

Order

On

**True up for FY 2019-20,
Annual Performance Review
for FY 2020-21**

&

ARR for FY 2021-22

For

M/s Sravanthi Energy Pvt. Ltd.

April 26, 2021

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.: 13 of 2021

In the Matter of:

Petition filed by M/s Sravanthi Energy Pvt. Ltd. for True up of FY 2019-20, Annual Performance Review of FY 2020-21 and Annual Revenue Requirement for FY 2021-22.

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 Limited

Urja Bhawan, Kanwali Road, Dehradun

... Respondent

Coram

Shri D.P. Gairola Member (Law)

Shri M.K.Jain Member (Technical)

Date of Order: April 26, 2021

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

In accordance with the relevant provisions of the Act, the Commission had notified

Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2015 (hereinafter referred to as "UERC Tariff Regulations, 2015") for the second Control Period from FY 2016-17 to FY 2018-19 and Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018 (hereinafter referred to as "UERC Tariff Regulations, 2018") for the third Control Period from FY 2019-20 to FY 2021-22, specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission vide its Order dated 21.03.2018 approved the AFC for FY 2018-19 for Phase 1 of the Petitioner's plant. Subsequently, the Commission had issued the Order on approval of Business Plan and Multi Year Tariff dated February 27, 2019, for the third Control Period from FY 2019-20 to FY 2021-22. Further, the Commission vide its Order dated 18.04.2020 approved the ARR for FY 2020-21 alongwith truing of FY 2018-19. In compliance with the provisions of the Act and Regulation 8(1) and Regulation 10(1) of UERC Tariff Regulations, 2018, M/s Sravanthi Energy Pvt. Ltd. (hereinafter referred to as "M/s SEPL" or "the Petitioner" or "the Generator") filed the Petition (Petition No. 13 of 2021 hereinafter referred to as the "Petition") giving details of its revised projections of Annual Fixed Charges (AFC) for FY 2021-22 and Annual Performance Review of FY 2020-21. Through the aforesaid Petition, the Petitioner also requested for truing up of FY 2019-20 based on the audited accounts in accordance with the UERC Tariff Regulations, 2018. The Petitioner also requested to revisit the Non-Tariff Income approved by the Commission in truing-up of FY 2018-19 in accordance with the UERC Tariff Regulations, 2015.

The Petition filed by M/s SEPL had certain infirmities/deficiencies which were informed to it vide Commission's letter no. UERC/6/TF-602/2020-21/2020/1064 dated 23.12.2020 and M/s SEPL was directed to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. M/s SEPL vide its letter no. SEPL/UERC/2020 dated 31.12.2020 removed the critical deficiencies and further vide its letter no. SEPL/UERC/2021 dated 12.01.2021 submitted additional information required for analysis of the Petition. Based on the submissions made by M/s SEPL, the Commission vide its Order dated 09.02.2021 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 processing of the Petition, as may be stipulated by the Commission, failing which the Commission may proceed to dispose off the matter as it deems fit based on the information available with it.

This Order, accordingly, relates to Petition filed by M/s SEPL for true up of FY 2019-20, APR for FY 2020-21 and revised AFC for FY 2021-22 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.

Tariff determination being the most vital function of the Commission, it has been the practice of the Commission to elaborate in detail the procedure and to explain the underlying principles in determination of tariffs. Accordingly, in the present Order also, in line with past practices, the Commission has tried to elaborate the procedure and principles followed by it in determining the ARR of the generator. The Annual Fixed Charges of M/s SEPL are recoverable from the beneficiary, i.e. UPCL. It has been the endeavour of the Commission in past also, to issue Tariff Orders for the large generating stations 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 the generating stations. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

- Chapter 1 - Background and Procedural History.
- Chapter 2 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Trueing up for FY 2019-20.
- Chapter 3 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2020-21.
- Chapter 4 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Revised ARR & Tariff for FY 2021-22.

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 it 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) comprising of two phases of 225 MW (ISO) each, and each phase having two GTGs with a gross output of about 76 MW each, and one common steam turbine generator (STG) of about 73 MW. 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 fuel 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 Petitioner had filed a Petition for determination of tariff for supply of power from its 214 MW Gas based Combined Cycle Power Plant (hereinafter referred to as “the Project”) to UPCL from COD, i.e. 20.11.2016 to 31.03.2017 and for remaining two years of the second Control Period, i.e. FY 2017-18 and FY 2018-19. On the request of the Petitioner for grant of provisional tariff, the Commission based on the information submitted by the Petitioner and the comments received from UPCL had approved a provisional tariff of Rs. 4.70

per unit (exclusive of PSDF support) to be recovered by the Petitioner from UPCL till determination of final tariff by the Commission.

The Commission vide its Tariff Order dated 24.10.2017 approved the Business Plan and Multi Year Tariff of M/s SEPL for 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. Subsequently, 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. The Commission, in the approval of Business Plan for the third 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 2019-20 to 2021-22, and also carried out the Truing up of FY 2017-18.

In accordance with Regulation 12 of the UERC Tariff Regulations, 2018, 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 2020-21 on 15.12.2020. Through the above Petition, M/s SEPL sought true up for FY 2019-20, APR for FY 2020-21 and determination of AFC for FY 2021-22 based on the audited accounts for FY 2019-20.

The Commission vide its letter no. UERC/6/TF-602/2020-21/2020/1064 dated 23.12.2020 asked the Petitioner to submit certain relevant information in accordance with the Tariff Regulations, 2018 for the true-up of FY 2019-20. 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 31.12.2020 removed the critical deficiencies. Based on the submission dated 31.12.2020 made by M/s SEPL, the Commission provisionally admitted the Petition on 09.02.2021.

Meanwhile, based on the scrutiny of the Petition 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 the Tariff Order.

In order to provide transparency to 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-602/2020-21/2021/1258 dated 09.02.2021.

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

The submissions made by M/s 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. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2019-20

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

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

- a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;*
- b) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors).*
- c) Revision of estimates for the current and/or ensuing financial year, if required, based on audited financial results for the previous financial year;*
- d) Computation of the sharing of gains and losses on account of controllable factors for the previous year.*

"

In its present filings, the Petitioner has submitted that the Annual Fixed Charges have been determined based on audited accounts considering the relevant provisions of UERC MYT Regulations, 2018 for FY 2019-20 till FY 2021-22, and has, accordingly, requested the Commission to carry out the truing up for FY 2019-20 alongwith the sharing of gains and losses.

2.1.1 Impact of Sharing of Gains & Losses on account of Controllable Factors for FY 2019-20

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

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

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

- a) 1/3rd of such gain or loss shall be passed on as a rebate or allowed to be recovered in tariffs over*

such period as may be specified in the Order of the Commission;

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

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

O&M expenses comprises of the major portion of AFC of M/s SEPL and are within the control of the Petitioner and, moreover, in accordance with UERC Tariff Regulations, 2018 these are controllable expenses. Similarly, in accordance with the UERC Tariff Regulations, 2018, the variation in working capital requirements is also a controllable factor. However, as discussed in Tariff Order dated 24.10.2017, the interest on working capital (IWC) was not included in the annual fixed charges (AFC) allowable to the Petitioner based on the Petitioner's submission that it intends to forego the same in case UPCL does not charge rebate on their energy bills. Further as discussed in Tariff Order dated 18.04.2020, interest on working capital was not allowed by the Commission for the purpose of truing up of FY 2018-19 for the same reason. However, M/s SEPL in the current Petition has requested the Commission to include the amount of working capital interest, which is on account of the delay in payment of bills by UPCL, as part of AFC in the current Order. The same has been dealt with by the Commission in the subsequent Paras of this Order. Further, the performance parameter namely Station Heat Rate and Auxiliary consumption are controllable in nature and, accordingly, the Commission as discussed in subsequent paras of this Order has carried out the truing up of the same and sharing of losses or gains has been done accordingly. Further, the capital related expenses like interest on loans, depreciation etc. has been treated as uncontrollable and, hence, no sharing of losses or gains for the same has been carried out.

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

2.1.2 Physical Parameters

2.1.2.1 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.”

The Commission in its Tariff Order dated 24.10.2017 for the purpose of computation of saleable energy of the Petitioner's plant considered the NAPAF of 85% in accordance with the UERC Tariff Regulations, 2015. Moreover, as the Petitioner's plant was covered under the PSDF scheme during FY 2016-17, therefore, during the currency of the Scheme, NAPAF and actual PAFAM in respect of the Petitioner's plant would not have any implication since the recovery of the AFC was allowed in accordance with the ceiling rate provided under the Scheme.

Further, the Commission in the Tariff Order dated 27.02.2019 has opined that the NAPAF of 85% approved for second Control Period in the Tariff Order dated 24.10.2017 shall continue to be applicable for third Control Period as well without any change.

The Petitioner in the current Petition has not sought any deviation from the NAPAF approved by the Commission and, accordingly, the Commission is of the view that the NAPAF of 85% approved in the Tariff Order dated 27.02.2019 for the third Control Period shall continue to be applicable without any change for FY 2019-20.

2.1.2.2 Energy Generation and Saleable Primary Energy

The Commission in its MYT Order dated 27.02.2019 on approval of Business Plan and Multi Year Tariff for the third Control Period from FY 2019-20 to FY 2021-22 had approved the Design Energy based on the contracted capacity of 214 MW. Further, in accordance with Regulation 47(4)(i) of the Tariff Regulations, 2018, auxiliary consumption of 2.5% has been considered. Accordingly, applying the PLF of 85% as discussed hereto above and reducing the auxiliary power, the saleable energy works out as 1553.61 MU for FY 2019-20.

M/s SEPL in its Petition has submitted the actual saleable energy for FY 2019-20 as 1327.64 MUs that in turn translates to a Plant Load Factor of 72.64%. The Petitioner submitted that the Plant Availability Factor, i.e. the period for which the plant was available for generation of power (irrespective of the actual generation) was 88% for FY 2019-20, however, during the year, the actual

Gross Generation was 1357.98 MUs and the Plant Load Factor which is determined based on the output was 72.64%. The Petitioner submitted that this was primarily due to restrictions imposed by Uttarakhand Power Corporation Ltd (UPCL) on power offtake due to which the loss in gross generation of power during FY 2019-20 was 235.46 MUs. The Petitioner further submitted that if the loss of generation is taken into account then the PLF shall reach its normal levels of 85%. The Petitioner further submitted that, similarly, for Year to Date (April-Sept 2020), the actual Gross Generation of power has been Nil primarily due to restrictions imposed by UPCL on power offtake as the demand has been largely subdued due to force majeure conditions considering COVID-19 situation since March 2020. The Petitioner further submitted that their plant was available for generation during the said period and the Plant Availability Factor was 95.69% during the said period of 6 months.

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 2019-20. M/s SEPL has also not sought any deviation in the approved design energy for FY 2019-20. Accordingly, the Commission decides to consider the design energy and saleable primary energy for FY 2019-20 as approved in the Tariff Order dated 27.02.2019 for the Petitioner's plant.

2.1.3 Financial Parameters

2.1.3.1 Capital Cost

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

Table 2.1: Approved Capital Cost for Phase 1 of M/s SEPL as on COD (Rs. Crore)

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

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

Table 2.2: Financing for Phase 1 as on COD (Rs. Crore)

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

The Commission in the earlier Tariff Orders had approved Nil additional capitalisation for FY 2016-17, additional capitalisation of Rs. 0.78 Crore during FY 2017-18 and additional capitalisation of Rs. 0.70 Crore during FY 2018-19 for Phase 1 of the Petitioner's plant. Accordingly, the Commission has considered the approved closing capital cost of FY 2018-19 of Rs. 1193.89 as opening capital cost for the purpose of truing up of FY 2019-20.

2.1.3.2 Additional Capitalisation and De-capitalisation

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

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

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

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

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

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

b) Change in law;

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

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

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

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

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

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

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

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

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

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

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

- The asset is retired from the Books of Assets, at depreciated value.
- Transfer the failed assets/equipments from failed to scrap material.
- Dismantle it into of scrap inventory like iron, brass etc.
- Build up scrap inventory.

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

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

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

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

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

The Petitioner has claimed an additional capitalisation of Rs. 0.28 Crore for FY 2019-20 in accordance with Regulation 22 of UERC Tariff Regulations, 2018 as detailed in the Table below:

Table 2.3: Additional Capitalisation claimed for FY 2019-20 (Rs. Crore)

S.No.	Particulars	Amount
1.	Vehicle	0.09
2.	Furniture & Fixtures, Office Equipments & Others	0.18
3.	Computers	0.01
Total		0.28

Further, the Petitioner has also claimed a de-capitalization of Rs. 0.11 Crore for FY 2019-20

on account of vehicle sold during the year.

The Commission analysed the claims of the Petitioner and observed that the same are in accordance with the audited financial statement of FY 2019-20 as submitted by the Petitioner. Hence, the Commission, accordingly, approves the net additional capitalisation of Rs. 0.17 Crore as claimed by the Petitioner for FY 2019-20 in accordance with the Regulations.

Accordingly, based on the above discussion, the details of the trued-up capital cost allowed for FY 2019-20 is as follows:

Table 2.4: Trued up Capital Cost for FY 2019-20 (Rs. Crore)

Particulars	Opening GFA as on 01.04.2019	Additional Capitalisation approved for FY 2019-20	Closing GFA as on 31.03.2020
Freehold Land	4.08	-	4.08
Civil Works	101.37	-	101.37
Plant & Machinery	1085.72	-	1085.72
Vehicles	1.00	*(-)0.02	0.98
Furniture & Fixtures, Office equipments etc.	1.29	0.18	1.46
Computers	0.43	0.01	0.45
Total	1193.89	0.17	1194.06

**After considering de-capitalisation of Rs. 0.11 Crore*

2.1.3.3 Capital Structure

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

“...

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

(6) In case of Generating Company, Transmission Licensee, Distribution Licensee, or SLDC where investments have been made prior to 1.4.2019, Debt: Equity Ratio shall be as approved by the Commission in the previous Orders.”

The Commission has considered the Debt-Equity Ratio of 71.89:28.11 for capital cost as on 01.04.2019 which was approved in the Tariff Order dated 18.04.2020 while approving the truing up for FY 2018-19. Further, with regard to additional capitalisation claimed for FY 2019-20, 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 2019-20 in the Debt-Equity ratio of 70:30, as per UERC Tariff Regulations, 2018.

The Capital structure for the capital cost as on 01.04.2019 and additional capitalisation for FY 2019-20 is as follows:

Table 2.5: Detail of Financing of Capital Cost Allowed for FY 2019-20

Particular	Opening as on 01.04.2019		Added during the year	Closing as on 31.03.2020	
	(Rs. Crore)	%		(Rs. Crore)	(Rs. Crore)
Debt	858.34	71.8947	0.12	858.46	71.8943
Equity	335.55	28.1053	0.05	335.60	28.1057
Total	1193.89	100.00	0.17	1194.06	100.00

2.1.3.4 Depreciation

Regulation 28 of UERC Tariff Regulations 2018 specifies as follows:

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

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

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

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

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

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

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

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating

station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

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

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

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

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

The Petitioner has claimed depreciation of Rs. 61.67 Crore for FY 2019-20 based on the actual expenditure capitalised in its books of account, and also on additional capitalisation from COD till FY 2019-20.

The Commission has calculated the weighted average rate of depreciation of 5.11% by applying the depreciation rates as specified in Appendix-II of UERC Tariff Regulations, 2018 on the GFA base of the Petitioner. Accordingly, the Commission has worked out the depreciation of Rs. 60.96 Crore against the admissible average GFA of Rs. 1193.97 Crore during FY 2019-20 by applying the weighted average rate of depreciation of 5.11%.

Based on the above discussed approach, the summary of depreciation as approved in Tariff Order dated 27.02.2019, claimed by the Petitioner and as approved now by the Commission for FY 2019-20 after truing up is shown in the Table given below:

Table 2.6: Depreciation for FY 2019-20 (Rs. Crore)

Particulars	Approved in Tariff Order dated 27.02.2019 for FY 2019-20	Claimed	Approved after truing up
Depreciation	60.90	61.67	60.96

2.1.3.5 Return on Equity (RoE)

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

"26. Return on Equity

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

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

(2) Return on equity shall be computed on at the rate of 15.5% for thermal generating stations, transmission licensee, SLDC and run of the river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations and run of river generating station with pondage and distribution licensee on a post-tax basis.

..."

The Petitioner has claimed the Return on Equity amounting to Rs. 55.92 Crore for FY 2019-20. The Commission has allowed the Return on Equity on the opening equity base at the rate of 15.50%. The Return on Equity approved by the Commission for FY 2019-20 is given in the Table below:

Table 2.7: Return on Equity for FY 2019-20 (Rs. Crore)

Particular	Approved in Tariff Order dated 27.02.2019	Claimed by Petitioner	Approved after truing-up
Return on Equity	51.98	55.92	52.01

2.1.3.6 Interest and Finance charges

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

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

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

(2) The normative loan outstanding as on 01.04.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.03.2019 from the approved gross normative loan.

(3) The repayment for each year of the Control Period shall be deemed to be equal to the depreciation allowed for that year. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalization of such asset.

...

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

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

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

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

(7) *The Generating Company or the Transmission Licensee or the Distribution Licensee, or the SLDC as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings on interest shall be shared between the beneficiaries and the Generating Company or the Transmission Licensee or the Distribution Licensee or the SLDC, as the case may be, in the ratio of 1:2.*

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

...“

The Petitioner has claimed interest on normative loan of Rs. 321.54 Crore for FY 2019-20 for the purpose of trueing up based on the weighted average rate of interest of 21.39% p.a. The Petitioner submitted that the original term loans that were held by the individual banks under consortium lending were transferred on assignment basis to the Asset Reconstruction Companies, i.e. ACRE and Aditya Birla ARC. The Petitioner submitted that in accordance with the loan agreements, penal interest was accounted for in the books of accounts alongwith liquidated damages (LD) amounting to a total of Rs. 119 Crore in FY 2019-20, and, accordingly, the interest expense for FY 2019-20 excluding penal interest and LD, is Rs. 202.54 Crore.

The Commission has considered the normative loan worked out as on 01.04.2019 as opening normative loan for FY 2019-20 and repayment has been considered equal to the admissible

depreciation, i.e. Rs. 60.96 Crore. Also, as discussed hereto above, the Commission has approved net additional capitalisation of Rs. 0.17 Crore for FY 2019-20, accordingly, addition to normative loan has been considered as 0.12 Crore as per UERC Tariff Regulations, 2018.

Further, as discussed in the Tariff Order dated 24.10.2017, most of the lenders for the Phase-1 of the Petitioner's project had charged interest only upto FY 2014-15 because the term loan of the lenders in the consortium turned into NPA as per the banking norms. The relevant extract of the Tariff Order dated 24.10.2017 is reproduced hereunder:

"Further, as discussed under IDC, most of the bankers had charged interest only upto FY 2014-15. The Petitioner was asked to clarify the reason for the same, in response to which the Petitioner submitted that term loan of the lenders in the consortium had turned into NPA as per the banking norms, hence, some of the banks avoided charging interest. The Commission observed that the Petitioner was providing for interest expenses in its books of accounts on provisional basis as per the loan agreement entered into with the banks. The Commission in this regard is of the view that since the interest has been charged by only few lenders after FY 2014-15, hence, calculation of weighted average rate of interest based on the previous year actual interest charged by the bankers will not reflect a true picture. Moreover, considering the interest based on the provisions made by the Petitioner in its books of accounts will not be prudent as the same are based on estimation. The Petitioner in Form F-9.2 has submitted the rate of interest on actual loans and in accordance with the information given in the said Form the latest borrowing made by the Petitioner in FY 2016-17 from IFCI & consortium bank was @ 12.20% per annum. Therefore, the Commission is of the view that as the actual weighted average rate of interest cannot be properly worked out because few of the banks had stopped charging interest post FY 2014-15, hence, the rate of interest of 12.20% as given by the Petitioner in its Forms for latest borrowing of Rs. 53.60 Crore has been considered by the Commission for calculating the interest on normative loan."

In this regard, the Commission sought information from the Petitioner regarding the status of the restructuring of the loan, in response to which the Petitioner submitted that the original term loans from respective Banks/ Financial Institution were taken over by the Asset Reconstruction Companies ("ARC") on assignment basis in 2019. The said loans were transferred from the original lenders to the new lenders, i.e. Asset Care & Reconstruction Enterprise ("ACRE") and Aditya Birla ARC in 2019, however, the set of definitive documents in relation to the restructuring of the term loans were executed only on 23.12.2020. The Petitioner submitted that as per the terms of the restructuring that got effective from 1st April 2019, the interest rate remained unchanged at this stage

and the same was continued to be levied on the principal outstanding for the respective bank loans that were assigned to the ARCs. The Petitioner further submitted that considering the uncertainties in the past resulting in huge losses, and also considering that the total liability is unsustainable, the terms of the restructuring were agreed such that the future milestones achieved by the Sponsors provide substantial benefit to the Project – especially once the amount due to the new lenders are discharged through re-financing of the loans.

The Petitioner further submitted that it had applied to the Financial Institutions in India towards refinancing of the Term Loans at substantially cheaper rate of interest, and the most tangible benefit shall accrue to its Project at the time of re-financing as the interest cost on the total loans taken by the Petitioner shall be at a reduced rate. The Petitioner submitted that this step is simultaneous to the refinancing process and the benefit shall accrue immediately on the discharge of loans of ACRE and Aditya Birla ARC, and it expects the refinancing process to be completed by July/ Aug 2021 post which the loans shall continue to reflect in the books on normative basis and shall only pertain to the Refinancing Lender on actuals in relation to the respective Phases of the Project.

The Commission analysed the submissions made by the Petitioner in this regard and observed that the Petitioner has submitted that although the documents in relation to the restructuring of the term loans were executed only on 23.12.2020, but restructuring got effective in the year 2019 itself. The Commission sought information w.r.t. the term loan accounted for by the Petitioner in its books of accounts, which have been eventually taken over by the Asset Reconstruction Companies, 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 as follows (excluding the amount of liquidated damages and penal interest):

Table 2.8 Weighted Average Rate of Interest

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Weighted Average Rate of Interest	12.69%	12.89%	12.60%	13.47%

As can be seen from above table, the weighted average rate of interest for the loans related to Phase I of the Petitioner’s project has always remained higher than the Interest rate of 12.20% which was provisionally approved by the Commission for working out the normative interest on loan capital of the respective years in earlier orders, subject to finalization of restructuring arrangement. As per the terms of Tariff Regulations, 2018 any benefit out of the restructuring shall be shared

between the beneficiary and the generating company in the ratio of 1:2, however, as submitted by the Petitioner there has been no waiver of interest nor the terms of lending have been altered by the Asset Reconstruction Companies, thus resulting in no gain to the Petitioner on account of aforesaid restructuring, as far as rate of interest and eventually the interest cost is concerned, in view of the Tariff Regulations. The Commission had earlier allowed interest expenses from FY 2016-17 to FY 2019-20 based on a normative rate of interest of 12.20%. However, the actual rates of interest are on a higher side and the Petitioner company should have made all out efforts to get it reduced. A similarly placed gas based generator, namely M/s Gama Infraprop Pvt. Ltd. has incurred interest for the above referred financial years at the rate of 10.21%, 12.28%, 12.40%, and 12.37% respectively. 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. Hence, the interest expenses for FY 2017-18 to FY 2019-20 has been trued up at the rate of 12.28%, 12.40%, and 12.37% respectively. Further, w.r.t. to rate of interest of 10.21% for FY 2016-17 of M/s Gama Infraprop Pvt. Ltd. ("M/s GIPL"), the Commission observed that M/s GIPL during the tariff proceedings of FY 2019-20 submitted before the Commission that the weighted average rate of interest works out to 12.15% for FY 2016-17 after adjusting unsustainable long term loans. The relevant extract of Order dated 27.02.2019 in case of M/s GIPL is reproduced hereunder.

"With regard to the claimed weighted average rate of interest, the Commission observed that the weighted average rate of interest has increased substantially from 10.21% p.a. for FY 2016- 17 to 12.85% for FY 2017-18. In this regard, the Petitioner submitted that the Commission had worked out the weighted average rate of interest of 10.21% p.a. for FY 2016-17 based on the average of opening and closing balances of long term loans of the company. However, the restructuring of the accounts, i.e. transfer of an amount of Rs. 371.73 Crore to unsustainable debt effective from 25.11.2016 was not accounted for in the financial accounts for FY 2016-17 as the required documentation got completed in May, 2017 and the appropriate entries giving effect to the order of segregation of long term loan between sustainable and unsustainable was passed on 23.05.2017 but was effective from 25.11.2016. The Petitioner submitted that the weighted average rate of interest works out to 12.15% for FY 2016-17 after adjusting unsustainable long term loans."

In this regard, the Commission is of the view that the weighted average rate of interest of 10.21% approved for M/s GIPL in truing of FY 2016-17 cannot be applied in case of M/s SEPL for truing up the interest cost of relevant FY, and therefore the rate of 12.20% already approved by the Commission while truing up of FY 2016-17 remains unaltered.

The Commission, accordingly, approves the interest on loan capital as Rs. 34.45 Crore, Rs. 99.08 Crore, Rs. 92.56 Crore and Rs. 84.84 Crore respectively for FY 2016-17, FY 2017-18, FY 2018-19 and FY 2019-20 in this regard.

Furthermore, the Petitioner has claimed Bank Charges and BG/LC Commission charges amounting to Rs. 0.67 Crore for FY 2019-20 under Operation & Maintenance expenses under the sub-head Administrative and General 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. 0.67 crore as finance charges for FY 2019-20.

Based on the above considerations and UERC Tariff Regulations, 2018, the Commission has approved the interest expenses for FY 2019-20 for Phase 1 of the Petitioner's project as shown in the Table below:

Table 2.9 Interest on loan capital as approved for FY 2016-17 to FY 2018-19 (Rs. Crore)

Particulars	Provisionally approved by the Commission in true-up of relevant FY	Approved now after truing-up of interest cost of relevant FY	Net amount to be adjusted in Truing Up of FY 2019-20
	A	B	C=B-A
FY 2016-17	34.45	34.45	0.00
FY 2017-18	98.44	99.08	0.65
FY 2018-19	91.07	92.56	1.49
Total	223.96	226.10	2.14

In view of above, the net truing-up impact of interest on loan capital for FY 2016-17 to FY 2018-19 amounting to Rs. 2.14 Crore shall be adjusted in the interest on loan capital of FY 2019-20.

Table 2.10 Interest on Loan as approved for FY 2019-20 (Rs. Crore)

Particulars	Approved in Tariff Order dated 21.03.2018 for FY 2019-20	Claimed by Petitioner	Approved after truing up for FY 2019-20
FY 2019-20	83.61	321.54*	84.84
Add: Financing Charges for FY 2019-20	-	-	0.67
Add: Truing Up impact of interest on loan capital for FY 2016-17 to FY 2018-19	-	-	2.14
Total Interest & Finance Charges	83.61	321.54	87.65

* Including penal interest & LD charges of Rs. 119 Crore

2.1.3.7 Operation & Maintenance (O&M) Expenses**2.1.3.7.1 Truing up of O&M Expenses for FY 2019-20**

Regarding the Operation and Maintenance expenses, Regulation 48(1) of the UERC Tariff Regulations, 2018, specifies as follows:

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

(In Rs. Lakh/MW)

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

...”

Based on the applicable norms of O&M expenses for combined cycle generating station, the Commission had approved normative O&M expenses of Rs. 79.01 Crore for FY 2019-20 for 214 MW capacity of the Petitioner's plant.

The Petitioner claimed an amount of Rs. 71.41 Crore towards O&M expenses for FY 2019-20 as per the audited accounts. 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 observed that few of the expenses claimed by the Petitioner are not allowable under the provisions of the MYT Regulations, 2018 like expenses of penal nature, CSR expenses/donations, etc. Further, the Petitioner inadvertently claimed CGST on power purchase bills, which is allowed separately as part of energy charges. In this regard the Commission is of the view that the expenses of such nature should be met by the Petitioner out of its own resources and they cannot be allowed as part of AFC to be passed on to the consumers in the form of Tariff and, accordingly, disallows the same. The details of expenses disallowed by the Commission alongwith reasons for the views taken by the Commission are as given in the Table below:

Table 2.11: Expenses disallowed in FY 2019-20 (Rs. Crore)

Particulars	Amount	Reasons for disallowance
CGST on power Purchase bills.	5.53	Considered separately under energy charges.
Interest on delayed payment of statutory dues.	0.04	Interest of Penal nature.
Business Development Expenses (related to gift items & others).	0.25	The same should be borne out of the profits of the Company.
Expenses on IES of BETA plant included in Legal & Professional	0.07	Not allowable
CSR Expenses.	0.08	The same should be borne out of profit of the Company.
Donations	0.10	The same should be borne out of profit of the Company.
Processing fees amortization.	1.27	Pertains to pre-CoD period which have been allowed as part of the capital cost, the Petitioner subsequently withdrew the claim for said amount.
Net Expenses related to Phase II of the project	-0.01	Expenses related to Phase II, wrongly claimed here
Total	7.33	

Further, as discussed above, bank charges & BG/LC commission charges of Rs. 0.67 Crore included in the Operation & Maintenance Expenses claimed by the Petitioner, has been allowed separately by the Commission as finance charges under Interest on Loan Capital.

As per MYT Regulations, 2018, the variation in normative and actual O&M expenses shall be considered as part of gain/loss on account of controllable factors.

Regulation 14 of MYT Regulations, 2018 specifies as follows:

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

- (1) *The approved aggregate gain and loss to the Applicant on account of controllable factors shall be dealt with in the following manner:*
 - a) *1/3rd of such gain or loss shall be passed on as a rebate or allowed to be recovered in tariffs over such period as may be specified in the Order of the Commission;*
 - b) *The balance amount of such gain or loss may be utilized or absorbed by the Applicant.”*

As discussed above, O&M expenses have been considered as controllable factor, and, accordingly, the Commission has approved the total O&M expenses for FY 2019-20 after sharing of gain/loss in accordance with the Regulations as shown in the Table below:

Table 2.12: O&M Expenses Approved After Sharing of Gains and Losses for FY 2019-20 (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 2019-20	71.41	63.41	79.01	15.60	10.40	73.81

2.1.3.8 Interest on Working Capital

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

“...

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

- (i) Landed fuel cost for 1 (one) month corresponding to the NAPAF duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;
- (ii) Liquid fuel stock for ½ (half) month corresponding to the NAPAF, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;
- (iii) Operation and maintenance expenses for one month;
- (iv) Maintenance spares @ 30% of operation and maintenance expenses; and
- (v) Receivables equivalent to 2 (two) months of Capacity Charge and Energy Charges for sale of electricity calculated on NAPAF duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel.

...”

The Petitioner submitted that as per the Orders of the Commission, UPCL was required to make payments towards the invoices raised by M/s SEPL within 3 working days, however, due to delay in payment of the said invoices beyond the prescribed time frame, the Petitioner has incurred Working Capital Interest. The Petitioner, accordingly, claimed an amount of Rs. 31.10 Crore towards interest on working capital due to delay in payment of the energy bills by UPCL during FY 2019-20.

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

extract of the Tariff Order dated 24.10.2017 is reproduced hereunder:

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

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

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

It is pertinent to mention here that non-payment of invoices by UPCL in timely manner is a clear violation of the terms of PPA agreed between the Petitioner and UPCL, and also the directions issued by the Commission.

In this regard, it is to be noted that the Petitioner has filed a separate Petition dated 04.03.2021 before the Commission seeking necessary directions to UPCL for releasing interest on delay in payments of its energy invoices for the FY 2018-19 & FY 2019-20. The Commission on the

said Petition had vide its Order dated 23.03.2021 directed both the Petitioner and UPCL to amicably settle the issue between themselves as per the provisions of the PPA by 31.05.2021, and may bring up the dispute, if any remaining unresolved, before the Commission after exhausting the remedies available under the provisions of the PPA under Section 86(1)(f) of the Act. The relevant portion of the Order dated 23.03.2011 is reproduced hereunder:

“ ...

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

...”

In this regard, the Commission is of the view that since the issue of delay in payment of invoices by UPCL and subsequent cost to the Petitioner in the form of working capital has already been raised in separate proceedings and the Commission has already passed appropriate directions to both the Petitioner and UPCL in this regard, therefore, the Commission is not taking any decision in the matter at this stage through this current Order.

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 2019-20.

2.1.3.9 Non Tariff Income

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

“46. Non Tariff Income

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

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

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

- a) *Income from rent of land or buildings;*
- b) *Income from sale of scrap;*
- c) *Income from statutory investments;*
- d) *Interest on delayed or deferred payment on bills;*
- e) *Interest on advances to suppliers/contractors;*
- f) *Rental from staff quarters;*
- g) *Rental from contractors;*
- h) *Income from hire charges from 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. 0.08 Crore as NTI for FY 2019-20. The Petitioner also submitted that NTI of Rs. 7.34 Crore claimed by it and approved by the Commission for FY 2018-19 in Tariff Order dated 18.04.2020, consisted of Rs. 7.12 Crore pertaining to interest income and Rs. 0.22 Crore pertaining to miscellaneous receipts and sale of scrap. The Petitioner submitted that the interest income relates to the earnings out of investments made from unutilized funds received on account of Return on Equity (RoE) accumulated over a period of time. In this regard, the Petitioner referred the proviso to Regulation 46(j) of UERC Tariff Regulations, 2015, and submitted that the NTI of FY 2018-19 as approved by the Commission be reduced by Rs. 7.12 Crore, as the same pertains to the earnings out of RoE. The Petitioner on similar grounds claimed NTI of Rs. 0.08 Crore for FY 2019-20 as against Rs. 8.54 Crore as appearing in its books of accounts.

The Commission analysed the submissions made by the Petitioner, and based on the information submitted by it before the Commission, observed that the Petitioner on one hand is claiming that it had invested surplus RoE which had resulted in earning of bank interest on the same as reflected in its books of accounts of respective years, however, on the other hand the Commission has been approving Interest on Loan Capital to the Petitioner on normative basis, against which the actual payment made by it to the lenders is very less, except in FY 2019-20, as can be seen from the

Table below:

Table 2.13 Summary of Normative Interest on loan capital approved by the Commission (Rs. Crore)

Particulars	Normative Interest on loan capital Approved by the Commission	Actual Interest Paid by the Petitioner	Unpaid Interest on loan capital
2016-17	34.45	4.05	30.41
2017-18	99.08	2.64	96.44
2018-19	92.56	0.58	91.99
2019-20	84.84	196.65	-111.81
Surplus Normative Interest till FY 2018-19			218.83
Surplus Normative Interest till FY 2019-20			107.02

Accordingly, there is no method to effectively determine whether the funds invested in the deposits were out of RoE allowed to the Petitioner or the unpaid interest expenses lying with the Petitioner. Hence, the Commission has decided to consider the interest on investment made out of RoE for the purposes of reduction from NTI to the extent, the Average Investments during the year exceeds the unpaid normative interest on loan capital upto the respective FY as shown in the table above.

The Commission analysed the investment details submitted by the Petitioner and RoE approved by the Commission for respective years. The Commission observed that, the Petitioner had claimed that post CoD the capitalization have been funded entirely through internal resources and also that it is investing its funds on rolling basis based on surplus funds available with it. Accordingly, the Commission worked out the Average Investment made by the Petitioner in FY 2018-19 and FY 2019-20 respectively and also the weighted average rate of interest in the respective years as shown in the table below:

Table 2.14 Summary of Investment made by the Petitioner (Rs. Crore)

Particulars	2018-19	2019-20
Average Investment as per FD details submitted by the Petitioner	111.31	140.01
Interest on Bank Deposits as per Audited Accounts	6.39	7.21
Average Rate of Interest	5.74%	5.15%

As can be seen from above Tables, the average investment in FY 2018-19 is less than the surplus Normative Interest on Loan Capital remaining unpaid upto FY 2018-19, therefore, no adjustment in NTI of FY 2018-19 is required to be made. Similarly, in FY 2019-20 the average investment of Rs. 140.01 Crore is more than the surplus normative interest on loan capital upto FY 2019-20, i.e. Rs. 107.02 Crore, therefore the Commission is of the view that average interest earned on

excess investment shall be reduced from NTI of FY 2019-20 as follows:

Table 2.15 Investment out of RoE in FY 2019-20

Particulars	Amount (Rs. Crore)
Average Investment in FY 2019-20	140.01
Surplus Normative Interest on Loan Capital upto FY 2019-20	107.02
Excess Average Investment	32.99
Weighted Average rate of interest on Investments	5.15%
Interest earned out of investment of RoE	1.70

In view of above, the Commission allows reduction of NTI to the extent of Rs. 1.70 Crore in FY 2019-20. The actual amount of NTI as per financial statement submitted by the Petitioner for FY 2019-20 works out to Rs. 8.54 Crore, accordingly, the NTI for FY 2019-20 works out to Rs. 6.84 Crore against Rs. 0.08 Crore claimed by the Petitioner.

2.1.3.10 Annual Fixed Charges (AFC) for FY 2019-20

Based on the above analysis, the Commission has worked out the approved figures of Gross AFC for FY 2019-20 after truing up. The summary of Gross AFC for FY 2019-20 is as shown in the Table below:

Table 2.16: Annual Fixed Charges for FY 2019-20 (Rs. Crore)

Particulars	Approved in T.O. dated 27.02.2019	Claimed by the Petitioner	Approved after truing up
Depreciation	60.90	61.67	60.96
Interest on Loan & Financial Cost	83.61	321.54	87.65
Interest on Working Capital	0.00	31.10	0.00
O&M expenses	79.01	71.41	73.81
RoE	51.98	55.92	52.01
Total Annual Fixed Costs	275.50	541.64	274.42
NTI	0.04	0.08	6.84
Net AFC	275.46	541.56	267.58

Accordingly, trued-up AFC for FY 2019-20 works out to Rs. 267.58 Crore. The surplus for FY 2019-20 alongwith the carrying cost works out to Rs. 9.36 Crore, and the same shall be adjusted in the AFC of FY 2021-22.

2.1.4 Capacity Charge for FY 2019-20 and Energy Charge Rate (ECR) for FY 2019-20

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 2019-20.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Provided that in case of generating station or unit thereof or transmission system or an element thereof, as

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

Where,

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

NAPAF = Normative plant availability factor in percentage.

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

PAFY = Percent Plant availability factor achieved during the Year.

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

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

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

$$i = 1$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

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

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

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

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

For gas and liquid fuel based stations

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

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.

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

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

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

As discussed in the Commission's Order dated 05.04.2019, based on the report of the independent Consultant appointed for the purpose of determination of Gross Station Heat Rate of the gas based plants of M/s SEPL and M/s GIPL, the Commission approved the Design Station Heat rate as 1911.809 kCal/kWh and Gross SHR as 2007.4 kCal/kWh for the Petitioner's plant in accordance with the Regulations. Further, it is to be noted that SHR is a controllable factor which can be optimised through efficient operations. As per MYT Regulations, variation in respect of

controllable factor is subject to sharing of gain/loss, on account of efficient operation with respect of achievement of optimum actual SHR by the Petitioner. As per aforesaid Order dated 05.04.2019, the Petitioner will be eligible for incentive on account of lower SHR if the same is below 1988.05 kCal/kWh and disincentive if the actual SHR exceeds 2007.4 kCal/kWh, however, there will be no incentive or disincentive in the range of 1988.05 kCal/kWh to 2007.4 kCal/kWh. The relevant extract of the Order dated 05.04.2019 is as follows:

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

...

...

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

The Commission analysed the invoices raised by the fuel supplier for supply of fuel to the Petitioner's plant, Gross generation as well as net generation from the Petitioner's plant, and other relevant information, that was required to work out the actual SHR and actual Auxiliary Energy Consumption (AUX), of the respective years as per UERC Tariff Regulations, 2018 for the purpose of truing up of the Energy Charges for FY 2019-20.

The Commission on the basis of the documents/information submitted by the Petitioner

worked out the actual SHR as 1945.049 kCal/kWh for FY 2019-20, as against the normative SHR range, i.e. 1988.05 kCal/kWh to 2007.40 kCal/kWh approved by the Commission for the purposes of sharing of gain/losses on this account. Similarly, based on the energy generation data, the Commission worked out the actual auxiliary consumption as 2.234% for FY 2019-20, as against the Normative auxiliary consumption of 2.5% as provided in the Tariff Regulations. In accordance with the UERC Tariff Regulations, 2018, Auxiliary Energy Consumption and SHR are controllable factors, and, therefore, financial impact of efficiency/inefficiency on the performance of the generator on these counts is to be shared between the generator and distribution licensee.

As can be seen from above, for FY 2019-20, since the actual SHR, i.e. 1945.049 kCal/kWh is below the Normative SHR range approved by the Commission, and also the actual auxiliary consumption, i.e. 2.234% is lower than the Normative auxiliary consumption provided in the Regulations, therefore, sharing of gain/loss has been carried out for both the SHR and Auxiliary Consumption as per the Regulations. In accordance with the UERC Tariff Regulations, 2018, the detailed computation of actual performance parameters, i.e. SHR and Auxiliary Energy Consumption vis-à-vis norms approved by the Commission alongwith sharing of gain/losses is shown in the Table below:

Table 2.17: Truing-up of Energy Charge for FY 2019-20

Particulars		Unit	FY 2019-20
CVPF (Weighted average GCV of fuel)		Kcal/SCM	9,393.09
Gas Consumption (SM3)		SM3	28,12,00,622
Total Fuel cost including CGST claimed by the Petitioner under O&M expenses		Rs.	6,74,68,96,455
LPPF (Total Gas bill amount/ Total Gas taken during the month)		Rs./SM3	23.99
Gross annual Generation		MU	1,357.98
Energy Sent out	A	MU	1,327.64
Station Heat Rate (Actual)		kCal/kWh	1,945.049
Station Heat Rate (Normative)		kCal/kWh	1,988.050
Auxiliary Consumption (Actual)		%'age	2.23%
Auxiliary Consumption (Normative)		%'age	2.50%
Energy Charge Rate (Normative)	B	Rs./kWh	5.208
Energy Charge Rate (Actual)	C	Rs./kWh	5.082
Energy charges to be recovered at Normative ECR	$D=A*B$	Rs.	6,91,43,41,620
Energy charges to be recovered at Actual ECR	$E=A*C$	Rs.	6,74,70,59,162
(Gain)/Loss	$F=E-D$	Rs.	(16,72,82,459)
Sharing of Gain (1/3 of Gain)	$G=1/3*F$	Rs.	(5,57,60,820)
Energy Charge after sharing	$H=D+F$	Rs.	6,85,85,80,801
Energy Charge already claimed by SEPL	I	Rs.	6,97,87,85,554

Balance to be recovered or (refund)	J=H-I	Rs.	(12,02,04,753)
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Accordingly, based on the above Table, net amount to be refunded to UPCL on account of true-up of energy charges, works out to Rs. 12.02 Crore for FY 2019-20.

Further, the Commission observed that average delay in payment of bills by UPCL to the Petitioner is around 76 days. In this regard, the Commission is of the view that, carrying cost shall be calculated considering a period of 289 days only (365 days - 76 days) in FY 2019-20 for the purposes of true-up of energy charges of FY 2019-20. Further, w.r.t. carrying cost of FY 2020-21, the Commission observed that the invoices of the last quarter of FY 2019-20 only would have an impact in FY 2020-21 considering the average delay of 76 days discussed above. The delay attributable to FY 2020-21 works out to 16 days, 45 days, and 76 days on invoice for the month of January 2020, February 2020 and March 2020 respectively, and accordingly the average days for calculating the carrying cost for FY 2020-21 works out to 354 days. Accordingly, the energy charges to be refunded to UPCL by the Petitioner alongwith carrying cost works out to Rs. 14.07 Crore, which shall be adjusted by the Petitioner in twelve equal instalments starting from April' 2021 in the monthly invoices to be raised on UPCL.

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

3.1 Capital Cost

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

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

"The scope of 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 18.04.2020, on approval of AFC for FY 2020-21, had approved the AFC for FY 2020-21 based on the approved capital cost as on COD, i.e. 20.11.2016 and further additional capitalization allowed by the Commission in the subsequent Orders. The Petitioner, in the present Petition, has proposed revision of estimates for FY 2020-21 based on the audited accounts for FY 2019-20.

The Commission, in this Order, has carried out the Truing up for FY 2019-20 in accordance

with the UERC Tariff Regulations, 2018. In accordance with Regulation 12(3) of the UERC Tariff Regulations, 2018, the scope of annual performance review is limited to the revision of estimates for the ensuing year, if required, based on the audited financial results for the previous year and does not provide for the revision of estimates for the current year and give effect on this account in the estimates of the ensuing year. Accordingly, the Commission shall carry out the truing up of FY 2020-21 based on the audited accounts for that year and give effect on this account during the proceedings for determination of AFC for FY 2022-23.

Further, the Commission observed that the Petitioner has projected a substantial increase in O&M expenses for FY 2020-21 as compared to the actuals claimed for truing up of FY 2019-20, with major increase noticeable under the head Repair & Maintenance expenses. The Commission asked the Petitioner to submit reasons/justification for the same, in response to which the Petitioner submitted that the same is on account of Hot Gas Path Inspection for both the Gas Turbines. 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. 19.45 Crore in FY 2020-21 under the head Plant & Machinery (spares) amounting to Rs. 19.44 Crore and Furniture & Fixtures amounting to Rs. 0.01 Crore. The Petitioner submitted that the aforesaid claim under Plant & Machinery (spares) majorly includes expenditure related to initial spares and GT Inlet System.

The Commission in the Tariff Order dated 18.04.2020 had already discussed w.r.t. the capitalization of Initial Spares, the relevant portion of the Order dated 18.04.2020 is reproduced hereunder:

“The Commission has noted the submission made by the Petitioner and observed that the amount of Rs. 15.60 Crore claimed by the Petitioner under Plant & Machinery (Spares) is an estimated amount and is not backed up by any firm contract/purchase order for the same. The Petitioner has itself submitted that final amount may vary based on the proposals from relevant suppliers at the time of actual procurement. Accordingly, continuing with the methodology adopted by the Commission in the Tariff Order dated 27.02.2019, the capitalization of spares shall be considered based on actual expenditure in the year of purchase, after prudence check and in accordance with the Regulations.”

Further, w.r.t. GT Inlet system the Commission has already granted in principle approval

for the same in Tariff Order dated 18.04.2020, the relevant portion of the Order dated 18.04.2020 is reproduced hereunder:

"In view of the above, the Commission, considering the need and expected benefit arising out of the said installations, grants in-principle approval for the proposed works related to Gas Turbine Inlet Air-Filtration system & Fogging/Water Spray System amounting to a total of Rs. 3.70 Crore for the two GT's, and based on the prudence analysis of the actual cost incurred, the same shall be allowed at the time of truing up of the respective year in which the said expenditure is capitalized in the books of accounts of the Petitioner. 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 Commission has gone through the submission of the Petitioner, and regarding additional capitalization in FY 2020-21, the Commission is of the view that the same shall be allowed at the time of truing-up of FY 2020-21 based on the actual expenditure 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 third Control Period vide Order dated 27.02.2019 and subsequent orders of the Commission as discussed above.

4. Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Revised ARR & Tariff for FY 2021-22

4.1 Annual Performance Review

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

Regulation 12(3) of the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018 specifies as under:

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

- a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;*
- b) Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors).*
- c) Revision of estimates for the current and/or ensuing financial year, if required, based on audited financial results for the previous financial year;*
- d) Computation of the sharing of gains and losses on account of controllable factors for the previous year.*

"

The Commission, vide its Tariff Order dated 27.02.2019, on approval of Business Plan and MYT Petition for the third Control Period from FY 2019-20 to FY 2021-22 approved the AFC for the third 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, 2018. The Petitioner, in this Petition, proposed revision of estimates for FY 2021-22 based on the

audited accounts for FY 2019-20 and revised estimates for FY 2020-21.

The Commission, in this Order, has carried out the Truing up for FY 2019-20 for the Petitioner's 225 MW CCPP in accordance with the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2018. Further, the Commission, under the provisions of Regulation 12(3) of the UERC Tariff Regulations, 2018, has revised the AFC for FY 2021-22. The approach adopted by the Commission in the approval of each element of ARR for FY 2021-22 is elaborated in the subsequent paragraphs.

4.2 Physical Parameters

4.2.1 NAPAF

Regulation 47 of UERC Tariff Regulations, 2018 specifies as under:

“(1) Normative Annual Plant Availability Factor (NAPAF):

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

Also, as discussed in the Tariff Order dated 24.10.2017, the Commission while approving the PPA for the Petitioner's plant approved the NAPAF as follows:

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

Accordingly, the Commission is of the view that the NAPAF of 85% approved for FY 2021-22 in the Tariff Order dated 27.02.2019 for third Control Period shall continue to be applicable without any change for FY 2021-22.

4.2.2 Design Energy, Auxiliary Energy Consumption and Saleable Primary Energy

The Petitioner in its Petition has projected energy generation from its 225 MW CCPP as approved for FY 2021-22 in the Tariff Order dated 27.02.2019 for the third Control Period.

Accordingly, the Commission approves saleable primary energy after deducting the normative auxiliary consumption of 2.5% as 1553.61 MU for FY 2021-22.

4.3 Financial Parameters

4.3.1 Additional Capitalisation

The Commission vide its Tariff Order dated 27.02.2019 on approval of the Business Plan and Tariff Petition of the Petitioner for the third Control Period from FY 2019-20 to 2021-22, had decided to consider the additional capitalisation at the time of truing up of the respective years based on the actual expenditure as per the audited accounts in accordance with the prevailing Regulations as amended from time to time.

In the present Petition, the Petitioner has claimed Nil additional capitalisation in FY 2021-22. 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 27.02.2019, the capitalization, if any, shall be considered based on actual expenditure in the relevant year, after prudence check and in accordance with the Regulations.

Accordingly, the Commission approves nil additional capitalisation for FY 2021-22. The capital cost worked out as on 31.03.2020, i.e. Rs. 1194.06 Crore after considering the net additional capitalisation approved for FY 2019-20 has been considered as opening capital cost for FY 2020-21. Further, as discussed above and in Chapter 3 of this Order, no additional capitalisation has been considered for FY 2020-21 which shall, however, be reviewed at the time of truing up of the respective financial year.

4.3.2 Depreciation

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

“28. Depreciation

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

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

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

...

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

..."

As regards the depreciation for FY 2021-22, the Commission has determined the depreciation considering the approved GFA base and asset class wise rates of depreciation specified in UERC Tariff Regulations, 2018. Accordingly, the depreciation approved by the Commission for FY 2021-22 is as shown in the Table given below:

Table 4.1: Depreciation Charges for FY 2021-22 (Rs. Crore)

Particular	Approved in MYT Order dt. 27.02.2019	Claimed	Approved in this Order
Depreciation	60.90	62.86	60.96

4.3.3 Return on Equity

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

"26. Return on Equity

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

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

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

..."

The Petitioner has proposed additional capitalisation of Rs. 19.45 Crore for FY 2020-21. The Petitioner has considered the proposed additional capitalisation while claiming return on equity for the FY 2021-22. As discussed earlier, the additional capitalisation will be approved based on the actual expenditure 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 2021-22. Details of the Return on Equity claimed and approved is as follows:

Table 4.2: Return on Equity for FY 2021-22 (Rs. Crore)

Particulars	Approved in MYT Order dated 27.02.2019	Claimed	Approved in this Order
Return on Equity	51.98	56.82	52.02

4.3.4 Interest on Loans

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

“27. Interest and finance charges on loan capital and on Security Deposit

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

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

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

...

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available 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.

...”

As discussed in Chapter 2 of this Order, the Petitioner submitted that it had applied to the Financial Institutions in India towards refinancing of the Term Loans at substantially cheaper rate of interest, and the most tangible benefit shall accrue to its Project at the time of re-financing as the interest cost on the total loans taken by the Petitioner shall be at a reduced rate. The Petitioner

submitted that this step is simultaneous to the refinancing process and the benefit shall accrue immediately on the discharge of loans of ACRE and Aditya Birla ARC, and it expects the refinancing process to be completed by July/ Aug 2021 post which the loans shall continue to reflect in the books on normative basis and shall only pertain to the Refinancing Lender on actuals in relation to the respective Phases of the Project.

The Commission noted the submission of the Petitioner and is of the view that since the Petitioner is in the process of refinancing its loan, which it expects to conclude in July/ August 2021, therefore, the actual impact on rate of interest for ensuing years could not be worked out at this stage. Hence, interest rate of 12.37% as approved by the Commission for truing up of FY 2019-20 as discussed in previous paras of this Order has been considered for working out the interest on normative loan for FY 2021-22.

The Commission has considered the closing loan balance for FY 2020-21 as the opening loan balance for FY 2021-22. As discussed above, 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 2021-22. The Commission has considered the normative repayment equivalent to the approved depreciation for FY 2021-22. The interest rate of 12.37%, as discussed above, has been considered to compute the interest on the average loan balance for FY 2021-22 which shall, however, be reviewed at the time of truing up of FY 2021-22.

Accordingly, the interest on loan approved by the Commission for FY 2021-22 is as shown in the Table given below:

Table 4.3: Interest on Loan for FY 2021-22 (Rs. Crore)

Particular	Approved in MYT Order dt. 27.02.2019	Claimed	Approved in this Order
Interest on Loan	68.75	192.51	69.76

4.3.5 Operation and Maintenance expenses

Regarding the Operation and Maintenance expenses, Regulation 48(1) of the UERC Tariff Regulations, 2018, specifies as follows:

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

(In Rs. Lakh/MW)

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

“

Accordingly, the normative O&M expenses approved for FY 2021-22 in the Tariff Order dated 27.02.2019 for third 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 2021-22 are as follows:

Table 4.4: O&M Expenses for FY 2021-22 (Rs. Crore)

Particulars	Approved in Tariff Order dt. 27.02.2019	Claimed	Approved in this Order
O&M Expenses	90.18	90.18	90.18

However, the Petitioner is advised to exercise due prudence and reasonableness while incurring the O&M expenses for FY 2021-22. Any unreasonable or imprudent expenditure will not be allowed to be pass through in tariffs.

4.3.6 Interest on Working Capital

The Petitioner submitted that as per the terms of PPA and Orders issued by the Commission, UPCL was required to make the payment towards the invoices raised by the Petitioner within 3 working days. However, due to delay in payment of the said invoices beyond the prescribed time frame, the Petitioner has incurred interest on Working Capital and has, accordingly, claimed the same as part of AFC for FY 2021-22.

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

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

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

- c) *Operation and maintenance expenses for one month;*
- d) *Maintenance spares @ 30% of operation and maintenance expenses; and*
- e) *Receivables equivalent to 2 (two) months of Capacity Charge and Energy Charges for sale of electricity calculated on NAPAF duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel.*

The Petitioner in its Petition has claimed an amount of Rs. 16.26 Crore and Rs. 25.33 Crore respectively for FY 2020-21 and FY 2021-22 as interest on working capital.

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. However, based on the submission made by the Petitioner, it appears that UPCL is not complying with the directions issued by the Commission in the matter. In this regard, as discussed in Chapter 2 of this Order, the Petitioner has filed a separate Petition in the matter on which necessary directions have been given vide Commission's Order dated 23.03.2021.

Accordingly, in line with the decision taken in the Tariff Order dated 24.10.2017 and aforesaid discussions, the Commission has not considered any interest on working capital while approving the AFC for FY 2021-22 for the Petitioner's plant.

4.3.7 Non-Tariff Income

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

"46. Non Tariff Income

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

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

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

- a) Income from rent of land or buildings;*
- b) Income from sale of scrap;*

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

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

The Petitioner has proposed Non-Tariff income (NTI) of Rs. 0.04 Crore for FY 2021-22. The Commission provisionally accepts the NTI projected by the Petitioner for FY 2021-22, however, the same shall be trued up based on the actual audited accounts for the year.

Table 4.5: Non-Tariff Income for FY 2021-22 of Third Control Period (Rs. Crore)

Particulars	Approved in MYT Order dt. 27.02.2019	Claimed	Approved in this Order
NTI	0.04	0.04	0.04

4.3.8 Annual Fixed Charges, Capacity Charge & Energy Charge Rate (ECR) for FY 2021-22

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

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

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

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

calendar month shall be calculated in accordance with the following formulae:

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

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

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

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

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

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

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

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

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

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

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

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

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

Where,

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

NAPAF = Normative plant availability factor in percentage.

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

PAF_Y = Percent Plant availability factor achieved during the Year.

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

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

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

Where,

AUX = 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."*

The Commission, in order to arrive at the net AFC has adjusted the Non-Tariff Income from the gross AFC approved for FY 2021-22. The summary of Annual Fixed Charge approved by the Commission for FY 2021-22 of the third Control Period is given in the Table below:

Table 4.6: Approved AFC for FY 2021-22 (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 2019-20	Net AFC
60.96	69.76	0.00	90.18	52.02	272.93	(-) 0.04	(-) 9.36	263.53

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, 2018.

Further, the Commission observed that actual Gross Station Heat Rate of the Petitioner's plant during the past years as approved by the Commission is 1998.406 kCal/kWh, 1969.820 kCal/kWh and 1945.049 kCal/kWh for FY 2017-18, 2018-19, and FY 2019-20 respectively. The Commission had been allowing recovery of energy charges to the Petitioner through periodic billing on UPCL, considering the Gross Station Heat Rate (GSHR) equivalent to 2007.4 kCal/kWh in line with the Commission's Order dated 05.04.2019. The relevant extract of the Order dated 05.04.2019 is reproduced hereunder:

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

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 true-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.

Based on the above discussion, capacity charges and energy charges for FY 2021-22 shall be recovered by the Petitioner from the Respondent corresponding to the contracted capacity in accordance with UERC Tariff Regulations, 2018.

(M.K. Jain)
Member (Technical)

(D.P. Gairola)
Member (Law)