

Order

On

**True up for FY 2015-16 & FY 2016-17,
Annual Performance Review
for FY 2017-18**

&

Revised ARR for FY 2018-19

For

M/s Gama Infraprop Pvt Ltd.

March 21, 2018

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.: 63 of 2017

In the Matter of:

Petition filed by M/s Gama Infraprop Private Limited for True up for FY 2015-16 & FY 2016-17, Annual Performance Review for FY 2017-18 and Revised ARR for FY 2018-19.

In the Matter of:

M/s Gama Infraprop Pvt. Ltd.

M-3 (First Floor), Hauz Khas,

Aurobindo Marg, New Delhi- 110016

...Petitioner

AND

In the Matter of:

Uttarakhand Power Corporation Ltd.

Urja Bhawan, Kanwali Road, Dehradun

...Respondent

Coram

Shri Subhash Kumar

Chairman

Date of Order: March 21, 2018

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, 2011 (hereinafter referred to as "UERC Tariff Regulations, 2011") for the first Control Period from FY 2013-14 to FY 2015-16 and Uttarakhand Electricity Regulatory Commission (Terms

and Conditions for Determination of Multi Year Tariff) Regulations, 2015 (hereinafter referred to as "UERC Tariff Regulations, 2015") for the second Control Period from FY 2016-17 to FY 2018-19 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued the Order on approval of Business Plan and Multi Year Tariff dated May 16, 2017 from COD, i.e. 16.03.2016 to 31.03.2016 and for the second Control Period from FY 2016-17 to FY 2018-19. As per the provisions of Regulation 12 of the UERC Tariff Regulations, 2015, M/s Gama Infraprop Pvt. Ltd. (hereinafter referred to as "M/s GIPL" or "the Petitioner" or "the Generator") filed the Petition (Petition No. 63 of 2017 and hereinafter referred to as the "Petition"), giving details of its revised projections of Aggregate Revenue Requirement (ARR) for FY 2018-19, based on the true up for FY 2016-17 and Annual Performance Review for FY 2017-18 on 29.11.2017.

It was observed from the Petition filed by M/s GIPL that it had not filed the information for the true-up for FY 2015-16 whereas the Commission vide its Tariff Order dated 16.05.2017 had determined the Tariff for FY 2015-16 and for the second Control Period from FY 2016-17 to FY 2018-19. Accordingly, this deficiency along with other certain infirmities/deficiencies were informed to the Petitioner vide Commission's letter no. UERC/6/TF-435/17-18/2017/1420 dated 07.12.2017 and the Petitioner was directed to rectify the said infirmities in the Petition and submit certain additional information necessary for admission of the Petition. M/s GIPL vide its letter no. GIPL/UPCL/03/2017 dated 19.12.2017 removed critical deficiencies. Based on the submission dated 19.12.2017 made by M/s GIPL, the Commission provisionally admitted the Petition for further processing subject to the condition that M/s GIPL shall furnish any further information/clarifications as deemed necessary by the Commission during the processing of the Petition, as may be stipulated by the Commission, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

This Order, accordingly, relates to the Petition filed by M/s GIPL for true up for FY 2015-16 & FY 2016-17, APR for FY 2017-18 and revised ARR for FY 2018-19 and is based on the original as well as all the subsequent submissions made by M/s GIPL during the course of the proceedings and the relevant findings contained in the Tariff Order dated 16.05.2017.

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 Aggregate Revenue Requirement of M/s GIPL is recoverable from the beneficiary, i.e. UPCL. It is the endeavour of the Commission, to issue Tariff Orders for M/s GIPL concurrently with the issue of Order on retail tariffs for UPCL, so that UPCL is able to honour the payment liability towards generation charges of M/s GIPL. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

Chapter 1 - Background and Procedural History

Chapter 2 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2015-16 & FY 2016-17

Chapter 3 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2017-18 & Revised ARR for FY 2018-19

1 Background and Procedural History

M/s GIPL is a company incorporated under the Companies Act, 1956. M/s GIPL is a generating company falling within the definition under sub-section 28 of Section 2 of the Electricity Act (the Act) and has developed a 214 MW gas based CCPP comprising of two gas turbine generator (GTG), each having a gross output of about 71 MW at site conditions, two heat recovery steam generators (HRSG) and one common steam turbine generator (STG) of about 72 MW capacity. The heat content of the exhaust gas from each of the gas turbine would be recovered from the associated dual pressure non reheat horizontal heat recovery steam generators (HRSG). The steam generated would then be expanded in a condensing type non-reheat steam turbine which drives an electric generator.

The name plate capacity of the gas based Power Station is 225 MW (ISO condition) which comprises of two GTGs, each having a gross output of about 76 MW, and one common steam turbine generator (STG) of about 73 MW. However, at site conditions the power plant will have a gross capacity of 214 MW. The Project is designed to use natural gas/Re-Gasified Liquefied Natural Gas (R-LNG) as the main fuels for power generation.

The Petitioner due to shortage of gas fuel allocation could not commission its plant which remained stranded for considerable duration until the Scheme for utilization of gas based power generation capacity was implemented by the Ministry of Power, Government of India vide OM No. 4/2/2015 - Th-1 dated 27.03.2015 (the "Scheme"). Subsequently, Power System Development Fund Support Agreement (PSDF Support Agreement) dated 18.09.2015 was signed between Government of India and the Petitioner and other agreements were executed pursuant to the requirements under the scheme.

The Petitioner had executed a PPA for 107 MW capacity with the State licensee, i.e. UPCL and had initiated commercial operation of its one gas turbine and one steam turbine w.e.f. 16.03.2016. The Petitioner had filed a Petition for determination of tariff for supply of power from its 214 MW Gas based Kashipur Combined Cycle Power Plant (hereinafter referred to as "the Project") to UPCL from COD, i.e. 16.03.2016 to 31.03.2016 and for the second Control Period from FY 2016-17 to FY 2018-19. 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.

Subsequently, the Commission vide its Tariff Order dated 16.05.2017 approved the Business Plan and Multi Year Tariff for M/s GIPL for contracted capacity from 16.03.2016 to 31.03.2016 and for the second Control Period from FY 2016-17 to FY 2018-19. The Commission, in the approval of Business Plan, approved the Capital Expenditure Plan, Capitalisation Plan, Human Resource Plan and Trajectory of the performance parameters and, in the approval of MYT, approved the Aggregate Revenue Requirement for each year of the Control Period from FY 2016-17 to FY 2018-19. In accordance with Regulation 12 of the UERC Tariff Regulations, 2015, the Generating Company is required to file a Petition for Annual Performance Review by November 30 of every year.

In compliance with the Regulations, M/s GIPL filed its Petition for Annual Performance Review for FY 2017-18 on 29.11.2017. Through the above Petition, M/s GIPL sought true up for FY 2016-17, APR for FY 2017-18 and ARR for FY 2018-19 based on the audited accounts for FY 2016-17. The Commission vide its letter no. UERC/6/TF/435/17-18/2017/1420 dated 07.12.2017 informed the Petitioner that it had not submitted the relevant information in accordance with the Tariff Regulations, 2015 for the true-up of FY 2015-16. M/s GIPL was directed to rectify the said infirmities alongwith the other certain deficiencies in the Petition and it was required to submit certain additional information necessary for admission of the Petition. M/s GIPL vide its letter no. GIPL/UPCL/03/2017 dated 19.12.2017 removed the critical deficiencies. Based on the submission dated 19.12.2017 made by M/s GIPL, the Commission provisionally admitted the Petition.

Meanwhile, based on the scrutiny of the Petition submitted by M/s GIPL, the Commission vide its letter no. UERC/6/TF-435/17-18/2018/1604 dated 16.01.2018, pointed out certain data gaps in the Petition and sought following additional information/clarifications from the Petitioner:

- Copy of primary fuel invoices raised by Gas supplier, i.e. GAIL.
- Supporting documents w.r.t. repayment of principal amount, interest claimed and payment of interest for FY 2015-16 and FY 2016-17.
- Details of bills of Additional capitalisation claimed for FY 2016-17.
- Utilisation of funds
- Copy of all invoices raised to UPCL.

- Basis of claimed Interest on Working Capital.

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 Gama Infraprop Pvt. Ltd., the Commission sent the copy of the tariff proposals to UPCL vide letter No. UERC/6/TF-435/17-18/2017/1524 dated 24.12.2017. UPCL vide its letter No. 497/UPCL/Com/GG-3/D(F) dated 06.02.2018 requested the Commission to allow additional four weeks time to filing its comments.

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

The submissions made by M/s GIPL in the 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 2015-16 and FY 2016-17

2.1 Applicability of Regulations

Regulation 1(3) of Tariff Regulations, 2011 specifies as under:

"These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from FY 2013-14, i.e. April 1, 2013 onwards up to FY 2015-16, i.e. March 31, 2016. However, for all purposes including the review matters pertaining to the period till FY 2012-13, the issues related to determination of tariff shall be governed by following Regulations including amendments thereto."

Regulation 1(3) of Tariff Regulations 2015 specifies as follows:

"These Regulations shall be applicable for determination of tariff in all cases covered under these Regulations from FY 2016-17, i.e. April 1, 2016 onwards up to FY 2018-19, i.e. March 31, 2019. Provided, all new Projects commissioned after the notification of these Regulations shall be governed by the provisions of these Regulations."

Proviso of Regulation 1(3) of UERC Tariff Regulations, 2015 notified on 10.09.2015 specifies that all new Projects commissioned after the notification of the Regulations shall be governed by the provisions of the said Regulations. The 1st Unit of the Petitioner's plant was commissioned on 16.03.2016, accordingly, for the purpose of determination of tariff, all the provision of UERC Tariff Regulations, 2015 have been applied.

Regulation 12 of the UERC Tariff Regulations, 2015 specifies as follows:

"12. Annual Performance Review

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

(2) The Applicant shall under affidavit and as per the UERC (conduct of Business) Regulations 2004 make an application for Annual Performance Review by November 30th of every year;

...

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

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

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

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

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

In its present filing, the Petitioner has submitted the data relating to its expenses and revenues for FY 2015-16 and FY 2016-17 for the contracted capacity of the generating station based on the audited accounts and has, accordingly, requested the Commission to carry out the truing up for FY 2015-16 and FY 2016-17 alongwith the sharing of gains and losses.

2.2 Impact of Sharing of Gains and Losses on account of Controllable Factors for FY 2015-16 and FY 2016-17

Regulation 14 of the UERC Tariff Regulations, 2015 specifies as follows:

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

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

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

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

The UERC Tariff Regulations, 2015 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 impact of uncontrollable factors.

O&M expenses comprises of the major portion of AFC of M/s GIPL and are within the control of the Petitioner and, moreover, in accordance with UERC Tariff Regulations, 2015 these are controllable expenses. Similarly, in accordance with the UERC Tariff Regulations, 2015, the variation in working capital requirements is also a controllable factor. However, as discussed in Tariff Order dated 16.05.2017, the interest on working capital (IWC) was not included in the annual fixed charges (AFC) allowable to the Petitioner based on the Petitioner's submission that it intends to forego the same in case UPCL does not charge rebate on their energy bills. Further, M/s GIPL in the current Petition has requested the Commission to approve the actual interest paid to bank and gas supplier on account of delayed payment made by UPCL. The same has been dealt in the subsequent Para of this Order. 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, 2015.

2.2.1 Physical Parameters

2.2.1.1 NAPAF

The Commission vide its Order dated 20.07.2016 on approval of PPA for the Petitioner's plant approved the definition of NAPAF, as per 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 16.05.2017 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 2015-16 and FY 2016-17, therefore, during the currency of the Scheme NAPAF

and actual PAFM in respect of the Petitioner's plant will not have any implication since the recovery of the AFC is allowed in accordance with the ceiling rate provided under the Scheme. Accordingly, the Commission is of the view that the NAPAF of 85% approved for FY 2015-16 & FY 2016-17 in the Tariff Order dated 16.05.2017 for second Control Period shall continue to be applicable without any change.

2.2.1.2 Energy Generation and Saleable Primary Energy

The Commission in its Tariff Order dated 16.05.2017 on approval of Business Plan and Multi Year Tariff for the second Control Period from FY 2016-17 to FY 2018-19 had approved the Design Energy based on the contracted capacity of 107 MW. Further, in accordance with the Regulation 47(4)(i) of the Tariff Regulations, 2015 auxiliary consumption of 2.5% has been considered. Accordingly, applying the NAPLF of 85% as specified in the Regulations and reducing the auxiliary power, the saleable energy works out as 778.93 MU for FY 2015-16 and 776.80 MU for FY 2016-17. M/s GIPL has not sought any deviation in the approved saleable energy for FY 2015-16 and FY 2016-17. Accordingly, the Commission decides to maintain the design energy and saleable primary energy as considered in the Tariff Order dated 16.05.2017 for the Petitioner's plant.

2.2.2 Financial Parameters

2.2.2.1 Capital Cost and Additional Capitalisation

Regulation 22(1) of UERC Tariff Regulations, 2015 specifies as under:

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

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

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

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

"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2016 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 Commission, vide its Tariff Order dated 16.05.2017 had approved the Opening GFA amounting to Rs. 388.96 Crore for the contracted capacity of 107 MW as on the date of Commissioning of the 1st Unit of the generating plant and no additional capitalisation had been allowed for the second Control Period. In the present Petition, the Petitioner has also considered the same opening capital cost for the purpose of truing up of FY 2015-16. Accordingly, the opening Capital cost of Rs. 388.96 Crore has been considered for the purpose of truing up of FY 2015-16. Further, as per audited accounts for FY 2015-16, there is no addition or deletion of the assets. Hence, opening capital cost of Rs. 388.96 Crore for FY 2015-16 has been considered as opening capital cost for FY 2016-17.

In its Petition, the Petitioner claimed an additional capitalisation of Rs. 31.87 Crore against the addition of Rs. 8.87 Crore for FY 2016-17 as per audited annual accounts. It was observed from the Petitioner's submission that the Petitioner had transferred certain items/expenses from 'Repair & Maintenance expenses' (R&M expenses) to Additional capitalisation. The Commission sought justification for the same and directed the Petitioner to submit the Contracts, Purchase Order (PO)/Work Orders (WO) alongwith the copy of the invoices for additional capitalisation claimed. In its reply, the Petitioner submitted the PO/WO & invoices and also submitted that during FY 2016-17, total expenses of Rs. 25.54 Crore were incurred under R&M expenses (plant & machinery) out of which Rs. 2.40 Crore were adjusted towards receipt of revenue from insurance company towards the claim of the damages. Details of the same is as follows:

Table 2.1: Details of Insurance Claim

Particular	Amount (Rs. In Crore)
Damage of Front Bearing	2.21
Damage of Turbine Clutch	0.08
Rotor Breakdown	0.11
Total	2.40

The same was also not accounted in the revenue as per the accounting standards. Accordingly, the balance amount of Rs. 23.14 Crore was charged under the head R&M expenses (plant and machinery) as per audited financial statement for FY 2016-17. The Petitioner further submitted that since the work was carried out after the COD, the expenses incurred were considered as Revenue Expenditure as per the accounting procedures and standards, however, out of this total amount of Rs. 25.54 Crore, since an expense of Rs. 20.69 Crore pertains to the original scope of work, hence, should be considered as capital expenditure as per Regulation 22(1). Subsequently, the Petitioner vide submission dated 29.01.2018 claimed additional capitalization of Rs. 24.47 Crore, inclusive of certain expenses charged to Repair and Maintenance.

The Commission while scrutinizing the PO/WO and R&M expenses has observed that certain expenditure were of the capital nature pertaining to Plate Heat Exchanger, Chemical Dosing System, initial spares and other expenses which were commissioning related expenditure pertaining to balance & retention payments made to the contractors. Accordingly, the Commission has decided to consider the same as additional capitalisation and directs the Petitioner to carry out the necessary corrections in its accounts of FY 2017-18 to this effect.

With regard to procurement of initial spares, Commission vide Tariff Order dated 16.05.2017 had taken a view that the capitalization pertaining to spares shall be approved as per actual. The relevant Para of the said Order is as follows:

“No amount on account of Additional Capitalisation has been allowed for the purpose of tariff determination. However, the same will be allowed at the time of truing up based on the audited accounts and as per prevailing Regulations.”

Regulation 21(11) of UERC Tariff Regulations, 2015 specifies as follows:

“Initial Spares: Initial spares shall be capitalized subject to the following ceiling norms as a percentage of the Plant and Machinery cost as per actuals upto the cut-off date:

- (i) Thermal generating stations - 4.0%

- (ii) Hydro generating stations - 4.0%
- (iii) Transmission System
 - (a) Transmission line - 1.00%
 - (b) Transmission Sub-station - 4.00%

As per the above stated Regulation, the initial spares shall be capitalized as per actual expenditure incurred subject to ceiling limit specified upto cut-off date. The Petitioner has claimed initial spares of Rs. 1.54 Crore in FY 2016-17 which falls within the aforesaid specified ceiling limit. Further, it is to be noted that the spares are procured for the uninterrupted functioning of any equipment in case of breakdown/failure and at present only 50% of the plant is functioning and balance is unutilised and not generating power. Therefore, the Commission is of the view that such spares has been procured for the smooth functioning of the contracted capacity, hence, the same has been allowed as additional capitalisation.

With regard to capitalisation pertaining to undischarged liability, it is to be noted that the Commission vide its Tariff Order dated 16.05.2017 has apportioned the capital cost worked out for the entire plant based on the contracted capacity. The relevant extract of the Order is as follows:

".....In this regard, the Commission is of the view that allocation of overall capital cost of the plant to 107 MW tied up with the Respondent should be based on the contracted capacity tied-up with it only. Hence, the Commission is of the view that only 50% of the worked out capital cost should be charged for the contracted capacity i.e. 107 MW and the remaining capital cost may be recovered by the Petitioner through the arrangement, done for the balance 50% capacity. Accordingly, the Commission has considered 50% of the hard cost arrived for the elements for 107 MW capacity of the Plant."

The capitalization claimed as undischarged liability are in the nature of commissioning expenses and, accordingly, has been allowed following the same methodology as followed at the time of apportionment of the entire plant's capital cost between the contracted capacity and balance capacity. Further, as per audited books of accounts there is a de-capitalisation amounting to Rs. 0.68 Crore in Plant & Machinery. The Commission based on the aforesaid methodology has considered 50% of such de-capitalisation. Moreover, since the Petitioner has filed on Appeal before Hon'ble ATE against the Commission's Tariff Order dated 16.05.2017, wherein one of the issue agitated is the basis of apportionment of capital cost, the Commission does not find it prudent to change the methodology pending the outcome of the Appeal.

Further, as mentioned earlier, the Petitioner has received an amount of Rs. 2.40 Crore from the insurance company on account of loss of Profit. The Petitioner has reduced 50% of the amount received from insurance company from the total capitalisation claimed. It is pertinent to mention that the Commission vide its Tariff Order dated 16.05.2017 has considered the 50% of the cost of the capital cost worked out for the entire plant. Accordingly, the Commission in the present Petition has also considered only 50% of the amount received from the insurance company on account of damage.

Accordingly, based on the above discussion, details of the additional capitalization claimed and approved, inclusive of capital nature expenditure charged to R&M expenses are as follows:

Table 2.2: Additional Capitalisation Claimed and Approved for FY 2016-17 (Rs. Crore)

Description	Capitalisation claimed for contracted capacity	Capitalisation approved for contracted capacity
Spare-Supply of Plate Heat Exchanger NT150S HV, 121PL, SS316, 0.6, NBR	0.04	0.04
Spare-Ball Valve and Ball valve flanges	0.03	0.03
Spare-MS Profile Sheet	0.01	0.01
Spare-Measurement of CO ₂ , O ₂ , NO ₂ & CO emissions by pre-calibrated Portable Gas Analyser for continuous/discrete monitoring for GT-1	0.03	0.03
Spare-Phenanthroline Monohydrate Fisher, EDTA Disodium Salt Chemicals	0.01	0.01
Work for Erection of Power cycle Piping - Fabrication and erection of Support of material	0.05	0.02
Advisory Charges for Gas Plant	0.02	0.01
Chemical Dosing System	0.08	0.04
Engineering consultancy	0.02	0.01
Turbine Insulation work with supply of fiber mat including looping line	0.04	0.02
Work for Erection of Power cycle Piping	0.04	0.02
Desuperheaters DSH-1	0.04	0.02
Fabrication and installation of duct, insulation of old duct, commissioning of HVAC	0.03	0.01
Spares for ST	0.04	0.04
Spares-Bearing & Bearing Housing & Bolt Heating Device	0.36	0.36
Spares for GT, Raft & Cartage	0.03	0.03
Commissioning of GT-1 of 225 MW Gas based Power Plant	4.35	2.18
Spare-Supply of GT Spare of 225 MW Gas Based Power Plant	0.03	0.03
Commissioning of GT-2 of 225MW Gas Based Power Plant	-	-
Spare-Supply of GT Spare of 225 MW Gas Based Power Plant	0.16	0.16
Commissioning of GT-1 Auxiliary 225 MW Gas Based Power Plant	0.51	0.25
Commissioning of SFC Auxiliary 225 MW Gas Based Power Plant	0.34	0.17
Commissioning of GCB System of 225 MW Gas based Power Plant	1.02	0.51
Commissioning of ACC System for 225 MW Gas Based Power Plant	0.61	0.31
C&F charges	0.01	0.01

Commissioning of HRSG for 225 MW Gas Based Power Plant	6.10	3.05
Commissioning of BOP Machinery of GT-1 of 225 MW Gas Based Power Plant	9.17	4.58
Commissioning of Electrical Transformers for 107 MW for 225 MW Gas Power Plant	1.14	0.57
Spare - Supply of Spare for 107 MW Power Plant	0.36	0.36
Spare-330XL Probe	0.00	0.004
Flame Detector and Gas Detector Sensor	0.10	0.10
Spares for GT	0.01	0.01
Supply of Breakers Spare of 225 MW Gas based Power Plant	0.17	0.17
Differential Expansion Prob, Extension Cable, Pro-meter for Radial Vibration Generator Drive End Redial Transient Data Interface Module etc.	0.10	0.10
Commissioning of 415 V Transformer for 225MW Gas Based Power Plant	0.17	0.09
Supply of GT Spare of 225 MW Gas Based Power Plant	0.05	0.05
Power System Study Network Analysis and Relay Coordination	0.06	0.03
Supply of Fire Fighting for 225 MW Gas Based Power Plant	0.13	0.07
Lab instruments Micro process Based Universal Temperature & Pressure Indicator's	0.05	0.03
Commissioning of Switchyard for 225MW Gas Based Power Plant	0.16	0.08
Total (A)	25.68	13.61
Assets Written off (B)	0.47	0.47
Total (C)=(A)-(B)	25.21	13.14
Other Assets (Civil work, Office equipments, Computer and Vehicles) (D)	0.46	0.46
Insurance amount received (E)	1.20	1.20
De-Capitalisation (F)	0.00	0.34
Total (D)-(E)-(F)	24.47	12.06

Based on the above discussions, Asset wise detail of capital cost and approved additional capitalisation is as follows:

Table 2.3: Detail of capitalisation for FY 2015-16 and FY 2016-17 (Rs. Crore)

Particulars	Opening Capital cost as approved in Tariff Order dated 16.05.2017	Add Cap during FY 2015-16	Opening Capital cost as on 01.04.2016	Add Cap during FY 2016-17	Closing Capital Cost as on 31.03.2017
	(A)	(B)	(C)=(A)+(B)	(D)	(E)=(C)+(D)
Freehold Land	6.76	0.00	6.76	0.00	6.76
Civil Works	28.89	0.00	28.89	0.21	29.10
Plant & Machinery	352.76	0.00	352.76	11.60*	364.37
Furniture and Fixtures	0.21	0.00	0.21	0.00	0.21
Office Equipment & Others	0.06	0.00	0.06	0.02	0.09
Computers	0.02	0.00	0.02	0.01	0.03
Vehicles	0.25	0.00	0.25	0.22	0.47
Total	388.96	0.00	388.96	12.06	401.02

*adjusting 50% of de-capitalisation i.e. Rs. 0.68 Crore.

2.2.2.2 Capital Structure

Regulation 24 of UERC Tariff Regulations, 2015 specifies as under:

“(1) For a project declared under commercial operation on or after 1.4.2016, debt-equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as normative loan. Where actual equity employed is less than 30%, the actual equity would be used for determination of Return on Equity in tariff computations.

....”

The Commission vide its Tariff Order dated 16.05.2017 had approved the Debt-Equity Ratio of 80.64:19.36 as on the date of commercial operation which has been considered in the present Petition also. Further, as mentioned earlier, the Petitioner has not claimed any additional capitalisation for FY 2015-16 and for the capital structure pertaining to additional capitalisation for FY 2016-17, the Petitioner has submitted that the entire funding for additional capitalisation has been done through debt only. Accordingly, based on the aforesaid Regulation, nil equity has been considered for the purpose of additional capitalisation.

Capital structure for the capital cost as on COD and additional capitalisation for FY 2015-16 and FY 2016-17 is as follows:

Table 2.4: Financing for capitalisation for FY 2016-17

Particular	Approved as on COD		FY 2015-16		FY 2016-17				Approved as on 31.03.2017	
			Claimed & Approved		Claimed		Approved			
	(Rs. in Crore)	%	(Rs. in Crore)	%	(Rs. in Crore)	%	(Rs. in Crore)	%	(Rs. in Crore)	%
Debt	313.66	80.64	0.00	0.00	24.47	100.00	12.13*	100.00	325.79	81.24
Equity	75.30	19.36	0.00	0.00	0.00	0.00	(0.07)	0.00	75.23	18.76
Total	388.96	100.00	0.00	0.00	24.47	100.00	12.06	100.00	401.02	100.00

*excluding normative loan Rs.0.27 crore pertaining to de-capitalisation.

2.2.2.3 Depreciation

Regulation 28 of the UERC Tariff Regulations, 2015 specifies as follows:

“28. Depreciation

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

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

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

...

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

....”

The Petitioner has submitted that the depreciation has been charged at the rates specified by the Commission in UERC Tariff Regulations, 2015. The Petitioner vide its submission dated 19.12.2017 has claimed depreciation of Rs. 0.86 Crore and Rs. 20.48 Crore for FY 2015-16, i.e. from COD to 31.03.2016 and for FY 2016-17 respectively. The Commission has worked out the depreciation of Rs. 0.86 Crore against the admissible GFA of Rs. 388.96 Crore for FY 2015-16 and Rs. 19.96 Crore for FY 2016-17 considering the approved additional capitalisation for respective years.

Details of the depreciation as approved in Tariff Order 16.05.2017, claimed by the Petitioner and trued up for FY 2015-16 and FY 2016-17 is as follows:

Table 2.5: Depreciation approved for FY 2015-16 and FY 2016-17 (Rs. in Crore)

Particular	FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed by Petitioner	Approved	Approved in Tariff Order	Claimed by Petitioner	Approved
Depreciation	0.86	0.86	0.86	19.63	20.48	19.96

2.2.2.4 Return on Equity (RoE)

Regulation 26 of the UERC Tariff Regulations, 2015 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 submitted that the total capital cost of the entire plant was Rs. 1077.19 Crore having debt of Rs. 881.82 Crore and equity of Rs. 195.38 Crore as on 31.08.2016. The Petitioner further submitted that since the Commission had determined the tariff for 107 MW which is 50% of the installed capacity, equity to be considered for 107 MW capacity should be 50% of the total equity invested which works out to Rs. 97.69 Crore. As against the same, the Commission had approved equity of Rs. 75.30 Crore by applying Deb-Equity Ratio as on CoD on the approved capital cost for the contracted capacity. It is pertinent to mention that the Petitioner had submitted the capital cost of Rs. 1077.17 Crore for the entire plant against which the Commission had determined the capital cost of Rs. 822.65 Crore for the entire plant capacity as on 31.08.2016, i.e. COD for 2nd GT which further works out to Rs. 388.96 Crore for 50% of the plant capacity as on COD of 1st GT and 1st ST for which PPA with UPCL has been entered into by the Petitioner. The Commission, following the principal of *pari passu* had worked out the Debt and equity amount in the same proportion as funds deployed by the Petitioner. Moreover, the Petitioner has challenged the said Order before the Hon'ble APTEL wherein the issues of capital cost and financing structure have been agitated by the Petitioner. The proceedings are underway before Hon'ble APTEL. Accordingly, the Commission would consider this issue after the Judgment of Hon'ble APTEL in the matter and is not carrying out any change in this Order.

Further, it is to be noted that the Petitioner's gas based power plant was commissioned under the PSDF Scheme of MoP, Govt. of India which was applicable till 31.03.2017. Under the said scheme, the Petitioner was not entitled for any RoE during the applicability of the Scheme. Further, the Petitioner has also not claimed RoE for FY 2015-16 and FY 2016-17. Based on the discussion, Nil RoE has been considered for FY 2015-16 and FY 2016-17.

2.2.2.5 Interest and Finance charges

Regulation 27 of the UERC Tariff Regulations, 2015 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 1.4.2016 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2016 from the gross normative loan.

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

...

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

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

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

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

..."

The Petitioner has claimed interest on normative loan of Rs. 3.01 Crore, Rs. 30.36 Crore for FY 2015-16 and FY 2016-17 for the purpose of truing up based on the weighted average rate of interest of 11.63% p.a. and 9.59% p.a. respectively. It is to be noted that the Petitioner has calculated the weighted average rate of interest considering the opening loan of Rs. 308.80 Crore as on 16.03.2016 whereas the Commission had approved opening loan of Rs. 313.66 Crore in Tariff Order dated 16.05.2017. The Commission has followed the same methodology as adopted in Tariff Order dated 16.05.2017 for the purpose of computation of weighted average rate of interest. Accordingly, the Commission has considered the long term borrowings and interest thereon for entire FY 2015-16 and FY 2016-17 to compute weighted average rate of interest which works out to 11.15% p.a. and 10.21% p.a. for FY 2015-16 and FY 2016-17 respectively.

Opening Normative loan as approved in Tariff Order dated 16.05.2017 has been considered as opening normative loan for FY 2015-16 and repayment has been considered equal to admissible depreciation, i.e. Rs. 0.86 Crore. Further, weighted average rate of interest has been derived based on the actual interest amount of FY 2015-16 and average long term borrowing which works out to 11.15% p.a. Accordingly, interest on normative loan works out to Rs. 1.53 Crore for FY 2015-16 (from CoD to 31.03.2016). Subsequently, Closing Normative Loan for FY 2015-16 has been considered as opening normative loan for FY 2016-17, repayment has been considered equal to admissible depreciation, i.e. Rs. 19.96 Crore for FY 2016-17 and as discussed under “Capital Structure” that the entire additional capitalisation has been funded through debt only, therefore, entire approved additional capitalisation has been considered as addition to normative loan. Accordingly, by applying the weighted average rate of interest 10.21% p.a. interest on normative loan works out to Rs. 31.54 Crore. Further, the amount of Rs. 0.33 Crore, financing and bank charges net of interest income, actually incurred by the Petitioner in FY 2016-17 as per the audited accounts under the head of financing charges is being allowed by the Commission as part of the finance cost of FY 2016-17.

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

Table 2.6: Interest on Normative Loan for FY 2015-16 and FY 2016-17 (Rs.Crore)

Particular	FY 2015-16			FY 2016-17		
	Approved in Tariff Order	Claimed by Petitioner	Approved	Approved in Tariff Order	Claimed by Petitioner	Approved
Interest on Normative Loan	1.53	3.02	1.53	33.77	30.36	31.87*

**inclusive of net impact of bank charges i.e. Rs. 0.86 Crore paid and Rs. 0.53 Crore received as interest income for FY 2016-17.*

2.2.2.6 Operation & Maintenance (O&M) Expenses

2.2.2.6.1 Truing up of O&M Expenses for FY 2015-16 and FY 2016-17

Regulation 48(1) of Principal UERC Tariff Regulations, 2015 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)
	With warranty spares for 10 years	Without warranty spares	
2015-16	9.25	13.87	16.83
2016-17	9.86	14.79	17.95
2017-18	10.52	15.77	19.14
2018-19	11.22	16.82	20.41

..."

Based on the representations received from gas based generating plants in the State, the Commission had amended the Regulations to incorporate provision for normative O&M expenses for advance F class machines w.e.f. 18.01.2017. Regulation 48(1) of UERC Tariff Regulations 2017 (First Amendment) specifies as under:

“(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		
2015-16	9.25	13.87	16.83	28.36
2016-17	9.86	14.79	17.95	30.29
2017-18	10.52	15.77	19.14	35.35
2018-19	11.22	16.82	20.41	34.56

..."

Since the UERC Tariff Regulations, 2017 (First Amendment) came into force w.e.f. 18.01.2017, accordingly, till 17.01.2017 Principal Regulations would be applicable and from 18.01.2017 onwards, norms of First Amendment Regulations will be applied. Based on the applicable norms of O&M expenses for Combined cycle generating station, normative O&M expenses works out to Rs. 0.65 Crore and Rs. 19.19 Crore for FY 2015-16 (from COD to 31.03.2016) and FY 2016-17 respectively.

The Petitioner has submitted that the actual O&M expenses from COD to 31.03.2016 amounted to Rs. 0.23 Crore whereas as per audited books of accounts for FY 2015-16, O&M expenses amounted to Rs. 1.12 Crore. In this regard, it is to be noted that the Commission, while determining the tariff in Tariff Order dated 16.05.2016, had observed from the audited accounts of

FY 2015-16 that all the expenditures only upto 31.12.2015 were capitalized whereas COD of 1st unit of the plant was 16.03.2016. In this regard, the Petitioner had submitted that from the banking perspective, any invoice to the Discom even for infirm power which was raised by the company was deemed as commercial invoice, hence, from banking point of view, the expenses were capitalized on 31.12.2015, whereas technically, the plant was commissioned in combined cycle mode on 16.03.2016 as per the provision of prevailing Regulations.

Further, the Petitioner vide letter dated 19.12.2017 submitted that the actual O&M expenses which includes Repair & Maintenance expenses, Employee expenses and Administrative & General expenses, amounted to Rs. 10.56 Crore for FY 2016-17 against the O&M expenses charged to P&L account of Rs. 28.30 Crore. With regard to variation in the amounts, as discussed under Para 2.2.2.1 on "Capital Cost and Additional Capitalisation", the Petitioner has submitted that expenses only of Rs. 4.85 Crore are of O&M nature and balance expenditure are of capital nature. Further, it has been observed that the Petitioner has considered bank charges of Rs. 0.86 Crore as part of O&M expenses, the same is approved as a part of 'Interest and Finance charges' on actual basis. After prudence analysis of the expenses, the Commission approved the actual O&M expenses of Rs. 9.68 Crore inclusive of Rs. 4.85 Crore for R&M expenses.

It is to be noted that the Commission has approved the PPA for contracted capacity of 107 MW with certain modifications vide its Order dated 08.02.2016 and has approved 50% of the capital cost arrived for the elements for 107 MW capacity of the Plant and the balance capacity is not being utilised and there is no additional revenue from the balance plant. Further, there are some common expenses such as security, office maintenance etc. However, at present as far as the O&M expenses are concerned, the Commission is of the view that O&M expenses are the recurring expenses which are required to be incurred for regular maintenance and up keep of the plant and at present only 50% of the Capacity of the Plant is being operated. Accordingly, the Commission has approved the actual expenses incurred from 16.03.2016 to 31.03.2016 and FY 2016-17 as discussed in above Paras after prudence analysis, however, on the commercial utilisation of the balance capacity, O&M expenses will be bifurcated between contracted and balance capacity, accordingly, in future after prudence analysis.

As per UERC Tariff Regulations, 2015 the variation in normative and actual O&M expenses shall be considered as part of gain/loss on account of controllable factors.

Regulation 14 of UERC Tariff Regulations, 2015 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 in Para 2.2 , O&M expenses have been considered as controllable factor, accordingly, the Commission has approved the total O&M expenses for FY 2015-16 (COD to 31.03.2016) and FY 2016-17 after sharing of gain/loss in accordance with the Regulations as shown in the Table below:

Table 2.7: O&M Expenses Approved After Sharing of Gains and Losses for FY 2015-16 and FY 2016-17 (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 2015-16	0.22	0.22	0.65	0.43	0.28	0.51
FY 2016-17	9.26	9.68	19.19	9.50	6.34	16.02

2.2.2.7 Interest on Working Capital

The Petitioner has submitted that as per Tariff Order dated 16.05.2017, the Commission had given the provision of getting the payment from UPCL without deduction of applicable rebate if the Petitioner forgoes Interest on Working Capital (IWC) in the interest of the consumers of the State. Hence, the Petitioner relinquished the Interest on Working Capital. The Petitioner also submitted that due to delay in payment from UPCL, the Petitioner was charged an actual IWC of Rs. 3.22 Crore and therefore, the Petitioner has claimed actual IWC.

Regulation 33 of UERC Tariff Regulations, 2015 specifies as follows:

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

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

- b) *Liquid fuel stock for ½ (half) month corresponding to the NAPAF, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;*
 - c) *Operation and maintenance expenses for one month;*
 - d) *Maintenance spares @ 30% of operation and maintenance expenses; and*
- 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.*

With regard to IWC as per Regulations, it is to be noted that the Commission in its Tariff Order dated 16.05.2017 has allowed the Petitioner to forgo interest on working capital in lieu of non-chargeability of rebate by UPCL on payment of bills raised by the Petitioner. The relevant extract of the aforesaid Tariff Order is as follows:

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

Further, as far as actual interest on working capital is concerned, it is to be noted that the Petitioner was directed to submit the basis of claiming the IWC amounting to Rs. 3.22 Crore. In reply, the Petitioner vide its letter dated 19.12.2017 submitted the summarized computation alongwith a document in support of interest on delayed payment. The Commission analysed the details and did not find relation between the one page document and information submitted in tabular format. Accordingly, the Commission once again directed the Petitioner to submit the supporting documents clearly indicating that the actual amount of Rs. 3.22 Crore has been paid by the Petitioner due to delay on part of UPCL. In reply, the Petitioner vide letter dated 23.01.2018 submitted that the total interest charged on Cash Credit (CC) is Rs. 3.22 Crore and interest on CC due to delay in payment works out to Rs. 1.37 Crore @ 15.50%. The Petitioner further submitted that M/s GAIL has also charged interest of Rs. 0.82 Crore on account of delay in payment. According, the Petitioner claimed the interest on working capital amounting to Rs. 2.24 Crore (Rs. 1.37 Crore

plus Rs. 0.82 Crore).

Moreover, it is to be noted that the Petitioner had approached the Commission vide its Petition dated 14.12.2016 requesting the Commission to issue Order/direction to the State Discom to make fortnightly payment of the amount equal to fortnightly gas bill submitted by the Petitioner within 3 working dates of submission. In the matter, the Commission vide Order dated 25.01.2017 decided that the Petitioner may raise fortnightly Gas Supply Bills on the Respondent on actual basis as is being received from supplier of gas. Further, it is pertinent to mention that the Petitioner has failed to prove that the funds from Cash Credit account has been utilised for the purpose of payment to the Gas supplier due to delay on the part of UPCL in payment of Petitioner's gas bills. Moreover, the Petitioner has submitted only single page document in support of the interest rate which is ambiguous and does not indicate that the document is related to Cash Credit agreement. Moreover, the Petitioner has not submitted any documents in support of the fortnightly submission of gas supplier's bill to the Discom.

In this regard, the Petitioner is advised to file a separate Petition corroborating the interest charges borne by it on Cash Credit and also interest levied by GAIL on account of late payment of gas bills made by UPCL alongwith, the details of cash credit account and the interest levied on it.

Accordingly, in line with the decision taken in the Tariff Order dated 16.05.2017 and aforesaid discussions, interest on working capital is not being allowed for the purpose of truing up of FY 2015-16 and FY 2016-17.

2.2.2.8 Non-Tariff Income

Regulation 46 of UERC Tariff Regulations, 2015 specifies as follows:

"46. Non Tariff Income

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

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

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

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

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

The Petitioner has not claimed any other income in FY 2015-16 and vide letter dated 19.12.2017 has claimed other incomes amounting to Rs. 17.55 Crore against the amount of Rs. 15.15 Crore as per audited books of accounts for FY 2016-17. The Commission observed that the Petitioner has considered the amount, i.e. Rs. 2.40 Crore received on account of damage of the equipments as mentioned in Table 2.1 above in other income which has already been deducted to the extent of 50% from the R&M expenses. Accordingly, the Commission has considered the other income of Rs. 15.15 Crore as per audited books of accounts for FY 2016-17.

2.2.2.9 Annual Fixed Charges (AFC) for FY 2015-16 and FY 2016-17

Based on the above analysis, the Commission has worked out the approved figures of AFC for FY 2015-16 and for FY 2016-17. The summary of the same is as follows:

Table 2.8: Annual Fixed Charges for FY 2015-16 and FY 2016-17 approved by the Commission (Rs. in Crore)

Particulars	FY 2015-16			FY 2016-17		
	Tariff Order	Claimed	Allowable	Tariff Order	Claimed	Allowable
Depreciation	0.86	0.86	0.86	19.63	20.48	19.96
Interest on Loan & Financial Cost	1.53	3.02	1.53	33.77	30.36	31.87
Return on Equity	0.00	0.00	0.00	0.00	0.00	0.00
O&M Expenses	0.65	0.23	0.51	19.19	10.65	16.02
Interest on Working Capital	-	0.00	-	0.00	3.22	0.00
Less: Non-Tariff Income	0.00	0.00	0.00	0.00	17.55	15.15
Total	3.03	4.10	2.89	72.60	47.15	52.70

Accordingly, trued-up AFC for FY 2015-16 and FY 2016-17 works out to Rs. 2.89 Crore and Rs. 52.70 Crore respectively.

2.2.2.10 Capacity Charge and Energy Charge Rate (ECR) for FY 2015-16 and 2016-17

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 2015-16 and FY 2016-17.

Regulation 49 of UERC Tariff Regulations, 2015 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:

$$AFC \times (NDM / NDY) \times (PAFM / NAPAF) \text{ (in Rupees).}$$

Where,

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

NAPAF = Normative annual plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in percent:

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.

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

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

$$i = 1$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

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

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

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

(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."

With regard to Gross Station Heat Rate, the Commission vide its Tariff Order dated 16.05.2017 had directed UPCL to appoint an expert Committee/Consultant for establishing the design heat rate of the Petitioner's plant and submit the report on the same within 3 months. The Petitioner, through the said order, was also directed to provide the relevant documents/certificate

to UPCL for the same. The relevant extract of the Tariff Order dated 16.05.2017 is reproduced hereunder.

“...the Commission directs the Respondent to appoint an expert Committee/Consultant for establishing the design heat rate of the Petitioner’s plant for the contracted capacity and submit the report on the same within 3 months of the issuance of this Order. The Petitioner is also directed to provide all the relevant documents/certificate and also to provide necessary assistance to the Respondent in this regard. Till the outcome of the report on SHR of the expert committee as discussed above for the purpose of the tariff order, the Commission has considered SHR as certified by the EPC contractor.”

In this regard, the Petitioner vide its letter dated 22.09.2017 submitted that the compliance of direction for determination of SHR should have been done by 16.08.2017 and requested the Commission to issue necessary direction to UPCL. Subsequently, the Petitioner requested the Commission for provisional approval of energy charges at actual till the finalisation of SHR. In the matter, the Commission vide its Suo-Moto Order dated 28.11.2017, provisionally allowed the Petitioner to recover energy charges at actual gas bills raised by the gas supplier till the finalisation of SHR and also directed UPCL to comply with the direction of the Commission as per the Tariff Order dated 16.05.2017, with respect to finalization of design SHR and submit the report for approval of the Commission. The relevant extract of the Order dated 28.11.2017 is reproduced hereunder.

“2.6 Accordingly, the Commission under Regulation 104 of the MYT Regulations, 2015, i.e. Power to Remove Difficulties has decided to provisionally allow M/s Gama to recover the fuel bills at actual from UPCL from the month of November, 2017, till finalization of design SHR by UPCL. For the period April, 2017 to November, 2017 adjustments, if any, would have already been done by both UPCL and the generators based on the provisional SHR approved by the Commission. Hence, the Commission does not consider it reasonable to allow any adjustments for the prior period which would anyhow be subject to adjustments once the final SHR of the generator is approved.

2.7 The Commission further directs UPCL to comply with the direction of the Commission as per the Tariff Order dated 16.05.2017 & 24.10.2017, with respect to finalization of design SHR for both the generators, i.e. M/s Gama Infraprop Pvt. Ltd. & M/s Sravanthi Energy Pvt. Ltd. and submit a report in this regard within next 3 months for approval of the Commission.”

It is clear from the above discussion that the Gross Station Heat Rate is required to be

established for the computation of Energy Charges payable to the generator and the Commission has already directed UPCL to appoint an expert committee/consultant for establishing the design SHR for the Petitioner's plant but no report in this regard has been submitted by the UPCL till date.

Accordingly, the Commission is of the view, that as decided in aforesaid Suo-Moto Order the Petitioner is allowed to recover the fuel bills at actual from UPCL till the finalization of the GSHR for the Petitioner's plant. Further, as discussed in the Tariff Order dated 16.05.2017 the Petitioner's plant commenced supply of power to the Respondent (UPCL) pursuant to the PSDF Scheme of GoI allowing the recovery of overall tariff from beneficiary (UPCL) only to the extent of the target price, i.e. Rs. 4.70/kWh. In addition, the Petitioner has also received PSDF support during the currency of the Scheme, accordingly, difference in actual overall per unit charges (Rs. 4.70/unit from UPCL + PSDF support p.u. received from MoP) recovered by the Petitioner and approved fixed charges per unit alongwith per unit energy charges is required to be settled. In case overall per unit actual recovery inclusive of PSDF support is in excess of the approved overall per unit fixed charges in this Order and actual energy charges, then the Petitioner is liable to refund the difference to the Respondent. Further, in case overall recovery is less than the approved overall per unit fixed charges in this Order and actual energy charges then no adjustment would be required till the end of FY 2016-17, i.e. upto validity of the PSDF Scheme of GoI. The summary of approved Capacity Charge and actual Energy Charge Rate (ECR) considered by the Commission and actual per unit charges recovered by the Petitioner during FY 2015-16 and FY 2016-17 is given in the Table below:

Table 2.9: Approved Capacity Charge and actual Energy Charge Rate considered by the Commission for FY 2015-16 and FY 2016-07

Particular	FY 2015-16	FY 2016-17	
		1st half	2nd half
Fixed Charge (Rs./kWh)	0.85	0.68	0.68
Energy Charge (Rs./kWh)	5.05	5.12	4.68
Total	5.90	5.80	5.36
Paid by UPCL (Rs./kWh)	4.70	4.70	4.70
PSDF Support (Rs./kWh)	1.00	-0.03	0.21
Total	5.70	4.67	4.91

From the above mentioned Table it is apparent that in FY 2015-16 and FY 2016-17, approved overall per unit charges (per unit trued up AFC and average ECR based on actual fuel bills) are higher than that actually recovered by the Petitioner, hence, no adjustment is required since the PSDF Scheme was applicable during that period. However, the ECR shall be reviewed based on the

Design SHR arrived at by the expert Committee/Consultant in its recommendations/report and approved by the Commission and, accordingly, adjustment required, if any, shall be given effect to in the subsequent Tariff Order.

3 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2017-18, Revised AFC & Tariff for FY 2018-19

3.1 Annual Performance Review

The Commission, vide its Tariff Order dated 16.05.2017, approved the Tariff for the Petitioner for the second Control Period, i.e. FY 2016-17 to FY 2018-19. Regulation 12(3) of the UERC Tariff Regulations, 2015 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, 2015 specifies as under:

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

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

The Commission, vide its Tariff Order dated 16.05.2017, on approval of Business Plan and MYT Petition for the second Control Period from FY 2016-17 to FY 2018-19, had approved the AFC for the second Control Period based on approved capital cost as on COD, i.e. 16.03.2016. The Petitioner, in present Petition, has proposed revision of estimates for FY 2018-19 based on the audited accounts for FY 2015-16 and FY 2016-17 and revised estimates for FY 2017-18.

The Commission, in this Order, has carried out the Truing up for FY 2015-16 and FY 2016-17 in accordance with the UERC Tariff Regulations, 2015. In accordance with Regulation 12(3) of the

UERC Tariff Regulations, 2015 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. The Commission shall carry out the truing up of FY 2017-18 based on the audited accounts for that year and give effect on this account in the AFC of FY 2019-2020. The Commission, as discussed earlier, while carrying out the truing up has trued up the O&M expenses for FY 2016-17 based on the detail of actual expenses submitted by the Petitioner. The Commission, under the provisions of Regulation 12(3) of the UERC Tariff Regulations, 2015, has revised the AFC for FY 2018-19. The approach adopted by the Commission in the approval of each element of ARR for FY 2018-19 is elaborated in the subsequent paragraphs.

3.2 Physical Parameters

3.2.1 NAPAF

Regulation 47 of UERC Tariff Regulations, 2015 specifies as under:

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

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

Further, as discussed in the Tariff Order dated 16.05.2017, the Commission while approving the PPA for the Petitioner’s plant approved the definition of 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 2018-19 in the Tariff Order dated 16.05.2017 for second Control Period shall continue to be applicable without any change.

3.2.2 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 2018-19 in the Tariff Order dated 24.10.2017 for second Control Period.

Accordingly, the Commission approves saleable primary energy after deducting the

normative auxiliary consumption of 2.5% as 776.80 MU.

3.3 Financial Parameters

3.3.1 Additional Capitalisation for FY 17-18 and FY 2018-19

The Commission vide its Tariff Order dated 16.05.2017 on approval of the Business Plan and Tariff Petition of the Petitioner for the Control Period from FY 2016-17 to FY 2018-19, had decided to consider the additional capitalisation at the time of truing up of the respective years based on the audited accounts and as per prevailing Regulations. In the present Petition, the Petitioner has claimed additional capitalisation of Rs. 3.55 Crore for FY 2017-18 stating that out of the total proposed additional capitalisation, an amount of Rs. 3.00 Crore is proposed towards replacement of Air Filter System of Gas Turbine due to change in the atmospheric condition there is a regular maintenance in the air filter system which entails the downtime of the machine. Further, from the provisional financial statements submitted upto 30.09.2017, it has been observed that only Rs. 0.03 Crore has been capitalised in the 1st half of the FY 2017-18. With regard to additional capitalisation for FY 2018-19, the Petitioner has claimed an amount of Rs. 6.10 Crore out of which Rs. 5.00 Crore expenditure is proposed for procurement of initial spares and Rs. 1 Crore for civil work.

With respect to the cost of Initial Spares to be allowed as additional capitalisation, the Commission has already taken a view in this regard in the Tariff Order dated 16.05.2017 that such capitalisation shall be reviewed at the time of truing up based on the actual expenditure subject to the ceiling limit specified under the Regulations. Accordingly, in accordance with the decision taken in Tariff Order dated 16.05.2017, the Commission at this stage doesn't find any reason to approve any additional capitalisation for FY 2017-18 and FY 2018-19. The Commission will review the additional capitalisation, if any, based on the audited accounts at the time of truing up in accordance with the UERC Tariff Regulations after prudence check.

Accordingly, capital cost worked out as on 31.03.2017, i.e. Rs. 401.02 Crore after considering the additional capitalisation approved for FY 2016-17 has been considered as opening capital cost for FY 2018-19 and as mentioned above, no additional capitalisation has been considered for FY 2018-19.

3.3.2 Depreciation

Regulation 28 of the UERC Tariff Regulations, 2015 specifies as follows:

“28. Depreciation

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

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

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

...

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

....”

The Petitioner has claimed depreciation for FY 2018-19 of Rs. 20.98 Crore. The Commission has worked out the depreciation of Rs. 20.28 Crore against the admissible GFA of Rs. 401.02 Crore for FY 2018-19. Details of the depreciation claimed and approved for FY 2018-19 is as follows:

Table 3.1: Claimed and Approved Depreciation for FY 2018-19 (Rs. in Crore)

Particular	Approved in Tariff Order	Claimed	Approved
Depreciation	19.63	20.98	20.28

3.3.3 Return on Equity

Regulation 26 of the UERC Tariff Regulations, 2015 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, vide letter dated 19.12.2017 submitted revised Tariff Forms and claimed return on equity of Rs. 11.67 Crore corresponding to the equity amount of Rs. 75.30 Crore based on projected capital cost as on 01.04.2018. Details of the Return on Equity claimed and approved for FY 2018-19 is as follows:

**Table 3.2: Claimed and Approved RoE for FY 2018-19
(Rs. in Crore)**

Particular	Approved in Tariff Order	Claimed	Approved
Return on Equity	11.67	11.67	11.66

3.3.4 Interest on Loans

Regulation 27 of the UERC Tariff Regulations, 2015 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 1.4.2016 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2016 from the gross normative loan.

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

...

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

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

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

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

...“

The Petitioner vide letter dated 19.12.2017 has submitted revised tariff form through which the Petitioner has claimed interest on normative loan amounting to Rs. 33.89 Crore considering the rate of interest of 11.52%. The Commission has considered the net closing normative loan of Rs. 284.70 Crore for FY 2017-18 as opening normative loan for FY 2018-19 and depreciation of Rs. 20.28 Crore approved for FY 2018-19 as repayment of normative loan as per applicable UERC Tariff Regulations, 2015. Further, weighted average rate of interest as derived for FY 2016-17, i.e. 10.21% has been considered for determination of interest on normative loan which will be reviewed at the time of truing up. Accordingly, the Commission has approved interest on loan of Rs. 28.03 Crore for FY 2018-19 worked out based on the weighted average rate of interest @ 10.21% as computed for FY 2016-17. Details of the interest claimed and allowed for the second Control Period is given in the Table below:

Table 3.3: Interest on Loan approved by the Commission for FY 2018-19 (Rs. in Crore)

Interest on Normative Loan	Claimed	Approved
Gross Opening Normative Loan	336.58	325.79
Cumulative Repayment	33.74	41.09
Net Opening Normative Loan	302.84	284.70
Additional Capitalisation	0.00	0.00
Normative Repayment of loan	17.27	20.28
Net Closing Normative Loan	285.56	264.42
Average Normative Loan	294.20	274.56
Rate of Interest	11.52%	10.21%
Normative Interest	33.89	28.03

3.3.5 Operation & Maintenance (O&M) Expenses

Regulation 48(1) of the UERC Tariff Regulations, 2017 (First Amendment), 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		
2015-16	9.25	13.87	16.83	28.36
2016-17	9.86	14.79	17.95	30.29
2017-18	10.52	15.77	19.14	35.35
2018-19	11.22	16.82	20.41	34.56

“

Accordingly, based on the applicable O&M norms, the normative O&M expenses for FY 2018-19 works out to Rs. 36.98 Crore.

3.3.6 Interest on Working Capital

The Petitioner has claimed interest on working capital amounting to Rs. 6.00 Crore for FY 2018-19 stating that the Petitioner has to incur extra interest on working capital as the Discom is not making payments on time, i.e. within 3 days from the issue of invoice.

Regulation 33 of UERC Tariff Regulations, 2015 specifies as follows:

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

- a) *Landed fuel cost for 1 (one) month corresponding to the NAPAF duly taking into account the mode of operation of the generating station on gas fuel and liquid fuel;*
- b) *Liquid fuel stock for ½ (half) month corresponding to the NAPAF, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;*
- c) *Operation and maintenance expenses for one month;*
- d) *Maintenance spares @ 30% of operation and maintenance expenses; and*

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.

It is to be noted that the Commission vide its Order dated 17.04.2017 had allowed the gas based power generators included in the GoI Scheme, to forego interest on working capital in lieu of

non-chargeability of rebate by UPCL on payment of bills raised by respective generators. Further, the Commission in its Order dated 06.12.2017 had held that it was open for both UPCL and the gas generators to sit together and work out in the interest of the consumers of the State whether the payment of electricity bills is to be made in terms of the PPA or the existing arrangement approved by the Commission vide its Order dated 17.04.2017 would continue and intimate to the Commission their agreement on the issue within one month of the date of Order alongwith proper justification. The Commission also held that if payment is made to the generators in accordance with the PPAs entered between the Petitioner and the Respondents, the generators will be at a liberty to claim interest on working capital in accordance with the Regulations. However, UPCL has not submitted its compliance in the matter till date. **The Commission once again directs UPCL to submit the compliances warranted in the Commission's Order dated 06.12.2017 within one month of the date of the Order.**

Hence, as discussed in Chapter 2 of this Order and methodology adopted in Tariff Order dated 16.05.2017, the Commission has not allowed any interest on working capital while approving the revised AFC for FY 2018-19.

3.3.7 *Non-Tariff Income*

Regulation 46 of UERC Tariff Regulations, 2015 specifies as follows:

"46. Non Tariff Income

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

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

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

- a) Income from rent of land or buildings;*
- b) Income from sale of scrap;*
- c) Income from statutory investments;*
- d) Interest on delayed or deferred payment on bills;*

- e) Interest on advances to suppliers/contractors;
- f) Rental from staff quarters;
- g) Rental from contractors;
- h) Income from hire charges from contactors and others;
- i) Income from advertisements, etc.;
- j) Any other non- tariff income.

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

The Petitioner has not proposed any non-tariff income for FY 2018-19, accordingly, no non-tariff income has been adjusted by the Commission as of now. However, the same is subject to correction during the truing up proceedings.

3.3.8 Annual Fixed Charges for FY 2018-19

Based on the above analysis, the Commission has worked out the approved figures of AFC for FY 2018-19. The summary of AFC for FY 2018-19 is as shown in the Table below:

Table 3.4: Annual Fixed Charges for FY 2018-19 approved by the Commission (Rs. in Crore)

Particulars	As approved in Tariff Order	As claimed by the Petitioner	As approved by the Commission
Depreciation	19.63	20.98	20.28
Interest on Loan	29.40	33.89	28.03
Return on Equity	11.67	11.67	11.66
O&M Expenses	36.98	36.98	36.98
Interest on Working Capital	0.00	6.00	0.00
Less: Non-Tariff Income	0.00	0.00	0.00
Total	97.68	109.53	96.95

3.3.9 Annual Fixed Charges/Capacity Charge and Energy Charge Rate (ECR) for FY 2018-19

Based on the above analysis for all the heads of expenses of AFC, the Commission has approved the Annual Fixed Charges (AFC) of the Petitioner for the second Control Period attributable to its beneficiary.

Regulation 49 of UERC Tariff Regulations, 2015 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 nth month.

PAF_Y = Percent Plant availability factor achieved during the Year.

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

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

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

$$i = 1$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

DC_i = 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: 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:

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

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

(a) For gas and liquid fuel based stations

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

Where,

AUX = Normative auxiliary energy consumption in percentage.

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

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

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

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

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

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

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

Based on the aforesaid Regulations, capacity charges and energy charges shall be recovered by the Petitioner from the Respondent corresponding to the contracted capacity. Further, with regard to Energy charges, as discussed in Chapter-2 and Suo-Moto Order dated 28.11.2017, the Petitioner is provisionally allowed to recover energy charges at actual gas bills raised by the gas supplier till the finalisation of design SHR for the Petitioner's Plant. However, the ECR shall be reviewed based on the Design SHR recommended by the expert Committee/Consultant and approved by the Commission and accordingly, adjustment required, if any, shall be given effect to in the subsequent Tariff Order.

(Subhash Kumar)
Chairman