future regarding the claims of the Petitioner, and in case of non-compliance of the same, the Commission is requested to reject the same. UPCL submitted that in the present Petition, the Petitioner has neither informed the basis of O&M expense proposed for FY 2024-25, i.e. whether the same is considered on continuous operation basis of plant or considering the back down of the plant, nor the Petitioner has submitted the details of proposed O&M works which are amounting to Rs. 102.06 Crore.

2.2.2 *Petitioner's reply*

In response to the same the Petitioner submitted that the expenditure budgeted under Operations and Maintenance ("O&M") expenses for a particular financial year is the base value and is precisely to ensure that the plant is maintained as per the OEM standards and delivers on the efficiencies expected from it. If this is not the case, then there would be no base value against which a savings or cost overrun could ever be assessed to give effect to the provisions of 2/3rd being borne by the Generator and 1/3rd being borne by the Distribution Company. The Petitioner submitted that the costs incurred under the head are routine in nature and the financial accounts and explanations are always open for prudence checks by the Commission on any aspect of the expenditure incurred for the relevant financial year. The Petitioner submitted that SEPL always makes best endeavour to reduce the costs wherever possible to ensure that the benefit is passed on to the State and the Consumers through lower tariffs.

The Petitioner submitted that the expenditure towards O&M is incurred for the reasons as summarized 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 -

- a. 6FA+e Gas Turbines & auxiliaries
- b. Steam Turbine & auxiliaries
- c. HRSG & auxiliaries

- d. Air-cooled condenser & auxiliaries
- e. Generator Transformer, Unit auxiliary transformers, distribution transformers
- f. Water system comprising of a reservoir, water treatment plant, fire water system, ETP etc.
- g. HT & LT switchgear, DC system, Inverters etc.
- h. 220 KV switchyard
- i. Network of piping (PCP & LP)
- j. Network of cables
- k. Distributed Control system, PLC
- l. 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). 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 deliver their services of monitoring, carrying out preservation, and preventive & corrective maintenance irrespective of whether the Plant is standstill or generating.

All statutory compliances 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 operation after startup. The Petitioner submitted that while the O&M costs have to always deal with the cyclical costs when it comes to Major Overhauls ("HGPI") which takes place every 24,000 hrs of operations, the other costs are largely predictable and subject to inflation year on year.

2.2.3 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 2024-25 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 2024-25 based on the actual O&M expenses incurred after prudence check.

2.3 Interest on Working Capital

2.3.1 UPCL's Comment

UPCL submitted that the Petitioner has submitted to forego the Interest on Working Capital whereas it is to submit that UPCL is undergoing a serious financial crunch. UPCL submitted that by way of accepting the Petitioner's proposal of foregoing the Interest on Working Capital, different payment terms for the Gas Based Generator would imply as if a distinction has been made between these Gas Based Generators and rest of the generators which are being billed as per the terms & conditions of the PPA which seems to be against the mandate of the Electricity Act, 2003. UPCL further submitted that considering the Petitioner's request of foregoing of IoWC and, accordingly, prompt payment terms to gas generators will lead to hardships to UPCL that may arise on account of LPS payable in case of default of payment not made within 7 days as per the Commission's order would further deteriorate UPCL's financial health and shall in turn affect services to the consumers of the State as well as loss incurred by UPCL in the form of levy of LPS shall also be borne by the electricity consumers of the State. UPCL submitted that the Commission may allow the Petitioner to claim the part of Interest on Working Capital in this tariff Petition.

2.3.2 Petitioner's reply

The Petitioner submitted that in relation to Interest on Working Capital, both the Petitioner and UPCL have mutually agreed that effective 1st September 2023, UPCL shall make payments towards gas bill within 15 days and AFC bill within 30 days post which LPS shall be applicable. The Petitioner submitted that considering this mutual agreement recorded in the Minutes of the Meeting dated 21.02.2024, and which has been duly shared with the Commission it is understood that this matter has been effectively and amicably addressed by both UPCL and SEPL.

2.3.3 Commission's view.

The Commission noted the submission made by the Petitioner and UPCL in this regard, and is of the view that since the mutual agreement between the Petitioner and UPCL has already settled the issue, which is subject to approval by the Commission through separate proceedings, the same does not require any amendment in existing methodology of

not charging IWC by the Petitioner is lieu of payment within the agreed time period.

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 fulfil 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 2022-23

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:

- 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, 2021 for FY 2022-23, and has, accordingly, requested the Commission to carry out the truing up for FY 2022-23 alongwith the sharing of gains and losses.

3.1.1 *Impact of Sharing of Gains & Losses on account of Controllable Factors for FY 2022-23*

Regulation 14 of the UERC Tariff Regulations, 2021 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, 2021 requires a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenues subject to prudence check including 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, 2021 these are controllable expenses. Similarly, in accordance with the UERC Tariff Regulations, 2021, the variation in working capital requirements is also a controllable factor. However, as discussed in 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, 31.03.2022 and 30.03.2023, interest on working capital was not allowed by the Commission for the purpose of truing up of FY 2018-19, 2019-20, FY 2020-21 and FY 2021-22 respectively for the same reason. Further, as discussed in the preceding paras of this Order, since both M/s SEPL and UPCL have mutually agreed on payments terms, which is subject to approval by the Commission, therefore, no IWC is being considered for FY 2022-23 and future period.

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.

The Petitioner through the current Petition, also requested the Commission to pass necessary direction to UPCL for release of LPS for the period 2018-19 to FY 2023-24 (upto August, 2023) amounting to Rs. 68.51 Crore as per their submission. Subsequently, the Petitioner filed a separate Petition before the Commission on 28.02.2024 for resolution of the matter pertaining to "compensation for delayed payment of invoice". In this regard, the Commission is of the view that matter related to LPS is already under process through a separate proceeding, and accordingly, the Commission is not delving on the same through this Order. The Commission shall take a view on

the same separately while delivering its judgement on the Petition dated 28.02.2024 filed by the Petitioner.

Accordingly, the Commission has worked out the trued up (surplus)/gap of the Petitioner after sharing of gains and losses as per the provisions of UERC Tariff Regulations, 2021.

3.1.2 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 31.03.2022 approved the NAPAF of 85% for the fourth 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 31.03.2022 for the fourth Control Period shall continue to be applicable without any change for FY 2022-23.

3.1.2.2 Energy Generation and Saleable Primary Energy

The Commission in its MYT Order dated 31.03.2022 on approval of the Business Plan and Multi Year Tariff for the fourth Control Period from FY 2022-23 to FY 2024-25 had approved the Design Energy based on the contracted capacity of 214 MW. Further, in accordance with Regulation 47(4)(i) of the Tariff Regulations, 2021, 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 2022-23.

M/s SEPL in its Petition has submitted that the Plant Availability Factor, i.e. the period for which the plant was technically available for generation of power (irrespective of the actual generation) was 85% for FY 2022-23, however, during FY 2022-23, the actual Gross Generation was Nil, which 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 during the period April, 2022 till March, 2023. The Petitioner further submitted that, similarly, for Year to date (April-Sept 2023), the actual Gross Generation of power has been 279.47 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 2022-23. M/s SEPL has also not sought any deviation in the approved design energy for FY 2022-23. Accordingly, the Commission decides to consider the design energy and saleable primary energy for FY 2022-23 as approved in the Tariff Order dated 31.03.2022 for the Petitioner's plant.

3.1.3 Financial Parameters

3.1.3.1 Capital Cost

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

(2) The Capital cost of an existing project shall include the following:

- a) *The capital cost admitted by the Commission prior to 01.04.2022 duly trued up as on 01.04.2022;*
- b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 22; and*
- c) *Expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 23.*

The Commission vide its Tariff Order dated 30.03.2023 had approved the opening GFA and net additional capitalisation amounting to Rs. 1216.03 Crore and Rs. 0.68 Crore respectively for FY 2021-22 for the contracted capacity of 214 MW. Accordingly, the Commission has considered the approved closing GFA, i.e. Rs. 1216.71 Crore for FY 2021-22 as opening GFA for the purpose of truing up for FY 2022-23.

3.1.3.2 Additional Capitalisation and De-capitalisation

Regulation 22 of UERC Tariff Regulations, 2021 specifies as under:

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

- a) Undischarged liabilities;
- b) Works deferred for execution;
- c) Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 21(11);
- d) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- e) On account of change in law.

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

(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.

(4) Any addition/modification to the existing assets exceeding Rs. 2.50 Crore in case of distribution licensees and Rs. 5 Crore in case of generating companies/transmission licensees shall be taken up only

after prior approval of the Commission. The investment approval applications covered under this sub-regulation are excluded from the application of proviso to Sub-regulation (2) of Regulation 10 of UERC (Conduct of Business) Regulations, 2014 in so far as the requirement of submission of documentary evidence with respect to the approval of BoD is concerned."

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

"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2022 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the matter specified in Regulation 22 and 23 of these Regulations."

The Petitioner has claimed an additional capitalisation of Rs. 0.19 Crore for FY 2022-23 in accordance with Regulation 22 of UERC Tariff Regulations, 2021 as detailed in the Table below:

Table 3.1: Additional Capitalisation claimed for FY 2022-23 (Rs. Crore)

S.No.	Particulars	Amount
1.	Vehicles	0.09
2.	Plant & Machinery	0.07
3.	Furniture & Fixtures, Office Equipments & Others	0.01
4.	Computers	0.01
Total		0.19

The Commission analysed the claims of the Petitioner and observed that the same are in accordance with the audited financial statement of FY 2022-23 as submitted by the Petitioner. The Petitioner submitted that all the capital expenditures have been incurred to ensure efficient and seamless running of the plant operations and/or maintenance.

The Commission observed that the expenditure under the head vehicle comprise of purchase of 2 nos. two wheelers and one Tractor (including tractor trolley and water tanker). The Petitioner, w.r.t. justification sought by the Commission for the procurement of Tractor (including tractor trolley and water tanker) for the plant, submitted that the Tractor and trolley is required for movement of material, garden waste, civil works and water tanker is required for watering green belt. The Petitioner submitted that the green belt is being maintained to meet the requirements of MOEF and CTO, and earlier they were hiring these assets from outside agencies which were not well maintained from a safety perspective. The Petitioner further submitted that these assets were available on outsource basis, only when the tractor and water tanker were not deployed in other agricultural usage, and due to the frequent non availability, plant was subjected to safety incidents due to pile up of garden and plant waste. Further, due to issues related to continuous water

arrangement for plantation the growth of plants/ trees was not appropriate, hence, to meet the above continuous requirement in a safe way the Tractor and Tanker were procured.

The Commission analysed the submission made by the Petitioner and is of the view that vehicles procured will be required for the plant, however, the capitalization of Rs. 0.09 Crore claimed by the Petitioner under the head Vehicles cannot be solely attributed to Phase-1 of the Petitioner's project as the same would serve the requirements of the entire plant. The Commission, accordingly, has allocated only 50% of the capitalization under the head Vehicles, amounting to Rs. 0.05 Crore, to the Phase-1 of the Petitioner's plant for the purposes of truing of FY 2022-23. Hence, the Commission, accordingly, approves the net additional capitalisation of Rs. 0.14 Crore for FY 2022-23 as against the Petitioner's claim of Rs. 0.19 Crore in accordance with the Regulations.

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

Table 3.2: Trued up Capital Cost for FY 2022-23 (Rs. Crore)

Particulars	Opening GFA as on 01.04.2022	Additional Capitalisation approved for FY 2022-23	Decapitalizati on approved for FY 2022-23	Closing GFA as on 31.03.2023
Freehold Land	4.08	-	-	4.08
Civil Works	101.52	-	-	101.52
Plant & Machinery	1,107.74	0.07	-	1,107.80
Vehicles	1.25	0.05	-	1.29
Furniture & Fixtures, Office equipments etc.	1.66	0.01	-	1.68
Computers	0.47	0.01	-	0.48
Total	1,216.71	0.14	-	1,216.85

3.1.3.3 Capital Structure

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

"...

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2022 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in Regulations 22 and 23 of these Regulations.

(6) In case of Generating Company, Transmission Licensee, Distribution Licensee, or SLDC where investments have been made prior to 1.4.2022, Debt: Equity Ratio shall be as approved by the Commission in the previous Orders."

The Commission has considered the Debt-Equity Ratio of 71.82:28.18 for capital cost as on

01.04.2022 which was approved in the Tariff Order dated 30.03.2023 while approving the truing up for FY 2021-22. Further, with regard to the additional capitalisation claimed for FY 2022-23, the Petitioner submitted that the expenses for the procurement of assets were done out of the revenues of the Company. Accordingly, the Commission has considered the financing of additional capitalisation incurred for FY 2022-23 in the Debt-Equity ratio of 70:30, as per UERC Tariff Regulations, 2021.

Accordingly, in view of the above, the Capital structure for the capital cost as on 01.04.2022 and additional capitalisation & decapitalisation for FY 2022-23 is as follows:

Table 3.3: Detail of Financing of Capital Cost Allowed for FY 2022-23

Particular	Opening as on 01.04.2022		Addition during the year		Decapitalisation during the year		Closing as on 31.03.2023	
	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%	(Rs. Crore)	%
Debt	873.78	71.82%	0.10	70.00%	0.00	0.00	873.88	71.81%
Equity	342.93	28.18%	0.04	30.00%	0.00	0.00	342.97	28.19%
Total	1216.71	100.00	0.14	100.00	0.00	0.00	1216.85	100.00

3.1.3.4 Depreciation

Regulation 28 of UERC Tariff Regulations 2021 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. 62.14 Crore for FY 2022-23 based on the actual expenditure capitalised in its books of account, and also on additional capitalisation from COD till FY 2022-23.

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, 2021 on the GFA base of the Petitioner. Accordingly, the Commission has worked out the depreciation of Rs. 62.18 Crore, by applying the weighted average rate of depreciation of 5.11%, against the admissible average GFA of Rs. 1216.78 Crore.

Based on the above discussed approach, the summary of depreciation as approved in Tariff Order dated 31.03.2022, claimed by the Petitioner and as approved now by the Commission for FY 2022-23 after truing up is shown in the Table given below:

Table 3.4: Depreciation for FY 2022-23 (Rs. Crore)

Particulars	Approved in Tariff Order dated 31.03.2022 for FY 2022-23	Claimed	Approved after truing up
Depreciation	61.80	62.14	62.18

3.1.3.5 Return on Equity (RoE)

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

“26. Return on Equity

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

Provided that, Return on Equity shall be allowed on amount 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 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.

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

...”

The Petitioner has claimed the Return on Equity amounting to Rs. 52.82 Crore for FY 2022-23 in line with the RoE approved by the Commission in the Order dated 31.03.2022. The Commission has allowed the Return on Equity on the opening equity base at the rate of 15.50%, after excluding additional capitalization after cut-off date beyond the original scope of work, excluding additional capitalization due to change in law, in accordance with first proviso to sub-regulation (2) of Regulation 26 of the MYT Regulations, 2021.

The Petitioner’s plant was commissioned on 20.11.2016, therefore, in accordance with the sub-regulation (19) of Regulation 3 of the MYT Regulations, 2021 the cut-off date for the Petitioner’s plant works out to 31.03.2019. The Commission had approved Equity additions amounting to Rs.

15.33 Crore during the true of FY 2019-20 to FY 2021-22, i.e. beyond the cut-off date. Out of the said addition to the Equity, an amount of Rs. 5.45 Crore pertains to procurement of Initial Spares and Rs. 0.95 Crore pertains to procurement of GT Inlet Filter for improvement of performance. Since, the procurement of Initial Spares is within the original scope of work and the procurement of GT Inlet Filter is on account of suggestion given by the Commission for performance improvement vide its Order dated 05.04.2019, therefore, the same have not been excluded from the opening equity base for the purposes of allowing RoE for FY 2022-23.

In view of the above, the Commission has worked out the addition to Equity post cut-off date till the end of FY 2021-22 amounting to Rs. 8.92 Crore (Rs. 15.33 Crore – Rs. 5.45 Crore – Rs. 0.95 Crore). Further, the Commission has approved Equity addition of Rs. 0.04 Crore for FY 2022-23 which pertains to capitalization beyond the original scope of work. As discussed in subsequent paras of this Order, the Commission has approved rate of interest on loan capital as 12.11% for FY 2022-23. Accordingly, RoE has been allowed on the addition post cut-off date, as discussed above, at the rate of 12.13% in accordance with the first proviso to sub-regulation (2) of Regulation 26 of the MYT Regulations, 2021. Further, the RoE on Equity addition in FY 2022-23 has been worked out on pro-rata basis in accordance with second proviso to sub-regulation (1) of Regulation 26 of the MYT Regulations, 2021.

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

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

Particular	Opening Equity as on 01.04.2022	Addition in Equity during the Year	Deduction in Equity during the Year	Closing Equity as on 31.03.2023	Approved RoE
Equity Capital (pertaining to works within the original scope of work) RoE @ 15.50%	334.01	0.00	0.00	334.01	51.77
Equity Capital (beyond the original scope of work) RoE @ 12.11%	8.92	0.04	0.00	8.96	1.08
Total	342.93	0.04	0.00	342.97	52.85

3.1.3.6 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 01.04.2022 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.03.2022 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.

Provided that on account of additional capitalization during the year, interest on additional loan shall be calculated on pro-rata basis.

(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. 182.43 Crore for FY 2022-23

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 31.03.2022 as opening normative loan for FY 2022-23 and repayment has been considered equal to the admissible depreciation, i.e. Rs. 62.18 Crore. Also, as discussed hereto above, the Commission has approved additional capitalisation of Rs. 0.14 Crore for FY 2022-23. Further, as discussed in the preceding paras of this Order, the additional capitalization of Rs. 0.14 Crore in FY 2022-23 has been funded through the debt-equity ratio of 70:30, i.e. debt of Rs. 0.10 Crore and equity of Rs. 0.04 Crore. Accordingly, net addition to normative loan has been considered as Rs. 0.10 Crore as per UERC Tariff Regulations, 2021.

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 13.52% for FY 2022-23.

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 2022-23 at the rate of 12.11%. 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 2022-23 has been trued up at the rate of 12.11%. Further, the interest on loan capital on additional capitalisation during the FY 2022-23 has been worked out on pro-rata basis in accordance with the proviso to sub-regulation (6) of Regulation 27 of the MYT Regulations, 2021.

The Commission, accordingly, approves the interest on loan capital as Rs. 63.20 Crore for FY 2022-23.

Furthermore, the Petitioner has claimed Bank Charges amounting to Rs. 0.0012 Crore for FY 2022-23 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. 0.0012 crore as finance charges for FY 2022-23.

Based on the above considerations and UERC Tariff Regulations, 2021, the Commission has approved the interest expenses for FY 2022-23 for Phase 1 of the Petitioner's project as shown in the Table below:

Table 3.6: Interest on Loan as approved for FY 2022-23 (Rs. Crore)

Particulars	Approved in Tariff Order dated 31.03.2022 for FY 2022-23	Claimed by Petitioner	Approved after truing up for FY 2022-23
FY 2022-23	63.95	182.43	63.20
Add: Financing Charges for FY 2022-23	-	-	0.0012
Total Interest & Finance Charges	63.95	182.43	63.20

3.1.3.7 Operation & Maintenance (O&M) Expenses

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

Regarding the Operation and Maintenance 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

...”

Based on the applicable norms of O&M expenses for combined cycle generating station, the Commission had approved normative O&M expenses of Rs. 93.97 Crore for FY 2022-23 for 214 MW capacity of the Petitioner's plant.

The Petitioner submitted that it had spent an amount of Rs. 80.99 Crore towards O&M expenses in FY 2022-23 as per the audited accounts, and, accordingly, claimed an amount of Rs.

89.64 Crore (after sharing of gain/loss) for the purpose of true up of O&M expenses in FY 2022-23. Further, the Petitioner submitted the separate details of employee, R&M and A&G expenses.

The Commission analysed the submissions made by the Petitioner and sought information/justification for major variations in O&M expenses under various heads vis-à-vis FY 2021-22.

In response to the same the Petitioner submitted that w.r.t. variation in Legal & Professional charges, the expenses in relation to Arbitration Proceedings moved by GAIL to Enforcement of the Award in the High Court and APTEL moved to Supreme Court. The filings at the respective institutions, i.e. High Court and Supreme Court alongwith representations at the Court required presence of the lawyers thereby resulting in increased costs.

The Petitioner further submitted that the primary reason for increase in salaries was the annual increment which was provided to the employees of the Petitioner Company to cover the cost of living which has only increased year on year. The Petitioner submitted that the increase was made to the tune of 20% on the last drawn compensation because the earliest increments were provided only in 2019, and the raise was given after 2.5 years in April 2022 to ensure that SEPL retains the employees for effective and smooth functioning of the plant.

The Commission analysed the submissions made by the Petitioner and observed that an amount of Rs. 9.44 Crore paid by the Petitioner Company to M/s ACRE towards management fee for rendering professional services to assist M/s SEPL in refinancing its debt, was included in the Legal & Professional charges is an. In this regard, the Commission is of the view that the entire payment to M/s ACRE towards management fees cannot be levied on the Phase-I of the project as the same relates to refinancing services for debt of the entire Company. Accordingly, the Commission allows only 50% of the aforesaid expenditure amounting to Rs. 4.72 Crore in Phase-I of the Petitioner's project for the purposes of truing up of FY 2022-23. Similarly, certain expenditure of common nature pertaining to both Phase-I and Phase-II of the Petitioner's project have been proportionately reduced from the claim for O&M expenses of Phase-I of the project, amounting to a total of Rs. 0.14 Crore, which comprise of Rent Office (15%), Office Maintenance (15%), Electricity Charges (15%) and Nursery related expenses (50%), based on the subsequent submissions made by the Petitioner and further analysis done by the Commission.

The Commission further observed that the expense under the head Staff Welfare includes certain gift related expenses on festive occasion. The Petitioner through its subsequent submissions

requested to withdraw the same from its claim of O&M expenses for FY 2022-23, and accordingly, the Commission has not considered an amount of Rs. 0.15 Crore towards the same while carrying out true-up of FY 2022-23. Further, the Petitioner's claim for salary expense was before apportionment of the same towards the Phase-II of the project, the details of which was subsequently provided by the Petitioner with a request to withdraw their claim to the same extent from the O&M expenses of FY 2022-23. The Commission has, accordingly, disallowed Rs. 2.00 Crore from the amounts claimed by the Petitioner under the head salaries for the purposes of truing up of FY 2022-23. Further, as discussed above, bank charges & BG/LC commission charges of Rs. 0.0012 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

The Petitioner further through its submission requested the Commission to allow it an amount of Rs. 0.13 Crore towards finance expense on lease obligation which it omitted to claim in its Petition. The Commission analysed the submission made by the Petitioner and is of the view that the same can be allowed for the purposes of truing up of FY 2022-23.

Further, on analysis of the claims made by the Petitioner for O&M expenses for FY 2022-23, the Commission observed that out of the total O&M expenses claimed, almost one third of expenses pertains to administrative & general expenses, that too majorly in the head of Legal and professional charges.

In this regard, the Commission would like to state that, this being the last year of the fourth Control Period, the Commission may design separate norms for determining the O&M expenses of gas-based utilities in the upcoming control period commencing from FY 2025-26. While designing such norms, the Commission takes into account that, whether the operations of the utility has stabilized or not, reasonableness/requirement of the O&M expenses for smooth running of plant operations, technology of machinery used in the plant, staffing pattern of the utility, past year actuals duly considering the outliers/unusual variations etc. The Petitioner, therefore, is required to ensure that the expenses incurred under the head Operation and Maintenance expenses are incurred at reasonable levels considering the fact that the operations of the plant must have stabilized by now, i.e. almost during the 7 years period post commissioning of the plant in FY 2016-17.

In light of the above discussion, the O&M Expenses disallowed by the Commission during

the FY 2022-23 is summarized in the table below:

Table 3.7: O&M Expenses for FY 2022-23 trued-up by the Commission (Rs. Crore)

S.No.	Particulars	Amount
1.	Legal & Professional charges	4.72
2.	Salary apportioned to Phase-II	2.00
3.	Gift related expenses	0.15
4.	Rent Office	0.02
5.	Office Maintenance	0.04
6.	Electricity Charges	0.0046
7.	Nursery related expenses	0.08
8.	Bank Charges (Considered separately)	0.0012
9.	Total disallowed	7.01
10.	Add: Finance Expense on lease obligation not claimed earlier	0.13
11.	Net expenses disallowed	6.88

As per MYT Regulations, 2021, the variation in normative and actual O&M expenses shall be considered as part of gain/loss on account of controllable factors.

Regulation 14 of MYT Regulations, 2021 specifies as follows:

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

- (1) *The approved aggregate gain and loss to the Applicant on account of controllable factors shall be dealt with in the following manner:*
 - a) *1/3rd 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 2022-23 after sharing of gain/loss in accordance with the Regulations as shown in the Table below:

Table 3.8: O&M Expenses Approved After Sharing of Gains and Losses for FY 2022-23 (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 2022-23	80.99	74.11	93.97	19.86	13.24	87.35

3.1.3.8 Interest on Working Capital

Regulation 33 (1) 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, as discussed in preceding paras of this Order the Commission has not considered IWC for the FY 2022-23 for the Phase-I of the Petitioner's plant, and the Petitioner has also not claimed any Interest on Working Capital in its current Petition.

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 2022-23.

3.1.3.9 Non Tariff Income

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

"46. Non Tariff Income

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

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

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

- a) Income from rent of land or buildings;*
- b) Income from sale of scrap;*
- c) Income from statutory investments;*
- d) Interest on delayed or deferred payment on bills;*
- e) Interest on advances to suppliers/contractors;*
- f) Rental from staff quarters;*
- g) Rental from contractors;*
- h) Income from hire charges from contractors and others;*
- i) Income from advertisements, etc.;*
- j) Any other non- tariff income.*

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

The Petitioner has claimed an amount of Rs. 0.14 Crore as NTI for FY 2022-23. 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 30.03.2023, 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 2022-23 is lower than the average RoE available with it till the end of FY 2022-23, and, therefore, the interest on average investment as discussed below has been reduced from the NTI for the purposes of truing up of FY 2022-23.

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. The

Petitioner through a subsequent submission also submitted that an original FD got closed in April 2020, and amount was credited to the current account with the Principal amount only, and separate FDs were issued for interest amount, the accounting for which was omitted earlier. The Petitioner submitted that those FD's were closed in November 2022, and, accordingly, the maturity of these FDs to the tune of Rs 0.046 Crore has been booked as Interest Income in FY 2022-23. The Commission, based on the details provided by the Petitioner has worked out the interest on those FDs pertaining to FY 2022-23, and has considered the balance interest of Rs. 0.0457 Crore as part of NTI for the FY 2022-23. Accordingly, the Commission worked out the Average Investment made by the Petitioner in FY 2022-23 and the weighted average rate of interest in the respective year, as shown in the Table below:

Table 3.9: Summary of Investment made by the Petitioner (Rs. Crore)

Particulars	FY 2022-23
Average Investment as per FD details submitted by the Petitioner	63.99
Corresponding interest on above FDs as per audited accounts	2.00
Average Rate of Interest	3.13%

Accordingly, in view of the above discussions, the NTI for FY 2022-23 as approved by the Commission is as follows:

Table 3.10: Non-Tariff Income for FY 2022-23

Particulars	Amount (Rs. Crore)
Interest Income Bank Deposit	2.05
Interest Income Security Deposit	0.04
Interest income from ICD's & Income tax refund	0.56
Gain on redemption of OFCD	0.13
Scrap Sale	0.12
Income on reversal - Salaries W/off	0.03
Insurance received	0.0037
Less: Interest on funds invested out of RoE	(2.00)
Net Non-Tariff Income for FY 2022-23	0.92

In view of above, the Commission approves Rs. 0.92 Crore as NTI for FY 2022-23 against Rs. 0.14 Crore claimed by the Petitioner.

3.1.3.10 Annual Fixed Charges (AFC) for FY 2022-23

Based on the above analysis, the Commission has worked out the approved figures of Net AFC for FY 2022-23 after truing up. The summary of Net AFC for FY 2022-23 is as shown in the Table below:

Table 3.11: Annual Fixed Charges for FY 2022-23 (Rs. Crore)

Particulars	Approved in T.O. dated 31.03.2022	Claimed by the Petitioner	Approved after truing up
Depreciation	61.80	62.14	62.18
Interest on Loan & Financial Cost	63.95	182.43	63.20
Interest on Working Capital	0.00	0.00	0.00
O&M expenses	93.97	89.64	87.35
RoE	52.82	52.82	52.85
Total Annual Fixed Costs	272.54	387.03	265.58
NTI	0.00	0.14	0.92
Net AFC	272.54	386.89	264.66

Accordingly, trued-up AFC for FY 2022-23 works out to Rs. 264.66 Crore. The surplus for FY 2022-23 alongwith the carrying cost works out to Rs. 9.75 Crore, and the same shall be adjusted in the AFC of FY 2024-25.

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

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 2022-23.

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

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

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

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

$CC1 = (AFC/12) (PAF1 / NPAF)$ subject to ceiling of $(AFC/12)$

$CC2 = (AFC/6) (PAF2 / NPAF)$ subject to ceiling of $((AFC/6) - CC1)$

$CC3 = (AFC/4) (PAF3 / NPAF)$ subject to ceiling of $((AFC/4) - (CC1+CC2))$

$CC4 = (AFC/3) (PAF4 / NPAF)$ subject to ceiling of $((AFC/3) - (CC1+CC2+CC3))$

$CC5 = (AFC \times 5/12) (PAF5 / NPAF)$ subject to ceiling of $((AFC \times 5/12) - (CC1+CC2+CC3+CC4))$

$CC6 = (AFC/2) (PAF6 / NPAF)$ subject to ceiling of $((AFC/2) - (CC1+CC2+CC3+CC4+CC5))$

$CC7 = (AFC \times 7/12) \text{ (PAF7/NAPAF) subject to ceiling of } ((AFC \times 7/12) - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6))$

$CC8 = (AFC \times 2/3) \text{ (PAF8/NAPAF) subject to ceiling of } ((AFC \times 2/3) - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7))$

$CC9 = (AFC \times 3/4) \text{ (PAF9/NAPAF) subject to ceiling of } ((AFC \times 3/4) - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7 + CC8))$

$CC10 = (AFC \times 5/6) \text{ (PAF10/NAPAF) subject to ceiling of } ((AFC \times 5/6) - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7 + CC8 + CC9))$

$CC11 = (AFC \times 11/12) \text{ (PAF11/NAPAF) subject to ceiling of } ((AFC \times 11/12) - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7 + CC8 + CC9 + CC10))$

$CC12 = (AFC) \text{ (PAFY/NAPAF) subject to ceiling of } ((AFC) - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7 + CC8 + CC9 + CC10 + CC11))$

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,

$AFC = \text{Annual fixed cost specified for the year, in Rupees.}$

$NAPAF = \text{Normative annual plant availability factor in percentage.}$

$PAFN = \text{Percent Plant availability factor achieved upto the end of the } n\text{th month.}$

$PAFY = \text{Percent Plant availability factor achieved during the Year.}$

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

(3) The PAFM upto the end of a particular month shall be computed in accordance with the following formula:

$$PAFM \text{ or } PAFY = 10000 \times \sum_{i=1}^N DC_i / \{ N \times IC \times (100 - AUX) \} \%$$

Where,

$AUX = \text{Normative auxiliary energy consumption in percentage.}$

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

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

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

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

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

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

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

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

(a) For gas and liquid fuel based stations

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

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

Provided further that copies of the bills and details of parameters of GCV and price of fuel i.e. natural gas,

RLNG, liquid fuel etc., shall also be displayed on the website of the generating company. The details should be available on its website on monthly basis for a period of three months.

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

Further, w.r.t. to true up of Energy Charges for FY 2022-23, as discussed earlier, the Petitioner's plant remained non-operational, i.e. there was no generation of power during FY 2022-23 on account of backing down instructions from UCPL. Therefore, no true up is required in relation to the SHR for the relevant Financial Year, i.e. FY 2022-23.

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

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 30.03.2023, on approval of AFC for FY 2023-24, had approved the AFC based on the approved capital cost as on COD, i.e. as on 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 2023-24 based on the audited accounts for FY 2022-23.

The Commission, in this Order, has carried out the Truing up for FY 2022-23 in accordance with the UERC Tariff Regulations, 2021. In accordance with Regulation 12(3) of the UERC Tariff Regulations, 2021, the scope of annual performance review is limited to the revision of estimates for the ensuing year, if required, based on the audited financial results for the previous year and does not provide for the revision of estimates for the current year and give effect on this account in the estimates of the ensuing year. Accordingly, the Commission shall carry out the truing up of FY 2023-24 based on the audited accounts for that year and give effect on this account during the proceedings for determination of AFC for FY 2025-26.

Further, the Commission observed that the Petitioner has projected a substantial increase in O&M expenses for FY 2023-24 as compared to the actuals claimed for truing up of FY 2022-23, with major increase noticeable under the head Repair & Maintenance Expenses 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 the plant was shut down during FY 2022-23 and came into operations from 1st April 2023, and considering the maintenance of the plant as per OEM standards, the expenditure was only to ensure the plant availability and keeping the maintenance standards upto the levels where the plant can deliver efficiencies as and when it comes into operation. The Petitioner submitted that in FY 2023-24, while the budgeted expenditure is considered at full value of Rs 97.93 Crore, it would strive to cut down on the expenses without compromising on the plant efficiencies.

In this regard, the Commission advises 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. 0.57 Crore for FY 2023-24 under the head Plant & Machinery amounting to Rs. 0.49 Crore, and Civil Works amounting to Rs. 0.08 Crore.

The Commission has gone through the submission of the Petitioner, and regarding additional capitalization in FY 2023-24, the Commission is of the view that the same shall be allowed at the time of truing-up of FY 2023-24 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 of truing-up of respective year.

5. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on ARR for FY 2024-25

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 2024-25 based on the audited accounts for FY 2022-23 and revised estimates for FY 2023-24.

The Commission, in this Order, has carried out the Truing up for FY 2022-23 for the Petitioner's 225 MW CCPP in accordance with the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2021. Further, the Commission, under the provisions of Regulation 12(3) of the UERC Tariff Regulations, 2021, has revised the AFC for FY 2024-25. The approach adopted by the Commission in the approval of each element of AFC for FY 2024-25 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 in the Tariff Order dated 31.03.2022 for fourth Control Period shall continue to be applicable without any change for FY 2024-25.

5.2.2 Design Energy, Auxiliary Energy Consumption and Saleable Primary Energy

The Petitioner in its Petition has projected saleable energy from its 225 MW CCPP as 1553.61 MU for FY 2024-25. The Commission in the Tariff Order dated 31.03.2022 for the fourth Control

Period had approved the energy generation for FY 2024-25 as 1553.61 MU from the Petitioner's plant.

Accordingly, the Commission approves saleable primary energy after deducting the normative auxiliary consumption of 2.5% as 1553.61 MU for FY 2024-25.

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 additional capitalization of Rs. 20.00 Crore in FY 2024-25 under the head Plant & Machinery, towards the procurement of initial spares which were duly permitted to the extent of 4% of the Capital Cost. The Petitioner further submitted that in their efforts to conserve cash and plan for judicious procurement, the initial spares have been staggered as stated in the earlier APRs and True-Up petitions. The Petitioner further submitted that out of the total allowed limit of Rs. 47.68 Crore for procurement of Initial Spares, in accordance with the Regulations, it has procured Initial Spares worth Rs. 18.0 Crore in FY 2020-21, and the remaining is being planned conservatively in FY 2024-25. The Petitioner submitted that the Commission may approve the said procurement as and when needed subject to prudence check.

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 2024-25.

Accordingly, capital cost worked out as on 31.03.2023, i.e. Rs. 1216.85 Crore after considering

the net additional capitalisation approved for FY 2022-23 has been considered as opening capital cost for FY 2024-25. Further, as discussed above, no additional capitalisation has been considered for FY 2023-24 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 2024-25, 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 2024-25 is as shown in the Table given below:

Table 5.1: Depreciation Charges for FY 2024-25 (Rs. Crore)

Particular	Approved in MYT Order dt. 31.03.2022	Claimed	Approved in this Order
Depreciation	61.80	63.49	62.18

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 2024-25. Details of the Return on Equity claimed and approved is as follows:

Table 5.2: Return on Equity for FY 2024-25 (Rs. Crore)

Particulars	Approved in MYT Order dated 31.03.2022	Claimed	Approved in this Order
Return on Equity @ 15.50% (On Equity within the Original scope of works)	52.82	56.58	51.77
Return on Equity @ 12.11% (On Equity beyond the original scope of work)			1.09
Total	52.82	56.58	52.86

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.

(6) 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.

...“

The Petitioner has considered the opening loan balance for FY 2024-25 as Rs. 1531.01 Crore. Further, the Petitioner has considered the weighted average rate of interest as 13.50% for FY 2024-25.

The interest rate of 12.11% as approved by the Commission for truing up of FY 2022-23 as discussed in previous paras of this Order has been considered for working out the interest on normative loan for FY 2024-25.

The Commission has considered the closing loan balance of FY 2022-23 as opening loan balance for FY 2023-24. The Commission has considered the depreciation for FY 2023-24 as the normative repayment for the year. The Commission has considered the closing loan balance for FY 2023-24 as the opening loan balance for FY 2024-25. 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 2024-25. The Commission has considered the normative repayment equivalent to the approved depreciation for FY 2024-25. The interest rate of 12.11%, as discussed above, has been considered to compute the interest on the average loan balance for FY 2024-25 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 2024-25 is as shown in the Table given below:

Table 5.3: Interest on Loan for FY 2024-25 (Rs. Crore)

Particular	Approved in MYT Order dt. 31.03.2022	Claimed	Approved in this Order
Interest on Loan	48.67	167.89	48.14

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 2024-25 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 2024-25 are as follows:

Table 5.4: O&M Expenses for FY 2024-25 (Rs. Crore)

Particulars	Approved in Tariff Order dt. 31.03.2022	Claimed	Approved in this Order
O&M Expenses	102.06	102.06	102.06

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.

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, as discussed in the preceding paras of this Order, the Commission has not considered IWC for the Petitioner's plant for the reasons discussed therein. Further, on the issue of delayed payment of generation bills by UPCL, the Petitioner has filed a separate Petition in the matter, which is being dealt with through a separate ongoing proceedings.

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 2024-25 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 contractors and others;*
- i) Income from advertisements, etc.;*
- j) Any other non- tariff income.*

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

The Petitioner has not proposed any non-tariff income in FY 2024-25. 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 2024-25 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 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 2024-25 attributable to its beneficiary.

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

"49. Computation and Payment of Annual Fixed Charges and Energy Charges for

Thermal Generating Stations

- (1) The fixed cost of a thermal generating station shall be computed on annual basis, based on the norms specified under these Regulations, and recovered on monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share/allocation in the capacity of the generating station.
- (2) The capacity charge (inclusive of incentive) payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:

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

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

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

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

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

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

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

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

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

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

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

$$CC_{12} = (AFC) (PAF_Y / NAPAF) \text{ subject to ceiling of } ((AFC) -$$

$$(CC1+CC2+CC3+CC4+CC5+ CC6+CC7+CC8+ CC9+CC10+CC11))$$

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.

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.

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

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

(4) Incentive to a generating station or unit thereof shall be payable at a flat rate of 50 paise/kWh

for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in Regulation 47(2).

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

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

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

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

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

The summary of Annual Fixed Charge approved by the Commission for FY 2024-25 of the fourth Control Period is given in the Table below:

Table 5.5: Approved AFC for FY 2024-25 (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 2022-23	Net AFC
62.18	48.14	0.00	102.06	52.86	265.24	0.00	(-) 9.75	255.49

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 its Order dated 26.04.2021 with respect to recovery of energy charges by the Petitioner from UPCL, the

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

(M.L. Prasad)
Member (Technical)

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