



## **TARIFF ORDER**

**Determination of Tariff for FY 2017-18  
&  
True-up of FY 2014-15,  
Petition No. 225/2017**

for

**Puducherry Power Corporation Limited (PPCL)  
Gas Power Station (32.5 MW)**

**31<sup>st</sup> March 2017**

संयुक्त विद्युत विनियामक आयोग (गोवा राज्य और संघ शासित प्रदेशों के लिए)

### **JOINT ELECTRICITY REGULATORY COMMISSION**

For the State of Goa and Union Territories,

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**Before the  
Joint Electricity Regulatory Commission  
For the State of Goa and Union Territories, Gurgaon**

**QUORUM**

Sh. M. K. Goel (Chairperson)  
Ms. Neerja Mathur (Member)

**Petition No. 225/2017**

In the matter of

**Determination of Generation Tariff for the FY 2017-18 and True-up for FY 2014-15 for Puducherry Power Corporation Limited (PPCL) Gas Power Station (32.5 MW).**

And in the matter of

Puducherry Power Corporation Ltd. (PPCL).....**Petitioner**

Electricity Department, Puducherry .....**Respondent**

**ORDER**

**Passed On:** 31<sup>st</sup> March 2017

- a. This Order is passed in respect of the Petition filed by the Puducherry Power Corporation Limited (PPCL) for approval of Determination of Tariff for the FY 2017-18 and True-up of FY 2014-15.
- b. After receiving the Petition, the Commission scrutinized the contents of the Petition and called for further information/data so as to take a prudent view of the Petition. The Commission also held a technical validation session of the Petition to determine the sufficiency of the Petition. Comments/objections/suggestions were also invited from the public/stakeholders. Public hearing was held and parties/people present were heard. The schedule of activities performed under this quasi-judicial process are as below:

<b>Particulars</b>	<b>Details</b>
Date of Admission	12 <sup>th</sup> January 2017
Petition No.	225/2017
Technical Validation Session	06 <sup>th</sup> February 2017
Public Hearing	15 <sup>th</sup> February 2017

- c. This Order shall come into force from 1<sup>st</sup> April 2017 and shall remain valid till further orders of the Commission.

- d. All existing provisions which are not modified by this order shall continue to be in force.
- e. The Commission approves the capacity (fixed) charge and energy charge for FY 2017-18 and other charges for PPCL Gas Power Station at Karaikal as given below:
- Annual Fixed Charge (AFC) at Rs. 23.34 crore for FY 2017-18 shall be billed as per the Regulation 30 of the CERC Tariff Regulations, 2014.
  - The Incentive shall be governed as per Regulation 30 (4) which is reproduced here below.  
*"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 36 (B)."*  
Normative Annual Plant Load Factor (NAPLF) will be considered at 85% for the purpose of the incentive calculation as per Regulation 36 (B) (a) of the Regulation 30 of the CERC Tariff Regulations, 2014.
  - The Energy Charge (net) to be billed per month shall be based on the unit energy rate calculated on the basis of the formula provided in Section 4.5 of this Order.
  - Billing of additional claim of Rs 9.33 crore towards the repair of generator stator in twelve equal monthly installments.
  - Refund of Rs 1.64 crore as part of the True-up exercise for FY 2014-15 is to be passed on to the beneficiary in twelve equal monthly installments.
  - In addition to the charges approved above, the Commission also allows recovery of expenses pertaining to regulatory compliance (fees paid to the Commission towards filing of Tariff Petition for the FY 2017-18 and related publication expenses) from the beneficiary in twelve equal monthly installments.
- f. Ordered as above, read with the attached document giving detailed reasons, grounds and conditions.

-sd-

**नीरजा माथुर**  
(सदस्य)

-sd-

**एम. के. गोयल**  
(अध्यक्ष)

संयुक्त विद्युत विनियामक आयोग  
(गोवा और केंद्र शासित प्रदेशों के लिए)

स्थान : गुडगाँव  
दिनांक: 31 मार्च, 2017

(Certified Copy)  
**कीर्ति तिवारी, सचिव**

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## List of Abbreviations

<b>Abbreviation</b>		<b>Full Form</b>
Act	:	Electricity Act, 2003
APC	:	Auxiliary Power Consumption
CERC	:	Central Electricity Regulatory Commission
CGS	:	Central Generating Station
Commission/JERC	:	Joint Electricity Regulatory Commission for the state of Goa and union territories
EA 2003	:	Electricity Act, 2003
EDP	:	Electricity Department, Puducherry
FC	:	Fixed charge
FY	:	Financial Year
GFA	:	Gross Fixed Assets
GCV	:	Gross Calorific Value
JERC	:	Joint Electricity Regulatory Commission for the state of Goa and union territories
MU	:	Million Unit
MW	:	Mega Watt
NAPAF	:	Normative Annual Plant Availability Factor
O&M	:	Operation and Maintenance Expenses
PAFM	:	Plant Availability Factor during the month
PLF	:	Plant Load Factor
PPA	:	Power Purchase Agreement
PPCL	:	Puducherry Power Corporation Limited
RO	:	Reverse Osmosis
RoE	:	Return on Equity
SHR	:	Station Heat Rate

# Chapter 1. Introduction

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## 1.1. About JERC

In exercise of the powers conferred by Section 83 of the Electricity Act 2003, the Central Government constituted a two member (including Chairperson) Joint Electricity Regulatory Commission for all Union Territories except Delhi to be known as “Joint Electricity Regulatory Commission for Union Territories” with headquarters at Delhi as notified vide notification no. 23/52/2003 – R&R dated 02<sup>nd</sup> May 2005. Later, with the joining of the State of Goa, the Commission came to be known as “Joint Electricity Regulatory Commission for the State of Goa and Union Territories” as notified on 30<sup>th</sup> May 2008. The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Andaman & Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman & Diu, Lakshadweep and Puducherry) started functioning with effect from September 2008. The office of the Commission is located in Gurgaon, Haryana.

## 1.2. Puducherry Power Corporation Limited (PPCL)

Puducherry Power Corporation Limited (hereafter referred to as ‘PPCL’ or ‘Petitioner’), an undertaking of Government of Puducherry, is a Government company within the meaning of Companies Act, 1956. Further, it is a “Generating Company”, as defined under sub-section 28 of section 2 of the Electricity Act, 2003.

PPCL was incorporated on 30<sup>th</sup> March 1993, with the objective of generating 32.5 MW of Electricity (22.9 MW from gas turbine and 9.6 MW from Steam turbine) at Karaikal which is one of the outlying regions of the Union Territory of Puducherry.

The details of its capacity, commercial operation data etc. are as given in the Table below:

**Table 1.1 Details of the PPCL Gas Power Station**

S. No.	Subject	Particulars
1.	Capacity	
	a) Gas turbine	22.9 MW
	b) Steam turbine	9.6 MW
	<b>TOTAL</b>	<b>32.5 MW</b>
2.	Date of commercial operation	3 <sup>rd</sup> January, 2000
3.	Type of fuel	Natural Gas
4.	Type of cooling system	Induced draft cooling tower
5.	Gas supplier	GAIL



The required gas of 1.91 lakhs cubic meter per day is obtained from the gas wells at Narimanam in the Cauvery basin under an agreement with GAIL (India) Ltd.

The Karaikal Gas Power Station was declared ready for commercial operation w.e.f. 3<sup>rd</sup> January 2000 and is supplying power to Electricity Department Puducherry (EDP) under a PPA signed with them on 25<sup>th</sup> February 2002.

The Electricity Department of Puducherry is the sole buyer of the electricity generated by PPCL.

### 1.3.Regulations

The Commission, in exercise of the powers conferred upon it by the Electricity Act, 2003 has notified JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 for determination of tariff (hereinafter referred to as the 'JERC Tariff Regulations 2009').

As per provisions of Clause 19 of the JERC Tariff Regulations 2009 and amendments thereon, the Commission, while determining the cost of generation of each thermal/gas/hydro-electric generating stations located within the State, shall be guided, as far as feasible, by the principles and methodologies of CERC, as amended from time to time.

### 1.4.Electricity Regulatory Process for PPCL

Puducherry Power Corporation Limited (PPCL) had submitted its previous Petitions for determination of Annual Fixed Cost (AFC) and Energy Charge before the Commission, and the Commission subsequently issued the following Tariff Orders:

**Table 1.2: Details of Tariff and related Petitions so far submitted by the Petitioner & Orders Issued by JERC**

Sr. No.	For FY	Filing date	Date of Tariff Order
1.	2011-12	29 <sup>th</sup> November 2010	6 <sup>th</sup> August, 2011
2.	2012-13	06 <sup>th</sup> February 2012	13 <sup>th</sup> April 2012
3.	2013-14	05 <sup>th</sup> February 2013	28 <sup>th</sup> March 2013
4.	2014-15	09 <sup>th</sup> January 2014	25 <sup>th</sup> April 2014
5.	2015-16	05 <sup>th</sup> January 2015	31 <sup>st</sup> March 2015
6.	2016-17	07 <sup>th</sup> January 2016	23 <sup>rd</sup> May 2016

### 1.5.Filing and Admission of Present Petition

The Petitioner was mandated to file the Tariff Petition for the tariff period FY 2017-18 by 30<sup>th</sup> November 2016. The Petitioner submitted before the Commission that the internal audit of PPCL for the FY 2015-16 is under finalization and would be completed shortly and the accounts of PPCL for the FY 2015-16 would take some more time for the approval of the board and other statutory compliance. Hence, PPCL submitted before

the Commission that it may be allowed to file the Tariff Petition by the second week of January 2017.

Due to the delay in filing of the Petition with respect to the regulatory timelines, the Petitioner filed an application for condonation of delay in filing the Tariff Petition for the FY 2017-18 before the Commission on 03<sup>rd</sup> December 2016. The Commission acceded to the request of the Petitioner on 26<sup>th</sup> December 2016 and granted extension of time up to 15<sup>th</sup> January 2017 for filing of the Petition.

PPCL then filed its Petition under Section 62 read with Regulation no. 3 to 10 of JERC Tariff Regulations 2009 before the Commission on 09<sup>th</sup> January 2017 for approval of the True-up for the FY 2014-15 and Tariff for the FY 2017-18 for Puducherry Gas Power Station (32.5 MW) for sale of power to the deemed distribution licensee of Puducherry.

### 1.6. Admission of the Petition

The Commission admitted the Petition for determination of Generation Tariff for PPCL for the FY 2017-18 along with the True-up for the FY 2014-15 on 12<sup>th</sup> January 2017.

In compliance of Regulation 29 of JERC (Conduct of Business) Regulations 2009 and Regulation 12(5) of the JERC Tariff Regulations 2009, the Petitioner was directed to publish the Public Notice of the Tariff Petition (abridged form) in at least three newspapers widely circulated in the area of UT of Puducherry, highlighting the Petition and outlining the existing and the proposed tariff and inviting the suggestions/objections from the general public/stakeholders. The Petitioner was directed to submit the copies of the newspapers in which the Public Notice is published, before the Commission.

### 1.7. Interaction with the Petitioner

The Commission regularly interacted with the Petitioner to seek clarifications and justifications on various issues essential for the analysis of the Tariff Petition. The Commission and the Petitioner also discussed key issues related to the Petition, which included norms of operation of the plant, details of fuel expenses submitted to the Commission etc.

The Technical Validation Session (TVS) was held in the Commission's Gurgaon office on 06<sup>th</sup> February 2017, where the representatives of the Petitioner and the Commission were present. The Commission carried out prudence check of the bills submitted and sought clarifications on data and information submitted by the Petitioner.

The Petitioner submitted its replies, as shown below in response to the queries raised by the Commission, which have been considered during approval of the tariff of the Petitioner:

**Table 1.3: List of Interactions with the Petitioner**

S.No.	Date	Subject
1.	12 <sup>th</sup> January 2017	Admission of the Petition
2.	19 <sup>th</sup> January 2017	Data Gaps sought by the Commission
3	01 <sup>st</sup> February 2017	Response 1 to data gaps by the Petitioner
4.	06 <sup>th</sup> February 2017	Response 2 to data gaps by the Petitioner
5.	13 <sup>th</sup> February 2017	Additional Data Gaps forwarded by the Commission
5.	27 <sup>th</sup> February 2017	Response to the additional data gaps by the Petitioner

## 1.8.Public Hearing Process

The Commission directed the Petitioner to publish the Summary of the Tariff Petition in abridged form and manner as approved in accordance with Section 64 of the Electricity Act 2003 to ensure wide public participation.

The Public Notices were published by the Petitioner in the following newspapers inviting objections/ suggestions from the stakeholders on the Tariff Petition:

**Table 1.4: Details of Public Notice published by the Petitioner**

Sr. No.	Date	Name of Newspaper	Place of Publication
1	20 <sup>th</sup> January 2017	New Indian Express	Puducherry (Villupuram Edition)
2	20 <sup>th</sup> January 2017	New Indian Express	Yanam (Vijayawada Edition)
3	20 <sup>th</sup> January 2017	New Indian Express	Karaikal (Nagapattinam Edition)

The Petitioner also uploaded the Petition on its website ([www.ppcl.puducherry.gov.in](http://www.ppcl.puducherry.gov.in)) for inviting objections and suggestions on the Petition.

Interested parties / stakeholders were requested to file their objections/suggestions on the Petition on or before 03<sup>rd</sup> February 2017. The copies of the Public Notice are attached as **Annexure 1** to this Order.

## 1.9.Notice for Public Hearing

The Commission also published a Public Notice in the leading newspapers as given below giving due intimation to stakeholders, consumers, objectors and the public at large about the Public Hearing to be conducted by the Commission on 15<sup>th</sup> February 2017 at Puducherry.

The details of the Public Notice published by the Commission are as below:

**Table 1.5: Details of Public Notice published by the Commission**

S.No.	Date	Name of Newspaper	Place of Publication
1.	26 <sup>th</sup> January 2017	Dinakaran (Tamil)	Puducherry
2.	26 <sup>th</sup> January 2017	Maalaimalar (Tamil)	Puducherry
3.	28 <sup>th</sup> January 2017	The New Indian Express (English)	Tamil Nadu
4.	28 <sup>th</sup> January 2017	Metro Varllu (Malayalam)	Thiruvananthapuram
5.	12 <sup>th</sup> February 2017	Mathrubhumi (Malayalam)	Puducherry
6.	12 <sup>th</sup> February 2017	Maalaimalar (Tamil)	Puducherry
7.	12 <sup>th</sup> February 2017	Andhra Jyoti (Telugu)	Yanam
8.	12 <sup>th</sup> February 2017	Dhina Thanthi (Telugu)	Puducherry
9.	12 <sup>th</sup> February 2017	The Hindu (English)	Puducherry

Copies of the public notice published by the Commission for intimation of Public Hearing are attached as **Annexure 2** to this order.

The schedule of Public Hearing conducted by the Commission was as below:

**Table 1.6: Schedule of Public Hearing at Puducherry**

Sr. No.	Date & Time	Venue of Hearing	Subject
1.	15 <sup>th</sup> February 2017 10:00 AM onwards	Hall at Puducherry, Multipurpose Social Service Society (PMSSS) Complex, #81, Laporte Street, Puducherry - 605001	Tariff Petition for PPCL for the FY 2017-18 and True-up for the FY 2014-15.

During the Public Hearing, the stakeholders were provided an opportunity to present his views on the Petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written objection or not, were given an opportunity to express their views. Only EDP expressed its view on the Tariff Petition filed by PPCL and the same has been examined by the Commission. The issues discussed during the Public Hearing and the views of the Commission thereon, have been summarized in **Chapter 2** of this Order.

#### 1.10. Organization of the Order

This Order is organized in the following chapters:

- ❖ **Chapter 1** Background and brief description of the regulatory process undertaken by the Commission.
- ❖ **Chapter 2:** Various suggestions and objections raised by objectors in writing, as well as during the Public Hearing before the Commission. Various suggestions and objections have been summarised, followed by responses of the Petitioner and rulings of the Commission on various issues.
- ❖ **Chapter 3:** True-Up of the FY 2014-15.
- ❖ **Chapter 4:** Tariff for FY 2017-18.
- ❖ **Chapter 5:** Additional claims of the Petitioner.
- ❖ **Chapter 6:** Summary of AFC and other charges for FY 2017-18.
- ❖ **Chapter 7:** Directions of the Commission to PPCL.

## Chapter 2. Summary of Objections/ Suggestions received, Response from the Petitioner and Commission's Views

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### 2.1.Introduction

In response to the Public Notice inviting objections/suggestions from the stakeholders on the Petition filed by the Petitioner for the True-up for the FY 2014-15 and Tariff for the FY 2017-18, Electricity Department-Puducherry (EDP) has filed its objections/suggestions in writing.

The Public Hearing was held at Puducherry on 15<sup>th</sup> February 2017, wherein the respondents were given an opportunity to put forth their objections and suggestions on the True-up for the FY 2014-15 and Tariff for the FY 2017-18 before the Commission.

Only EDP made a written submission of the objections. The objections raised by EDP and the Commission's response on each of the issue is as given below.

### 2.2.Objections/Suggestions, Response of the Petitioner and Commission's Comments

#### 2.2.1. Additional O&M Expenses

##### **Stakeholder's Comment (Electricity Department of Puducherry)**

*"It is submitted to the Hon'ble Commission that O&M expenses have been claimed higher than the prescribed norms to the extent of Rs. 8.01 crore. The same may not be approved, as O&M expenses of Rs. 10.86 crore approved by the Commission is as per norms and the expenses related to the replacement of corroded structure and pipeline etc. are to be met out of the approved O&M expenses.*

*Also, there is no separate provision in CERC Regulations allowing special treatment (One time dispensation) for amount of Rs. 9.33 Crs. Therefore, allowing such cost without any provision in the Regulations is not advisable. Also, a prudence check is required to be undertaken for such event through a root cause analysis report for such failure. Since such cost has been disallowed by insurance company also, it is necessary to analyse the cause for failure. As an outcome of the analysis, if it is observed that the breakdown is due to error of PPCL, then the cost of Rs. 22.11 Crs claim by GAIL due to non-consumption of gas for the said period may also be disallowed.*

*It is submitted that since the plant was not under operation during the breakdown period of 7 months, the O&M cost incurred during that period need to be proportionate and should be lower than the norm approved under Regulations, which is for the whole operation period. Therefore, in case the Hon'ble Commission allows Rs. 9.93 Crs as*

*additional O&M expenses as a special dispensation, there needs to be a reduction in the O&M cost as per norms due to non-operation of the plant.*

*Also, if the Commission considers the prayer of PPCL to allow such cost, then it may be allowed to be recovered over a period of three years so as to reduce the burden on the end consumers.*

*Or, if the Commission considers the prayer of PPCL to allow such cost, then it may be considered as a capital cost and the impact of the same to be deferred so as to minimize the tariff impact. Also, it is submitted to the Hon'ble Commission that the expenses of Rs. 21.45 lakhs towards replacement of corroded structure and pipeline etc. are to be met out of the approved O&M expenses and the additional expenses may not be allowed by the Hon'ble Commission."*

### **Petitioner's Response**

The Petitioner has given same justification as detailed in section 5.1 of this Order.

### **Commission's View**

The Commission has noted the submission of the stakeholder and has dealt with this issue in detail in section 5.1 of this Order.

## **2.2.2. Auxiliary Power Consumption**

### **Stakeholder's Comment (Electricity Department of Puducherry)**

*"The petitioner, PPCL, in its tariff petition for the FY 2017-18 vide Clause F, has submitted to the Hon'ble Commission as follows.*

*i.....*

*ii...*

*iii. With regard to the auxiliary power consumption, the petitioner seeks to invoke the power of the Hon'ble Commission to deviate from Tariff Regulation, 2009 considering the peculiar facts of the case and for reasons beyond the control of the Petitioner. The auxiliary power consumption (APC) is considered as per actual for the period from 01.06.2015 to 30.09.2015, because the station has electric Gas Booster Compressor pumps due to which APC is higher.*

*iv. The CEA has also recommended higher APC for plants having electric Gas Booster Compressor. Since Natural gas is supplied at a lower pressure i.e. 3 to 5 Kg/ Cu.m, electric driven Gas Booster compressors are required to boost up the gas pressure to 17 kg/ Cu.m resulting in increase of APC. Four electric driven Gas Booster compressor of 300 kW each has to run to achieve full load. It is imperative to submit that the Hon'ble Commission and also the Hon'ble Appellate Tribunal have taken the view that in a number of judgments, the vintage of power plants has to be kept in mind before determining the various operating parameters for the power plant and accordingly the petitioner considered APC at 6% percentage which is around the actual.*

.....

ix. Applying the above analogy, the Petitioner is praying for the APC of 6%. The Petitioner desired to place all the relevant pages from the above Judgments/orders in a separate compilation which is noted at Annexure-IV.

x. The Hon'ble Commission may consider the facts and factors, and allow the petitioner to avail the actual auxiliary power consumption made during the period from 01.04.2016 to 30.09.2016 (coverage of 6 months) of the Tariff Year 2017-18.

*In view of CERC's Regulations 2014-19 and CEA guidelines, the norm of 2.5% auxiliary consumption for Combined Cycle generating station and additional APC limited to 2.5% for the Electric Driven Gas Boosters (totaling to 5%), which has already been approved by the Hon'ble Commission in its earlier tariff orders may be adopted. Further, increase to 6% as sought by the Petitioner may not be accepted"*

#### **Petitioner's Response**

The Petitioner has submitted that the APC be considered as per actuals, based on the period from 1<sup>st</sup> April 2016 to 30<sup>th</sup> September 2016, because the station has electric gas booster compressor pumps due to which APC is higher, and CEA has also recommended higher APC for plants having electric gas booster compressor. As natural gas is supplied at a lower pressure, i.e. 3-5 kg/ Cu.m, electric-driven gas booster compressor is required to boost the gas pressure to 17 kg/ Cu.m, resulting in increase of APC. Four electric-driven gas booster compressors each of 300 kW have to run to achieve the full load. Further, the Petitioner has submitted that the Hon'ble APTEL has held in a number of judgments that the vintage of power plants is to be kept in mind before determining the various operating parameters for the power plant, and accordingly the Petitioner has asked for APC at 6%.

#### **Commission's View**

The Commission has noted the submission of the stakeholder and has dealt with this issue in detail in section 4.2.2 in respect of the Auxiliary Power Consumption (APC) while determining Tariff for FY 2017-18 in Chapter 4 of this Order.



## Chapter 3. True-up for FY 2014-15

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### 3.1. Background

The True up for the FY 2014-15 is to be carried out as per the provisions of Regulations 8 of the JERC Tariff Regulation 2009. The said Regulation specifies as under:

*'(8) Review and True Up*

- 1) The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'.*
- 2) (i) After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.*  
*(ii) The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.*
- 3) The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.*
- 4) While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.*
- 5) For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control.*
- 6) In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.*
- 7) The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category."*

The Commission had approved tariff for the FY 2014-15, vide its Order dated 25<sup>th</sup> April 2014 (Petition No. 121/2014). The Commission in the Order had approved the opening



capital cost at Rs 146.45 crore and additional capitalisation towards the reverse osmosis (RO) plant of Rs 3.32 crore for the FY 2014-15.

The audited accounts have been submitted along with the True-up Petition for the FY 2014-15 and after due prudence check of the fuel bills and power sale bills raised to the beneficiary (ED-Puducherry), the Commission has carried out the True-up for the year.

As a part of True-up exercise, the Commission has reviewed the variations between approvals and actuals of income and expenditure for the FY 2014-15 (as per the audited accounts submitted by the Petitioner) and has permitted necessary adjustments after due prudence check in cases where variations are for reasonable and justifiable reasons.

### 3.2.Regulations

As per provisions of Clause 19 of the JERC Tariff Regulations 2009, the Commission, while determining the cost of generation of each thermal/gas/hydro-electric generating station located within the state, shall be guided, as far as feasible, by the principles and methodologies of CERC, as amended from time to time.

The Commission, for the purpose of True-up for the FY 2014-15, has considered CERC Tariff Regulations for the period FY 2014-19 (herein referred to as **CERC Tariff Regulations, 2014**) issued by CERC vide notification No. L-1/144/2013/CERC dated 21<sup>st</sup> February 2014.

### 3.3.Operational Parameters

#### **Petitioner's Submission:**

The Petitioner has submitted the following operational parameters for FY 2014-15.

#### **1. Normative Annual Plant Availability Factor (NAPAF)**

The Petitioner has considered the NAPAF of 85% as per the Hon'ble APTEL judgment dated 21<sup>st</sup> November 2012. The Commission, as per its Order dated 25<sup>th</sup> April 2014, had approved the NAPAF of 85% and the same has been considered here.

#### **2. Gross Station Heat Rate**

The Petitioner has considered the gross station heat rate of 2646 kcal/kWh for FY 2014-15 as per the Commission's Order dated 25<sup>th</sup> April 2014.

#### **3. Auxiliary Power Consumption**

The Petitioner has considered the auxiliary consumption of 5.0% for FY 2014-15 as per the Commission's Order dated 25<sup>th</sup> April 2014.

**Commission's Analysis:**

For the purpose of the True-up of FY 2014-15, the operational parameters – NAPAF, gross SHR and auxiliary consumption have been considered as approved earlier by the Commission in the Order dated 25<sup>th</sup> April 2014.

NAPAF of 85% is in line with the judgment of the Hon'ble APTEL dated 21<sup>st</sup> November 2012 in Appeal No. 41/2012 as well as the Commission's Order dated 29<sup>th</sup> April 2013. Therefore, NAPAF of 85% is retained by the Commission for the FY 2014-15 for the period of actual operation.

Auxiliary power consumption of 5.0% and gross station heat rate (GSHR) of 2646 kcal/kWh are retained, as approved earlier for the FY 2014-15 in the Commission's Order dated 25<sup>th</sup> April 2014.

### 3.4. Annual Fixed Charge (AFC) approved for True-up of the FY 2014-15

The components of the fixed charge have undergone a change due to change in the approved capital cost. The following components have been considered as part of the fixed charge for the year.

1. Depreciation
2. Interest on Loan
3. Interest on working capital
4. O&M expenses
5. Return on equity

The components of the fixed charge mentioned above are discussed in detail in the following paragraphs. The Commission has arrived at the revised Annual Fixed Charge (AFC) for the year and accordingly approved the differential AFC charge as part of the True-up exercise for FY 2014-15.

#### 3.4.1. Capital Cost for the FY 2014-15

**Petitioner's Submission:**

The capital cost considered in the present True-up Petition is based on the approved capital cost of Rs 146.45 crore during True-up of FY 2013-14 as per the Commission's Order dated 23<sup>rd</sup> May 2016, plus Rs 4.47 crore towards RO plant which includes Rs 18.00 lakh incurred initially towards preliminary expenses, consultancy charges paid to CEA, advertising charges, etc., which were directly attributed to the project and have also been capitalised.

The Petitioner has considered the opening capital cost of Rs 146.45 crore and additional capitalisation of Rs 4.47 crore, thereby closing capital cost of Rs 150.92 crore for True-up of the FY 2014-15.

**Commission's Analysis:**

The Commission had approved Rs 146.45 crore as the opening capital cost with no additional capitalisation during the True-up of FY 2013-14. Further, the Commission had also ordered that:

*"The Commission, in this regard, notes that the Petitioner in the Tariff Petition for the FY 2016-17 has stated that the RO plant was put into operation with effect from 1<sup>st</sup> October 2014. As such, the additional capitalization towards the RO plant would be allowed only from FY 2014-15. The Commission, therefore, has not considered any additional capitalization towards the RO plant in FY 2013-14 as the plant was not operationalized during this period and **would consider the same during the True-up of FY 2014-15 based on supporting documents submitted**".*

The Commission further observes that as per audited accounts, the RO plant worth Rs 4,46,72,932 has been capitalised by the PPCL upto FY 2014-15. In view of this, the Commission now approves capitalisation of Rs 4.47 crore towards the RO plant in True-up of FY 2014-15.

**Accordingly, the Commission approves Rs 146.45 crore as the opening capital cost, Rs 4.47 crore as additional capitalisation and Rs 150.92 crore as the closing capital cost of FY 2014-15.**

3.4.2. Depreciation

**Petitioner's Submission:**

The depreciation has been computed on the closing capital cost of Rs. 150.92 crore for True-up of the FY 2014-15. The Petitioner has excluded the cost of freehold land of Rs. 7.93 crore for depreciation purpose. The depreciable value of the assets has been capped at 90% of the capital cost. The cumulative depreciation recovered up to the FY 2013-14 is Rs. 124.67 crore and accordingly the depreciation for the year has been considered as Rs. 0.37 crore by the Petitioner.

**Commission's Analysis:**

The Commission has considered the opening capital cost of Rs. 146.45 crore and additional capitalisation of Rs. 4.47 crore for the FY 2014-15. The cost of the freehold land of Rs. 7.93 crore has been excluded for depreciation purpose. The cumulative depreciation recovered up to FY 2013-14 is Rs. 124.67 crore (as referred in the True-up for the FY 2013-14 in Tariff Order dated 23<sup>rd</sup> May 2016). As the plant has already completed 12 years from the date of commercial operation and now it's in the 14<sup>th</sup> year of operation, the remaining depreciable value of the asset has been spread over the next 11 years of the useful life of the asset for the FY 2014-15, as per the CERC Tariff Regulations, 2014.

The depreciable value of the asset has been capped at 90% of the capital cost of the asset as per the applicable as per the CERC Tariff Regulations, 2014 and accordingly the

depreciation for True-up of FY 2014-15 is approved as Rs 0.37 crore.

The calculation of the same is as shown in the Table below:

**Table 3.1: Depreciation approved by the Commission for True-up of the FY 2014-15 (Rs. crore)**

S. No.	Details	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
1	Closing Capital cost	150.92	150.92
2	Less cost of Freehold Land	7.93	7.93
3	Capital cost excluding FH Land	142.99	142.99
4	Cap on Depreciation	128.69	128.69
5	Cumulative Depreciation upto the previous year	124.67	124.67
6	<b>Depreciation for the year</b>	<b>0.37</b>	<b>0.37</b>

**Therefore, the Commission approves Rs 0.37 crore as depreciation for the year during the True-up of the FY 2014-15.**

### 3.4.3. Interest Charge on Loan

#### **Petitioner's Submission:**

The Petitioner has claimed NIL interest charges for the True-up of FY 2014-15.

#### **Commission's Analysis:**

On the basis of the approved opening capital cost of Rs. 146.45 crore and Rs. 4.47 crore additional capitalisation for the year (as discussed in the section on capital cost), the gross normative loan is Rs. 104.08 crore (70% of the approved average capital cost of Rs. 148.69 crore).

As per the CERC Tariff Regulations, 2014, the repayment shall be deemed to be equal to the depreciation amount. It is seen that the cumulative depreciation recovered so far is higher than the gross normative loan, so the cumulative repayment has been limited to the gross normative loan. The cumulative depreciation up to the previous year (i.e. FY 2013-14) is Rs. 124.67 crore, and accordingly the cumulative repayment has been considered equal to the gross normative loan amount. Hence, the net loan opening is NIL.

The computation of the interest charges is as shown in the Table below:

**Table 3.2: Interest Charges approved by the Commission for True-up of FY 2014-15 (Rs crore)**

S. No.	Details	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
1	Average Capital cost for the year	148.69	148.69
2	Loan at 70% of average capital cost	104.08	104.08
3	Cumulative repayment up to previous year	104.08	104.08
4	Average net loan outstanding	0.00	0.00

S. No.	Details	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
5	Rate of Interest	13.36%	13.36%
6	Interest on Normative Loan	0.00	0.00

As the Petitioner has not availed actual loans, the rate of interest has been retained at the same level (i.e. 13.36%) as approved by the Commission in the last order for the True-up of FY 2013-14.

**The Commission, therefore, approves the interest charges on normative loan for the year as NIL for the True-up of the FY 2014-15.**

#### 3.4.4. Return on Equity

##### **Petitioner's Submission:**

Return on Equity (ROE) has been considered in accordance with the provisions of the JERC Regulation 24, and Regulation 15 (3) of the CERC Tariff Regulations, 2014. Grossing up of the base rate has been done with respect to the actual tax rate applicable to PPCL for computation of ROE for the FY 2014-15. Accordingly, the Petitioner has submitted the pre-tax rate of ROE as 23.48% (base rate of return of 15.5% grossed up by the corporate tax rate of 33.99%). The Petitioner has claimed ROE of Rs 10.43 crore.

##### **Commission's Analysis:**

As per Regulation 25 of the CERC Tariff Regulations, 2014, Tax on Return on Equity:

- (1) *The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, **the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year** in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. [“The actual tax on income from other business streams including deferred tax liability (i.e. income on business other than business of generation or transmission, as the case may be) shall not be considered for the calculation of effective tax rate”.]*
- (2) .....
- (3) *The generating company or the transmission licensee, as the case may be, **shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year.** However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be*

*recovered or refunded to beneficiaries or the long term transmission customers/DICs as the case may be on year to year basis.”*

The Commission observes that the Petitioner has not paid tax in FY 2014-15. In view of the above-mentioned provisions of the CERC Tariff Regulations, 2014, the Commission finds it appropriate not to gross up the base rate of 15.50%.

On the basis of the Commission’s approved opening capital cost of Rs. 146.45 crore and Rs 4.47 crore additional capitalisation for the year, the gross normative loan is Rs. 44.61 crore (30% of the approved average capital cost of Rs. 148.69 crore). The ROE on the normative equity capital base works out to Rs. 6.91 crore.

**The Commission, therefore, approves ROE for the year at Rs 6.91 crore during True-up of the FY 2014-15.**

### 3.4.5. Operation and Maintenance (O&M) Expenses

#### **Petitioner’s Submission:**

The O&M expenses for the FY 2014-15, as approved by the Commission were Rs. 10.86 crore; but the actual cost is Rs. 18.87 crore, of which the major repairing cost of gas turbine generator was Rs. 9.33 crore, and the allowed O&M expenses were not recovered during this breakdown period on account of non-recovery of AFC. The plant was under shutdown from 01<sup>st</sup> October 2014 to 01<sup>st</sup> May 2015 and was re-started on 02<sup>nd</sup> May 2015 after repairs. Accordingly, the Petitioner has requested to allow balance O&M expenditure of Rs. 9.33 crore towards repairing of the gas turbine generator and Rs. 0.21 crore towards replacement of damaged/corroded pipe rack structure, thereby totaling Rs. 9.54 crore.

#### **Commission’s Analysis:**

As per the CERC Regulation 29 (c) of the CERC Tariff Regulations, 2014, the O&M expenses for small gas turbine power generating plants (in the capacity range of 50 MW or below) for the FY 2014-15 are to be considered as Rs. 33.43 lakh/MW.

Accordingly, the O&M expenses for the 32.5 MW gas plant have been worked out as  $(33.43 \times 32.5 / 100 = 10.86)$  Rs. 10.86 crore for the purpose of True-up of FY 2014-15.

The Commission has examined the claim of the Petitioner for an additional O&M expenditure of Rs 0.21 crore towards replacement of damaged/corroded pipe rack structure. In the previous True-up order for the FY 2013-14, the Commission had asked for additional supporting documents from the Petitioner in respect of this additional expenditure. The Petitioner, subsequently had submitted the order of Inspector of Factories, Karaikal dated 06<sup>th</sup> November 2012 necessitating the said expenditure. This order gave immediate instructions to the Petitioner to repair the structures, ladder and platforms in the deaerator, cooling water systems and chimney area as they were found to be in dilapidated condition and further use of these structures would endanger human life. The Commission also notes that the work was awarded to the Public Works



Department, Government of Puducherry on 11<sup>th</sup> November 2014 on deposit work basis at an estimated cost of Rs. 94,25,400.

The Commission on a further clarification asked the Petitioner to submit the actual expenditure incurred under this head during FY 2014-15. The Petitioner submitted an utilisation certificate stating that Rs. 47.82 lakh had been fully utilised till 31<sup>st</sup> March 2015. The Commission has gone through the utilisation certificate submitted by the Petitioner and found it to be in order. Further, as expenditure of Rs. 26.37 lakh was incurred in FY 2013-14 itself, accordingly, the Commission allows the balance Rs. 21.45 (47.82-26.37) lakh as a one-time additional expenditure in FY 2014-15.

The Petitioner has also claimed Rs. 9.33 crore towards repairing of the gas turbine generator. The Commission has dealt with the treatment of the same in the next chapter.

**Therefore, the Commission approves the normative O&M expenses for the year at Rs. 10.86 crore applicable for the True-up of the FY 2014-15. Additionally, one-time O&M expenditure of Rs. 0.21 crore towards replacement of damaged/corroded pipe rack structure has been allowed by the Commission.**

#### 3.4.6. Interest on Working Capital

##### **Petitioner's Submission:**

The interest on Working Capital is Rs. 3.52 crore for the FY 2014-15, as per the CERC Tariff Regulations, 2014 and JERC Regulation 29.

The rate of interest of 13.50% has been considered by the Petitioner.

##### **Commission's Analysis:**

As per Regulation 28 (b) of the CERC Tariff Regulations, 2014, the Working Capital of the gas turbine generating station will be considered as under:

- i. Fuel cost of one month (gas) at NAPAF
- ii. Maintenance spares at 30% of O&M expenses
- iii. Receivables equivalent to two months of capacity and energy charge based on the NAPAF
- iv. O&M expenses for one month

The applicable rate of interest as per Regulation 28 (3) is as under:

*"Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1<sup>st</sup> April, 2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later."*

The bank rate has been defined in the Regulations as follows:

*“Bank Rate means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points.”*

Accordingly, the Commission has considered a base rate of 10.00% (as on 1<sup>st</sup> April 2014) and arrived at the bank rate of 13.50% (10.00% + 3.50%) for computation of the Interest on Working Capital for the FY 2014-15.

The energy charge considered while working out Working Capital are based on average fuel consumption and payments made in January, February and March 2014 corresponding to generation at NAPAF of 85%. As per CERC Tariff Regulations, 2014, the Commission has to consider the landed cost incurred and gross calorific value (GCV) of fuel as per actuals for the three months preceding the first month for which tariff is to be determined. Thereby, the fuel consumption values for the months of Jan’14, Feb’14 and Mar’14 have been considered for arriving at the one month fuel cost for purposes of computation of the Working Capital.

The Commission has considered the Working Capital and the interest thereon as per the Regulations mentioned above at an interest rate of 13.50% per annum, and arrived at the interest on Working Capital of Rs. 3.46 crore.

The computation of the interest charges is as below:

**Table 3.3 Interest on Working Capital approved by the Commission for True-up of FY 2014-15 (Rs crore)**

S. No.	Details	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
1	Cost of gas (one month) at NAPAF	5.91	5.94
2	Maintenance spares (30% O&M expenses)	3.26	3.26
3	Receivables (two months) at NAPAF	16.00	15.51
4	O&M expenses (one month)	0.91	0.91
<b>5</b>	<b>Total working capital</b>	<b>26.08</b>	<b>25.61</b>
6	Rate of interest on working capital	13.50%	13.50%
<b>7</b>	<b>Interest on working capital</b>	<b>3.52</b>	<b>3.46</b>

*Note: The additional one-time O&M expenditure of Rs. 0.21 crore allowed under the sub-head of ‘O&M expenses’ has not been considered for the computation of the working capital requirement for the year*

**Therefore the Commission approves interest on Working Capital for the year at Rs 3.46 crore during True-up of FY 2014-15.**



### 3.4.7. Differential Annual Fixed Charge (AFC) approved during True-up of FY 2014-15

The revised AFC approved by the Commission vis-à-vis that submitted by the Petitioner for the FY 2014-15 is as below:

**Table 3.4 Revised Annual Fixed Charge (AFC) approved by the Commission for True-up of the FY 2014-15 (Rs crore)**

S. No.	Details	Approved by the Commission in Tariff Order dated 25 <sup>th</sup> April 2014	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
1	Interest on loan	0.00	0.00	0.00
2	Depreciation	0.27	0.37	0.37
3	Interest on working capital	3.52	3.52	3.46
4	Operation and Maintenance Expenses	10.86	10.86	11.08*
5	Return on Equity	10.43	10.43	6.91
<b>6</b>	<b>Revised Annual Fixed Charge (AFC)</b>	<b>25.09</b>	<b>25.18</b>	<b>21.82</b>

\* *The Commission has also allowed additional one-time O&M expenditure of Rs. 0.21 crore towards replacement of damaged/corroded pipe rack structure for the FY 2014-15.*

The Commission in the Tariff Order for the FY 2014-15, dated 25<sup>th</sup> April 2014, had approved AFC of Rs. 25.09 crore. The AFC has now been revised to Rs. 21.82 crore for the FY 2014-15, on the basis of the True-up exercise carried out by the Commission.

The summary of actual AFC recovered in the monthly bills and revised AFC now entitled to be recovered is summarised as follows:

**Table 3.5 Refund of Annual Fixed Charge (AFC) approved by the Commission for True-up of FY 2014-15 (Rs crore)**

Month	PAFM <sup>1</sup>	NAPAF <sup>2</sup>	AFC billed at earlier approved AFC of Rs. 25.09 crore	AFC entitled at AFC of Rs. 21.82 crore	Refund
Apr-14	68.58%	85.00%	1.69	1.47	0.22
May-14	28.37%	85.00%	1.40	1.21	0.19
Jun-14	62.66%	85.00%	3.19	2.77	0.42
Jul-14	87.65%	85.00%	2.09	1.82	0.27
Aug-14	89.70%	85.00%	2.09	1.82	0.27
Sep-14	92.04%	85.00%	2.09	1.82	0.27
<b>Total</b>			<b>12.55</b>	<b>10.91</b>	<b>1.64</b>

Therefore, the Commission approves the refund of Rs 1.64 crore as part of the True-up exercise for the FY 2014-15, and directs the Petitioner to adjust this refund in billing of FY 2017-18 to the respondent in twelve equal monthly installments.

<sup>1</sup> PAFM: Plant availability factor achieved during the month, in percentage

<sup>2</sup> NAPAF: Normative plant availability factor in percentage

### 3.5.Variable Charge/ Energy Charge approved for True-up of FY 2014-15

The Commission, as per its Order dated 25<sup>th</sup> April 2014, had approved the formula on the basis of which the variable charge/energy charge would be claimed for the FY 2014-15. The formula for the energy charge (per unit basis) accounts for the actual gas cost, actual gross calorific value of the gas, normative auxiliary consumption and normative gross station heat rate (normative parameters approved by the Commission for the FY 2014-15). The Petitioner has been billing the variable charge/ energy charge for the FY 2014-15 on the basis of this formula.

The Commission, as part of the prudence check during the Truing-up exercise, has verified the bills that have been raised to the beneficiary (the respondent), i.e. EDP, for the FY 2014-15. The Commission has found the bills to be in order and as per the parameters approved by the Commission.

**The Commission, therefore, does not find any variation in amount due to the Petitioner on account of the variable charge/ energy charge during the True-up exercise for the year.**

## Chapter 4. Tariff Determination for FY 2017-18

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### 4.1.Regulations

As per provisions of Clause 19 of the JERC Tariff Regulations 2009, the Commission, while determining the cost of generation of the thermal/gas/hydro-electric generating stations located within the state, shall be guided, as far as feasible, by the principles and methodologies of CERC, as amended from time to time.

The Commission, for the purpose of analysis of the FY 2016-17, has considered CERC Tariff Regulations, 2014 issued by CERC vide notification No.L-1/144/2013/CERC, dated 21<sup>st</sup> February 2014.

### 4.2.Operational Parameters

#### 4.2.1. Normative Annual Plant Availability Factor (NAPAF)

##### **Petitioner's Submission:**

In terms of Regulation 36 of the JERC Tariff Regulations 2009, read with the CERC Regulations, 2014, NAPAF of 85% is being claimed. CERC has specified NAPAF at 85% for recovery of full fixed charge for 2014-19 for thermal generating stations.

Keeping in view the expected shutdown of 30 days for the replacement of the blade of the gas turbine compressor stator and rotor during the FY 2017-18, the Petitioner had requested the Commission to fix the NAPAF for the Karaikal station for recovery of full fixed charge in FY 2017-18 at 78% instead of 85% plant load factor (PLF).

##### **Commission's Analysis:**

The Commission had approved NAPAF at 85% for the FY 2013-14, FY 2014-15, FY 2015-16 and FY 2016-17 as per the Tariff Orders of the respective years, in compliance with the judgment of Hon'ble APTEL in Appeal No. 41/2012 on 21<sup>st</sup> November 2012. The Commission also perused the CERC Tariff Regulations, 2014 and maintained the NAPAF to be 85% as per Regulation 36 (A) (a).

Based on the Petitioner's submission, the Commission sought clarification from it regarding possibility of covering this shutdown thus maintaining the NAPAF. The Petitioner replied as follows:

*"Under the current operating condition the maximum average Plant Load factor per day will be 90%. So the total possible generation for 335 days (considering 30 days shutdown; will be  $335*32.5*24*1000*0.9 = 235.17$  MU*

*A) Loss of generation due to low 11 KV load & islanding 52.54 MU*

*B) Loss of generation due to fuel shortage: 10.97 MU*

*C) Therefore total generation possible=  $(A-(B+C)) = 221.66$  MU, so the maximum PLF is  $221.66/284.7=77.8\%$  or 78%.”*

The Commission observes that the Petitioner has recently recovered from a major shutdown from 1<sup>st</sup> October 2014 to 6<sup>th</sup> May 2015, and that these planned maintenances are essential for the life of the plant. However, the Commission is of the view that this shutdown can be clubbed with the other routine maintenance shutdowns. Hence, the Commission finds it appropriate to provisionally approve the NAPAF at 85% for the FY 2017-18.

The Commission will revisit the same at the time of True-up. The Petitioner is directed to maintain the details of backing down by EDP, actual shutdown schedules and other uncontrollable factors affecting the operations of the plant and submit the same for review of the Commission along with the filing of True-up of FY 2017-18.

**Therefore, the Commission provisionally approves NAPAF at 85% for the FY 2017-18.**

#### 4.2.2. Auxiliary Power Consumption (APC)

##### **Petitioner's Submission:**

The APC be considered as per actuals, based on the period from 1<sup>st</sup> April 2016 to 30<sup>th</sup> September 2016, because the station has electric gas booster compressor pumps due to which APC is higher, and CEA has also recommended higher APC for plants having electric gas booster compressor. As natural gas is supplied at a lower pressure, i.e. 3-5 kg/ Cu.m, electric-driven gas booster compressor is required to boost the gas pressure to 17 kg/ Cu.m, resulting in increase of APC. Four electric-driven gas booster compressors each of 300 kW have to run to achieve the full load. Further, the Petitioner has submitted that the Hon'ble APTEL has held in a number of judgments that the vintage of power plants is to be kept in mind before determining the various operating parameters for the power plant, and accordingly the Petitioner has prayed for APC at 6%.

##### **Commission's Analysis:**

The Commission has gone through the submissions made by the Petitioner and considered the auxiliary power consumption as per the norms mentioned in the Regulation 36 (E) (c) of CERC Tariff Regulations, 2014 for gas turbine generating stations as shown below:

- |                   |      |
|-------------------|------|
| 1. Combined cycle | 2.5% |
| 2. Open cycle     | 1.0% |

Further, as per the CEA guidelines, in cases where electric-driven gas booster compressors are part of the auxiliary plant, 2.5% extra auxiliary consumption can be allowed.

The issue has already been settled by the Hon'ble APTEL in its judgment dated 21<sup>st</sup> November 2012 in Appeal No. 41/2012 in the matter of Puducherry Power Corporation Limited vs. Joint Electricity Regulatory Commission and Electricity Department, Govt. of Puducherry.

The Hon'ble APTEL has upheld the analysis of the Commission and ordered that the auxiliary power consumption should be approved as per CERC Regulations and CEA guidelines.

**Therefore, the Commission approves APC at 2.5% for combined cycle plus additional power consumption limited to 2.5% for electric-driven gas booster pumps. Thus, 5.0% auxiliary power consumption of gross power generation is approved for the FY 2017-18.**

#### 4.2.3. Gross Station Heat Rate (GSHR)

##### **Petitioner's Submission:**

JERC Tariff Regulations 2009 provide that the norms and parameters of CERC Tariff Regulations shall be applicable for GSHR. CERC Regulations provide for determination of station heat rate on the basis of GCV.

The station design net heat rate is 2,291 kcal/kWh. A copy of the heat balance diagram for design heat rate has also been enclosed along with the petition. The gross design heat rate for net station design heat rate of 2,291 kcal/kWh works out to 2520 (2291\*1.1) kcal/kWh, considering a conversion factor of 1.1, i.e. GCV = 110% of NCV. Further, applying the degradation factor of 5 % as per the CERC Tariff Regulations, 2014, the normative GSHR comes to  $2,520 * 1.05 = 2,646$  kcal/kWh. The Commission has also approved the GSHR at 2,646 kcal/kWh for the FY 2016-17 on the basis of the submission of the Performance Guarantee Report of the Corporation for the guaranteed heat rate of 2,291 kcal/kWh (on the basis of the NCV of the gas). Accordingly, the Petitioner has sought GSHR of 2,646 kcal/kWh for the FY 2016-17.

##### **Commission's Analysis:**

The Commission had dealt with the issue of fixing the GSHR in the previous Tariff Order, dated 25<sup>th</sup> April 2014, after elaborately analysing the past actuals of the heat rate for 12 years and the CERC Order, dated 07<sup>th</sup> June 2012 on NEEPCO's Petition for revising the GHR of Assam and Agartala gas power projects as analogous to the PPCL plant. The Commission had also gone through the Performance Guarantee Report of the PPCL gas power station for the guaranteed heat rate of 2,291 kcal/kWh (on the basis of the NCV of the gas), and accordingly approved GSHR at 2,646 kcal/kWh for the FY 2014-15. Similar principle had been applied for approving the GSHR at 2,646 kcal/kWh for the FY 2015-16 and FY 2016-17.

On similar lines, and considering the Performance Guarantee Report of PPCL gas power station for the guaranteed heat rate of 2,291 kcal/kWh (on the basis of the NCV of the gas), the Commission approves the GSHR at 2,646 kcal/kWh for the FY 2017-18.

**Therefore the Commission approves the GSHR for the PPCL gas station at 2,646 kcal/kWh for the FY 2017-18.**

#### 4.2.4. Performance Parameters approved for FY 2017-18

Based on the above analysis, the performance parameters as approved for PPCL gas power station for FY 2017-18 are as listed in the Table below:

**Table 4.1 Performance Parameters approved by the Commission for FY 2017-18**

S. No.	Parameter	Projected by the Petitioner	Approved by the Commission
1.	Normative Plant Availability Factor (%)	78%	85%
2.	Auxiliary Power Consumption (%)	6.00%	5.00%
3.	Gross Station Heat Rate (kcal/kWh)	2646	2646

#### 4.3. Variable Cost Parameters

The Commission has prescribed a formula, in line with the CERC formula in CERC Tariff Regulations, 2014, for calculating monthly energy (variable) charge for billing purpose. However, in the following paragraphs, variable charge have been computed to work out the cost of gas (one month) and receivables for two months (energy charge component), which are used for calculation of the Working Capital requirement.

The details of the weighted average gross calorific value (GCV) and price of gas, as submitted by the Petitioner and the Commission's analysis, are discussed in subsequent paragraphs.

##### 4.3.1. Weighted Average Gross Calorific Value (GCV) of Gas

###### **Petitioner's Submission:**

The weighted average GCV 10,140.28 kcal/ Cu.m for the FY 2017-18, based on the landed cost of gas for July, August and September 2016. This has been considered to calculate the fuel cost for working out the Interest on Working Capital. The Commission is requested to allow weighted average GCV of gas for July, August and September 2016.

###### **Commission's Analysis:**

The CERC Regulations for calculation of the Working Capital requirement state that:

*"The landed cost incurred (taking into account normative transit and handling losses) by the generating company and gross calorific value of the fuel as per actual for the three months preceding the first month for which tariff is to be determined shall be considered and no fuel price escalation shall be provided during the tariff period."*

In line with the CERC Regulations, the Commission asked PPCL to submit the latest data available in respect of the fuel cost and GCV. Accordingly, PPCL made an additional submission, furnishing the following details:

**Table 4.2 GCV gas details submitted by the Petitioner for FY 2017-18**

S. No.	Parameter	Unit	Oct'16	Nov'16	Dec'16
1)	Quantity of gas supplied by GAIL	Cu.m	44,68,851	56,88,070	58,84,143
2)	Adjustment (+/-) in quantity supplied made by GAIL	Cu.m	-	-	-
3)	Gas supplied by GAIL (1+2)	Cu.m	44,68,851	56,88,070	58,84,143
4)	Normative Transit & Handling Losses	Cu.m	-	-	-
5)	Net Gas Supplied (3-4)	Cu.m	44,68,851	56,88,070	58,84,143
6)	Amount charged by the Gas Company	(Rs)	3,40,91,796	4,34,59,494	4,53,82,960
7)	Adjustment (+/-) in amount charged made by Gas Company	(Rs)	-	-	-
8)	Total amount charged (6+7)	(Rs)	3,40,91,796	4,34,59,494	4,53,82,960
9)	Transportation charges by rail /ship/ road transport	(Rs)	-	-	-
10)	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs)	-	-	-
11)	Demurrage Charges, if any	(Rs)	-	-	-
12)	Cost of diesel in transporting gas through other system, if applicable	(Rs)	-	-	-
13)	Total Transportation Charges (9+/-10-11+12)	(Rs)	-	-	-
14)	Total amount Charged for fuel supplied including Transportation (8+13)	(Rs)	-	-	-
15)	Weighted average GCV of Gas as fired	(kCal/Cu.m)	9,903.58	9,986.79	9,975.99
16)	Weighted average rate of Fuel/1000 Cu.m	Rs/1000 Cu.m	7,628.76	7,640.46	7,712.76

The Commission has validated the fuel details submitted by the Petitioner from the fuel bills submitted, and found the submission as regards quantity of gas, cost of fuel and weighted average GCV of gas in order.

The Commission has considered weighted average GCV of gas for Oct'16, Nov'16 and Dec'16 in its analysis of GCV. The Commission has computed the GCV of gas weighted by the quantity of gas procured for these months to arrive at the weighted average GCV of gas from Oct'16 to Dec'16.

**Table 4.3 Weighted average GCV (kcal/Cu.m) considered by Commission for FY 2017-18**

S. No.	Parameter	Oct'16	Nov'16	Dec'16
1)	Average GCV of gas for the month (kcal/Cu.m)	9,903.58	9,986.79	9,975.99
2)	Weighted average GCV of gas considered by the Commission for FY 2017-18 (kcal/Cu.m)	9,959.65		



The Commission, therefore, considers it appropriate to take GCV of 9,959.65 kcal/Cu.m based on the additional submission of the Petitioner for purposes of computing the working capital requirement for FY 2017-18.

**Accordingly, the Commission considers the Gross Calorific Value of Gas as 9,959.65 kcal/Cu.m for purpose of computation of the fuel cost in the Working Capital requirement for FY 2017-18.**

#### 4.3.2. Weighted Average Price of Gas

##### **Petitioner's Submission:**

The weighted average landed cost of gas for July, August and September 2016 has been considered. This has been considered to arrive at the fuel cost for working out the interest on working capital for the FY 2017-18.

The Petitioner has considered the weighted average price of gas at Rs 9,197.97 per 1000 Cu.m for the FY 2017-18, based on the months of Jul'16, Aug'16 and Sep'16.

##### **Commission's Analysis:**

As CERC Tariff Regulations, 2014 provide for landed cost of fuel to be considered for the three months preceding the first month for which tariff is to be determined, the Commission asked PPCL to furnish the latest bills and corresponding figures which the Petitioner subsequently submitted along with the response to data gaps.

The Commission validated the fuel details from the fuel bills submitted by the Petitioner and found the submission to be in order.

The Commission in its analysis has considered the weighted average (weighted by the quantity procured during the period) to arrive at Rs 7,663.72 per 1000 Cu.m rate for the fuel.

**Table 4.4 Weighted Average Cost of Gas (Rs/1000 Cu.m) considered by the Commission for FY 2017-18**

S. No.	Parameter	Oct'16	Nov'16	Dec'16
1)	Weighted average cost of gas as fired (Rs/1000 Cu.m) for the month	7,628.76	7,640.46	7,712.76
2)	Weighted average cost of gas as fired (Rs/1000 Cu.m)	7663.72		

The Commission in its analysis considers it appropriate to allow the weighted average price of gas as Rs 7663.72 per 1000 Cu.m to arrive at the weighted average cost of gas for the period from Oct'16 to Dec'16.

The Commission will consider the landed cost incurred and gross calorific value (GCV) of fuel as per actuals for the three months as per CERC Tariff Regulations, 2014, the Commission has to consider the landed cost incurred and gross Calorific Value (GCV) of fuel as per actuals for Jan'17, Feb'17 and Mar'17 at the time of True-up of FY 2017-18.



Accordingly, the Commission considers the weighted average cost of gas at Rs 7663.72 per 1000 Cu.m for the purpose of computation of the fuel cost in the Working Capital requirement for FY 2017-18.

#### 4.3.3. Energy (Variable) Charges for working capital requirement for FY 2017-18

Based on the performance and cost parameters as approved in the earlier paragraphs, the fuel cost of PPCL gas station for the FY 2017-18 at 85% NAPAF, is worked out as given in the Table below:

**Table 4.5: Variable Charges for Working Capital for the FY 2017-18**

S. No.	Items	Unit	Approved
1	Station Heat Rate	kcal/kWh	2646
2	Gross Calorific value of Gas	kcal/ Cu.m	9959.65
3	Price of Gas	Rs/1000 Cu.m	7663.72
4	Fuel Cost /Gross units	Rs/kWh	2.036
5	<b>Fuel Cost/Net units</b>	<b>Rs/kWh</b>	<b>2.143</b>

#### 4.4. Annual Fixed Charge (AFC) approved for FY 2017-18

The components of the fixed charge have undergone a change due to change in the approved capital cost. The following components have been considered as part of the fixed charge for the year.

1. Depreciation
2. Interest on Loan
3. Interest on WORKING capital
4. O&M Expenses
5. Return on Equity

The components of the fixed charge mentioned above are discussed in detail in the following paragraphs.

##### 4.4.1. Capital Cost for FY 2017-18

#### **Petitioner's Submission:**

The Commission may allow the capital cost of Rs. 150.88 crore as approved in the Order dated 23<sup>rd</sup> May 2016 for the Tariff period 2017-18.

**Commission's Analysis:**

The Commission has approved Rs. 150.92 crore as closing capital cost in True-up of the FY 2014-15. Further, the Commission had approved NIL capitalisation in the FY 2015-15, FY 2016-17 and FY 2017-18. Also, the Petitioner has not proposed any further capitalisation in the FY 2017-18,

**Therefore, the Commission approves the opening capital cost at Rs 150.92 crore, and no further additional capitalisation during FY 2017-18.**

4.4.2. Depreciation

**Petitioner's Submission:**

The Petitioner has projected the depreciation charge for the year at Rs. 0.38 crore. The Petitioner has restricted the accumulated depreciation of the asset to 90% of the capitalised value of the asset. The rate of depreciation has been considered as per Regulation 26 of the JERC Tariff Regulations 2009 and CERC Tariff Regulations, 2014. The Petitioner also submitted that the station is over 15 years old, and the Petitioner has calculated depreciation accordingly on the same methodology as adopted for the previous years.

**Commission's Analysis:**

The Commission has considered the opening capital cost of Rs. 150.92 crore (based on True-up closing cost for the FY 2014-15 and no additional capitalisation during FY 2015-16, FY 2016-17 and FY 2017-18 for purposes of the tariff determination. The cost of the freehold land of Rs. 7.93 crore has been excluded for depreciation purpose. The cumulative depreciation recovered up to the FY 2016-17 is Rs. 125.74 crore (considering cumulative depreciation of Rs. 125.04 crore up to final True-up of the FY 2014-15, and approved depreciation of Rs. 0.33 crore for the FY 2015-16 and Rs. 0.38 crore for the FY 2016-17 (as approved in their respective Tariff Orders). It is noted that the plant is in its 17<sup>th</sup> year of commercial operation. In line with the following provision of Regulation 27(5) of the CERC Tariff Regulations 2014, the remaining depreciable value (upto 90% of the capital cost) of the asset has been spread over the balance useful life of the asset, i.e. 8 years:

*“Provided that the remaining depreciable value as on 31<sup>st</sup> March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.”*

The depreciable value of the asset (excluding land valued at Rs. 7.93 crore) has been capped at 90% of the capital cost of the asset, and accordingly the depreciation for the year is approved at Rs. 0.37 crore.

The calculation of the same is as shown in the following Table:

**Table 4.6: Depreciation approved by the Commission for FY 2017-18 (Rs. crore)**

S. No.	Details	Petitioner's Submission	Approved by the Commission
1	Closing Capital cost	150.88	150.92
2	Less cost of Freehold Land	7.93	7.93
3	Capital cost excluding FH Land	142.95	142.99
4	Cap on Depreciation	128.66	128.69
5	Cumulative Depreciation upto the previous year	125.64	125.74
6	<b>Depreciation for the year</b>	<b>0.38</b>	<b>0.37</b>

As shown in the Table above, the remaining depreciation of Rs. (128.69 – 125.74) = 2.95 crore has been spread over the remaining useful life of the asset i.e. 8 years, resulting into depreciation for the year at Rs. 0.37 crore.

**Therefore, the Commission approves the depreciation at Rs. 0.37 crore for FY 2017-18.**

#### 4.4.3. Interest Charge on Loan

##### **Petitioner's Submission:**

The Petitioner has claimed NIL interest charges for the FY 2017-18.

##### **Commission's Analysis:**

Regulation 26 of CERC Tariff Regulations, 2014 has been referred to for computing the interest on normative loan.

On the basis of the approved average capital cost of Rs. 150.92 crore, the gross normative loan amount is Rs. 105.64 crore. As per the CERC Tariff Regulations, 2014, the repayment shall be deemed to be equal to the depreciation amount.

It is observed that the cumulative depreciation so far recovered (up to the FY 2016-17) is Rs. 125.74 crore, as also reflected in 4.6.1 above. The gross normative average loan for the the FY 2017-18 on the basis of the approved average capital cost of Rs. 150.92 crore is Rs. 105.64 crore. It is seen that the cumulative depreciation so far recovered is higher than the gross normative loan amount, and accordingly there is no loan outstanding for the year. In the absence of any outstanding loan amount, the interest charges for the year are approved as NIL.

The computation of the interest charges is as below:

**Table 4.7: Interest Charges approved by the Commission for the FY 2017-18 (Rs crore)**

S. No.	Details	Petitioner's Submission (True-up)	Approved by the Commission (True-up)
1	Average Capital cost for the year	150.88	150.92
2	Loan at 70% of average capital cost	105.62	105.64
3	Cumulative repayment up to previous year	105.62	105.64
4	Average net loan outstanding	0.00	0.00
5	Rate of Interest	13.36%	13.36%
6	<b>Interest on Normative Loan</b>	<b>0.00</b>	<b>0.00</b>

As the Petitioner has not availed actual loans, the rate of interest has been retained at the same level (i.e. 13.36%) as approved by the Commission in this order for the True-up of FY 2014-15.

**Therefore, the Commission approves the interest charges for the year as NIL for the FY 2017-18.**

#### 4.4.4. Return on Equity

##### **Petitioner's Submission:**

The Petitioner has submitted that the capital cost of the project has been funded from its own resources, and, hence, capital investment has been considered as 70% normative loan and 30% normative equity, as per JERC Tariff Regulations 2009. The Regulations stipulate that if the equity employed is in excess of 30%, the amount of equity for determination of tariff is limited to 30% and the balance amount is to be considered as normative loan.

The Petitioner has submitted the pre-tax rate of return on equity as 23.48% (base rate of return of 15.5% grossed up by the corporate tax rate of 33.99%), as per Regulation 24 of the JERC Tariff Regulations and CERC Tariff Regulations, 2014. The Petitioner has submitted that it does not have any tax holiday from FY 2010-11, and the tax holiday was applicable only up to FY 2009-10.

The Petitioner has claimed return on equity on 30% of the average capital cost submitted, i.e. Rs. 150.88 crore at the rate of 23.48%, which works out to Rs. 10.61 crore (23.48% of Rs 45.19 crore).

##### **Commission's Analysis:**

As per Regulation 25 of the CERC Tariff Regulations, 2014, Tax on Return on Equity:

*“(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, **the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant***

*Finance Acts by the concerned generating company or the transmission licensee, as the case may be. [“The actual tax on income from other business streams including deferred tax liability (i.e. income on business other than business of generation or transmission, as the case may be) shall not be considered for the calculation of effective tax rate”.]*

(2)....

*(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/DICs as the case may be on year to year basis.”*

For the purpose of analysis of the grossing-up tax rate on the base rate of return of 15.5%, the Commission notes that as per the unaudited accounts for the FY 2015-16, the Petitioner incurred a loss (loss before tax) of Rs. 41.55 crore due to plant breakdown from 1<sup>st</sup> October 2014 to 1<sup>st</sup> May 2015. The Commission is of the view that it would be difficult for the Petitioner to absorb such high losses and the carry-forward impact of such loss would continue during FY 2017-18. In this regard, the Commission notes that profit after tax for the FY 2013-14 (audited) is Rs. 8.78 crore and FY 2012-13 (audited) is Rs. 6.92 crore, respectively. Assuming a profitability in the range of Rs. 10 crore during FY 2016-17 and FY 2017-18, the carry-forward impact of the loss incurred during FY 2015-16 would lead to no tax liability during FY 2017-18.

The Commission, in view of the above, has, therefore, considered that the Petitioner would not be liable to pay any tax during FY 2017-18. The same would be re-visited at the time of True-up for the FY 2017-18 based on the actual tax paid and duly supported by relevant documents. Therefore, the Commission has not considered the grossing-up of the base rate with the tax rate, and has considered the return on equity as 15.50%.

Further, the Commission highlights that the other income stream (i.e. income of non-generation or non-transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate” in terms of the relevant Regulations during the True-up.

**The Commission directs the Petitioner to provide actual tax details along with the supporting documents during the True-up of FY 2017-18.**

The return on equity on the approved average capital cost of Rs. 150.92 crore on the normative equity capital base works out to Rs. 7.02 crore. (15.50% on the equity portion (30%) of approved average capital cost of Rs. 150.88 crore.)

**Therefore, the Commission approves return on equity at Rs. 7.02 crore for the FY 2017-18.**

#### 4.4.5. Operation and Maintenance (O&M) Expenses

##### **Petitioner's Submission:**

The Petitioner has claimed O&M expenses of Rs. 13.24 crore for the FY 2017-18. The O&M expenses include employee cost, R&M expenses and A&G expenses.

The Petitioner has submitted that O&M expenses have been taken as @ 40.73 lakh/MW, as specified by CERC for small gas turbine for the FY 2017-18.

The Petitioner, has also claimed additional O&M expense of Rs. 9.33 crore as a one-time relief measure for the FY 2014-15 due to the major breakdown, which happened during 1<sup>st</sup> October, 2014 to 1<sup>st</sup> May, 2015. There was no generation during the period of the breakdown. The Petitioner has submitted that as a one-time measure the additional expenditure incurred on generator repairs also be allowed as part of O&M expenses. The plant was re-started on 2<sup>nd</sup> May 2015. The Petitioner has submitted that due to the machinery breakdown for no fault on the part of the Petitioner, it has had to incur a one-time extra expenditure, which was not envisaged when the O&M expenses had been notified by the Commission, and has requested to allow the same to be recovered by way of tariff as a one-time measure.

##### **Commission's Analysis:**

The Commission has examined the O&M expenses claimed by the Petitioner. As per Regulation 29 (c) of the CERC Tariff Regulations, 2014, the O&M expenses for small gas turbine power generating plants for the tariff period FY 2017-18 are to be considered as Rs 40.73 lakh/MW. Accordingly, the O&M expenses for the 32.5 MW gas plant for the FY 2017-18 have been worked out at  $(40.73 \times 32.5 / 100 = 13.24)$  Rs. 13.24 crore.

Regarding the additional expenditure claimed for the repairs of stator and rotor of the gas turbine generator carried out by BHEL (the OEM) at a cost of Rs. 9.33 crore, the Commission has dealt with the same in the next chapter.

The Petitioner has also claimed Rs. 9.60 crore towards repairing of gas turbine compressor stator and rotor blades. The Commission has dealt with the treatment of the same in the next chapter.

**The Commission, therefore, approves the O&M charges at Rs. 13.24 crore for the FY 2017-18.**

#### 4.4.6. Interest on Working Capital

##### **Petitioner's Submission:**

The Petitioner has claimed interest on working capital of Rs. 3.06 crore for the FY 2017-18, as per Regulation 28(3) of the CERC Tariff Regulations, 2014 and Regulation 29 of the JERC Tariff Regulations 2009.

For computing the interest on working capital (IWC), the rate of interest considered is the SBI base rate as on 1<sup>st</sup> April 2015, i.e. 13.50%. The energy charge considered while working out IWC are based on average actual fuel consumption and payments made pertaining to the period Jul'16, Aug'16 and Sep'16.

**Commission's Analysis:**

As per Regulation 28 (3) of the CERC Tariff Regulations, 2014, the Working Capital to the Gas Turbine Generating Station shall be considered as under:

- i. Fuel cost of one month (Gas) at NAPAF
- ii. Maintenance spares at 30% of O&M expenses specified in Regulation 19
- iii. Receivables equivalent to two months of capacity and energy charge based on the NAPAF
- iv. O&M expenses for one month

The applicable rate of interest as per Regulation 28 (3) of the CERC Tariff Regulations, 2014 is as:

*"Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later."*

The bank rate has been defined in Regulations as follows:

*"Bank Rate means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points"*

Accordingly, the Commission has considered the base rate of 9.25% (latest prevailing base rate notified on 1<sup>st</sup> February 2017 as the rate applicable from 1<sup>st</sup> April 2017) and arrived at the bank rate of 12.75% (9.25% + 3.50%) for computation of the IWC for the FY 2017-18.

The energy charge considered while calculating working capital are based on average actual fuel consumption and payments made in Oct'16, Nov'16 and Dec'16, as discussed in Section 4.4 of this Order. The weighted average GCV and weighted average cost of gas for calculating the fuel requirement/cost are as discussed in Section 4.4 of this Order. Energy charge for Working Capital purposes have been worked out corresponding to generation at NAPAF of 85%.

The Commission has considered the working capital and interest thereon, as per the Regulations mentioned above at an interest rate of 12.75% per annum and arrived at the interest on working capital of Rs. 2.62 crore.



The computation of the interest charges is as below:

**Table 4.8 Interest on working capital approved by the Commission for FY 2017-18 (Rs crore)**

S. No.	Details	Petitioner's Submission	Approved by the Commission
1	Cost of gas (one month) at NAPAF	4.49	4.11
2	Maintenance spares (30% O&M expenses)	3.97	3.97
3	Receivables (two months) at NAPAF	12.92	12.10
4	O&M expenses (one month)	1.10	1.10
<b>5</b>	<b>Total working capital</b>	<b>22.49</b>	<b>21.28</b>
6	Rate of interest on working capital	13.50%	12.75%
<b>7</b>	<b>Interest on working capital</b>	<b>3.06</b>	<b>2.71</b>

**The Commission, therefore, approves Rs. 2.71 crore as the Interest on Working Capital for FY 2017-18.**

#### 4.4.7. Annual Fixed Charge (AFC) approved for FY 2017-18

The Annual Fixed Charge (AFC) vis-à-vis that submitted by the Petitioner is as below for FY 2017-18:

**Table 4.9 Annual Fixed Charge approved by the Commission for FY 2017-18 (Rs crore)**

S. No.	Details	Petitioner's Submission	Approved by the Commission
1	Interest on loan	0.00	0.00
2	Depreciation	0.38	0.37
3	Interest on working capital	3.06	2.71
4	Operation and Maintenance Expenses	13.24	13.24
5	Return on Equity	10.61	7.02
<b>6</b>	<b>Revised Annual Fixed Charge (AFC)</b>	<b>27.28</b>	<b>23.34</b>

**The Commission, therefore, approves the AFC at Rs. 23.34 crore for FY 2017-18.**

#### 4.5. Energy /Variable Charge (Net)

The Commission approves the computation of energy charge for payment purpose for FY 2016-17 on the basis of the following formula:

$$\text{ECR} = \text{GHR} \times \text{LGP} \times 100 / \{ \text{GCV} \times (100 - \text{APC}) \}$$

Where

*ECR= Energy Charge Rate, in Rs. per kWh sent out upto three decimal places*

*GHR= Normative Gross Station Heat Rate in kcal/kWh*

*LGP= Weighted average landed price of gas in Rs/Cu.m, during the calendar month*



*GCV= Gross Calorific Value of gas, in kcal per Cu.m during the calendar month*

*APC= Normative Auxiliary Power Consumption in percentage*

As the energy charge shall be computed and billed based on the above formula, there will be no need for any adjustment in True-up on this account.

An illustrative example is as shown below:

Assuming,

*GHR = Normative Gross Station Heat Rate i.e. Rs 2646 kcal/kWh for FY 2017-18*

*LGP = Rs 7.66/Cu.m*

*GCV = 9959.65 kcal/Cu.m*

*APC= Normative Auxiliary Power Consumption, at 5.00% for FY 2017-18*

*ECR =  $2646 \times 7.66 \times 100 / ((9959.65 \times (100-5.0)) = Rs 2.143/kWh$*

So, as can be observed from the above example the energy charge for the month work out to be Rs. 2.143/kWh assuming the above mentioned parameters.

## Chapter 5. Additional Claims by PPCL

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### 5.1.Rs. 9.33 crore towards repairing of Gas Turbine Generator

#### **Petitioner's Submission:**

The Petitioner has placed on record that the power generating station suffered a major breakdown on 01<sup>st</sup> October 2014 and the Gas Turbine Generator got restored on 02<sup>nd</sup> May 2015 and the Steam Turbine Generator got restored on 06<sup>th</sup> May 2015 and that there was no generation during the period of breakdown approximately 7 months. The Petitioner also submitted that the above fact was also intimated to the Commission vide PPCL's Lr.No.865/PPCL/MD/2014-15, dated 03<sup>rd</sup> November 2014.

The Petitioner submitted that the Gas Turbine Generator was under breakdown from 01<sup>st</sup> October 2014 to 01<sup>st</sup> May 2015 due to catastrophic failure of Generator Stator. Further, the Generator had been overhauled by M/s BHEL GE Gas Turbine Services Ltd (BGGTS) twice during last 14 years as per recommendations of Original Equipment Manufacturer. Subsequent to this Generator failure, the Original Equipment Manufacturer, M/s BHEL was called and requested to inspect the Generator and repaired the Stator at their site (i.e.) at BHEL, Hyderabad factory, as repair work at site was not possible. As per the advice, the cost of repair of Stator and Rotor as quoted (after thorough negotiation) by BHEL through BGGTS was around Rs. 9.33 crore and the GTG is restored on 02<sup>nd</sup> May 2015 and the STG was restored on 06<sup>th</sup> May 2015.

The Petitioner has prayed for the recovery of the amount of Rs. 9.33 crore by way of tariff as a one-time measure for the tariff period FY 2014-15 as the claim has been rejected by the Insurance Company.

The Petitioner has given the undertaking that in case any amounts are recovered from the Insurance Company through litigation, the same would be given due adjustment in the revenue requirements of the Petitioner.

#### **Commission's Analysis:**

The Commission, in its Tariff Order for the FY 2016-17 dated 23<sup>rd</sup> May 2016 stated:

*"Regarding the additional expenditure claimed for the Repairs of Stator and Rotor of the Gas Turbine generator carried out by BHEL at a cost of Rs. 9.33 crore for the break-down period 01.10.2014 to 01.05.2015, the actual amount due would be known only once the claim from the insurance company is settled and during the final True-up for the FY 2014-15 based on finalization of the audited accounts for the year. The Commission would then take a view regarding this expenditure."*

The Petitioner has now submitted a claim of Rs. 9.33 crore along with audited accounts for the purpose of True-up.

The Commission sought details of actual invoices raised by BHEL and payment thereof. The Commission also sought justification for consideration of this expense as pass-through in tariff, against which the Petitioner stated:

*“There has been no negligence on the part of PPCL. BHEL has concluded in their report that failure happened “due to frequent grid disturbances, sudden load fluctuations and abnormal 11 KV feeder tripping had led to severe stress on the stator windings causing the weakening of insulation. Further, corona discharges had occurred during operation aided by salt deposition and accumulation of dust and fine ash particles from atmospheric air on the winding near the core. This has caused damage of weakened insulation exposing copper & subsequent flash overs between the winding copper of phases and core.*

*Frequent grid disturbances, sudden load fluctuations and abnormal 11 KV feeder tripping are beyond the control of PPCL. PPCL has maintained the Generator as per the recommendations of the OEM, i.e. BHEL. Deposits were found when the machine was opened in 2006 and 2011 during major inspections. Cleaning of the deposits was done and machine was put back in service in 2006 and 2011.*

*Every machinery part undergoes wear and tear during the normal course of operation. The Original Equipment Manufacturers (OEM) recommend periodic inspection in their Operation & Maintenance manual to detect such wear and tear and take corrective action during such inspection. For Gas Turbine generator, M/s BHEL had recommended Major Inspection every 40000 to 60000 running hours. The relevant portion of the OEM’s manual is given in Annexure-D of the Petition. The Gas Turbine Generator of PPCL had undergone major inspection twice since commissioning of the plant i.e. once on 2006 and then on 2011. The next inspection was due on 2016-17. So there was no reason to inspect the Gas Turbine for wear and tear till next inspection. However, Gas Turbine Generator broke down on 1<sup>st</sup> October 2014.*

*BHEL carried out Inspection and various electrical diagnostic tests on Generator stator windings and rotor windings to assess the condition of insulation system and the generator health. The diagnostic tests include special tests like computerized digital ELCID test, IR & PI test, Tan delta & capacitance test, Partial discharge/corona probe test, DC Hipot test/DC Step voltage test winding DC resistance measurement, rotor retaining rings. Tests carried on rotor winding – IR test, AC impedance test and digital (recurrent surge oscillograph) test, DC resistance measurement and NDT tests of bearings during the last inspection in the year 2011.*

*The test results which were sent to the surveyors are given in Annexure-E.*

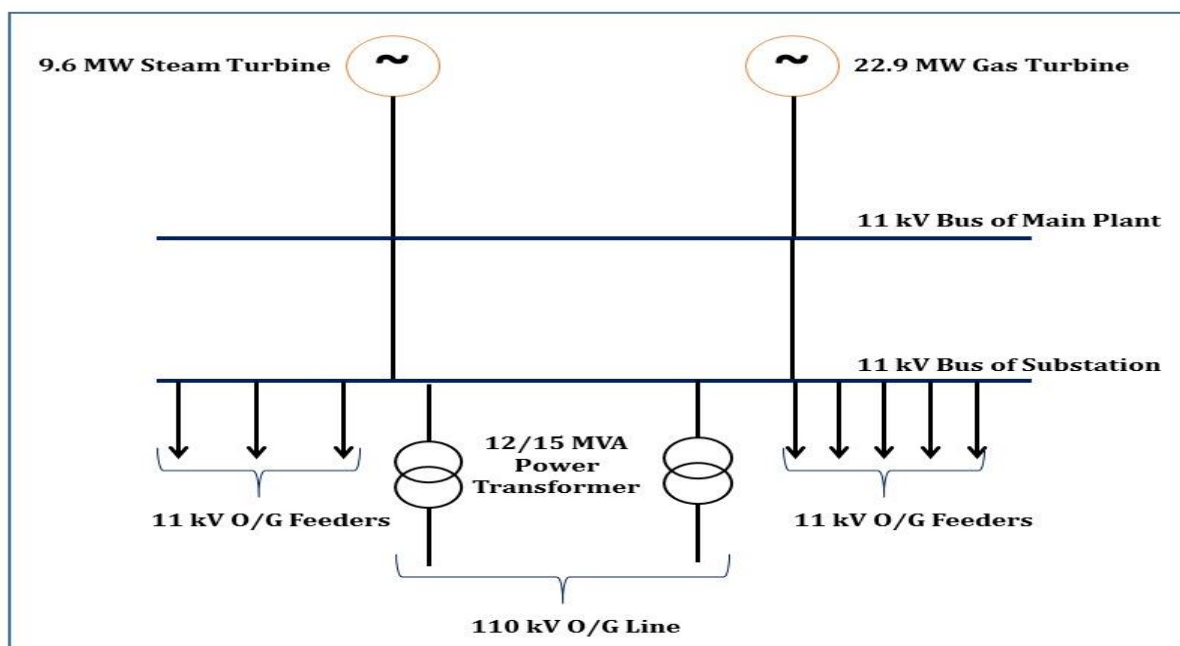
*As per the Test results of Major inspection in 2011, no deterioration or indication of deterioration was observed on the generator stator or the generator rotor winding and its insulation after operation of the generator along with the existing system*

for the last 11 years. During the operation of Gas Turbine Generator for 11 years similar kind of tripping has occurred many a time as it has occurred during the trip dated 01.10.2014. But on 1.10.2014, it could be the severity of the nature of fault that such an incident has occurred. This cannot be considered as gradual deterioration of the insulation for the last three years, nor can it be proved technically. Hence the argument given by the surveyor that insulation has got weakened during operation for last 15 years cannot be technically justified when the insulation was in perfect condition in 2011. This matter was communicated to the Insurance Company on 08.09.2015, copy of the letter is given in Annexure-F.

Further, the Insurance Company was well aware of the operation of PPCL and the risk involved due to abnormal grid disturbances. On 5<sup>th</sup> October 2012, the Steam Turbine exciter broke down. The reason for break down as per the RCA findings of BHEL was due to failure of varistors due to abnormal grid disturbance. Then the MBD claim was admitted by the respondent. In the present case, prima facie the denial of the claim appears to be contrived and deliberate.

The Commission has powers to remove difficulty as per Regulation 50 of CERC Tariff Regulations 14-19. The breakdown was beyond the control of PPCL, hence request is made to Hon'ble Commission to compensate for the losses borne by PPCL."

The Commission analysed the documents submitted by the Petitioner. The Commission observes that the substation at which PPCL is connected predominantly serves 11 kV load, as evident from the diagram below:



With reduction of industrial load due to migration of the industries over a period of time, the variations in load and consequently faults/fluctuations have increased in the grid /outgoing (O/G) feeders. As per the data made available by the Petitioner, the

station was subjected to over 30 tripping/outages between May 2011 and March 2014 due to disturbances in the grid and connected 11 kV feeders, which in the Commission's view were beyond the reasonable control of the Petitioner.

Further, in comments on the surveyor's letter regarding insurance claim for failure of generator by the OEM, BHEL Hyderabad, BHEL has concluded:

*"From the above explanations, it may be concluded that the failure of the stator winding is not due to the faulty or defective design materials or workmanship inherent vice latent defect gradual deterioration deformation or distortion or wear and tear, but most probably due to the grid disturbances, asymmetrical loading, sudden load fluctuations, 11 kV feeder fault tripping etc. as explained above. **BHEL once again confirms that stator winding Micalastic Insulation can't deteriorate due to aging and natural wear and tear, but due to external mechanical damage to insulation caused by grid, load and other distribution system faults.**"*

In view of this, the Commission finds merit in the submission of the Petitioner that frequent grid disturbances, sudden load fluctuations and abnormal 11 kV feeder tripping are beyond the control of the Petitioner. For a gas turbine generator, BHEL had recommended major inspection every 40000 to 60000 running hours. As the gas turbine generator of PPCL had undergone major inspections twice since commissioning of the plant, i.e. in 2006 and 2011, and the next inspection was due in 2016-17, the Commission acknowledges the submission that there was no reason for the Petitioner to inspect the gas turbine for wear and tear till the next inspection.

The Commission also notes that while the insurance company rejected the claim, the Petitioner is taking up this matter further in appropriate forums as the Petitioner is of the view that claim is legitimate on technical grounds mentioned above and that denial of the claim appears to be contrived and deliberate.

During the technical validation session, it was also clarified by the Petitioner that as there is no SLDC and as the department is the sole buyer, the Petitioner primarily operates on the instructions of ED-Puducherry.

**In view of the submissions made and justifications placed on record, the Commission is of the view that normative O&M approved by the Commission is adequate only to ensure the normal operations of the utility, and is not sufficient for contingencies of the nature mentioned. The Commission also notes that the PPA between PPCL and EDP is silent on the treatment of these contingencies. Keeping in view the financial position of the PPCL, as well as the importance of servicing the consumers of Karaikal, the Commission finds it appropriate to approve the additional claim of Rs 9.33 crore to be recovered from the ED-Puducherry in FY 2017-18 in twelve equal monthly installments.**

**However, the Commission, in this regard, would like to clarify that this approval is limited to recovery of expenses incurred towards repairing of the gas turbine generator to enable the Petitioner to undertake smooth operation for the remaining useful life of the plant, and no way should be construed as approval for recovery of any related/unrelated claims.**

**The Commission also directs the Petitioner to take up the matter of the insurance claim at all concerned forums/agencies and pass on the benefit of the same (to the extent of Rs. 9.33 crore plus carrying cost) to ED-Puducherry on processing of the claim by the insurance company.**

5.2.Rs. 9.60 crore towards repairing of Gas Turbine Compressor Stator and Rotor Blades and replacement of rotor

**Petitioner's Submission:**

The Petitioner has submitted that it requires 30 days of additional shutdown to replace the gas turbine compressor stator and rotor blades along with undertaking major inspection of the gas turbine. This replacement of the compressor stator and rotor blades is being undertaken on the recommendations of the service agency of OEM BHEL-GE Gas turbine Services (BGGTS). The Petitioner further submitted that for replacement of the compressor rotor blades, the turbine rotor needs to be changed, for which an expenditure of Rs. 9.60 crore plus taxes will have to be incurred.

The Petitioner has requested to allow one-time expenditure that will be incurred in the the FY 2017-18. The actual expenditure will be intimated while filing of True-up petition for the FY 2017-18.

**Commission's Analysis:**

The Commission in the Technical Validation Session has sought details for the necessity to replace the turbine rotor.

The Petitioner submitted that:

*"BHEL GE Gas Turbine Services Pvt Ltd (BGGTS) in its inspection report of May 2015 has recommended for replacement of compressor rotor and stator blades along with inlet guide vanes which are to be replaced as a set. Since compressor rotor blades can be taken out only after de-stacking of compressor rotor, the same need to be carried out at an authorized workshop, i.e. in BHEL, Hyderabad. The time duration for dismantling the rotor and sending to BHEL, Hyderabad for replacement of compressor rotor will be 115-120 days whereas if new rotor is purchased and replaced the downtime of the plant will be only 25-30 days.*

*Considering the loss of capacity charges and payment of Minimum Gas Obligation to Fuel supplier, it would be beneficial to PPCL if the rotor is changed. An offer received from BGGTS for supply of un-bucketed unit rotor for Frame 5 Gas Turbine where in the quoted price is Rs 9.60 crore + taxes. Copy are given in Annexure - C.*

*Recently PPCL's Board has given in principle approval to process the case for procurement of rotor and other Gas Turbine spares by e-tendering and after tendering put the case to Government for approval as for any capital item above Rs.50.00 lakhs needs approval of the Government as per the Articles and Memorandum of Association of the Company. Hon'ble Commission has been intimated about the above case for prior approval only."*

The Commission notes that the previous shutdown for seven months led to Minimum Guaranteed Offtake (MGO) payment of approximately Rs. 21 crore and loss of capacity charges of about Rs. 10 crore.

The Commission also considers that the replacement of the rotor which is received from OEM after due balancing is a better option than to replace blades instead as the generation loss during the time of to and fro transportation of the rotor to be refurbished will offset the cost of new rotor.

However, the Commission is of the view that the expense is of a capital nature and cannot be considered as a revenue expense. Also, the Commission observes that the Petitioner is yet to float a tender for the same. In the absence of actual market price discovered through competitive bidding, and consequent approval of the Government, the Commission does not find any merit in considering the expense to be recovered through tariff for the FY 2017-18 at this stage.

**In view of above, the Commission has no objection for the replacement of the Compressor rotor and other Gas Turbine spares.**

**The Commission will consider the actual expense (after discovery of actual market price through the process of bidding and adjustment of salvage value of the existing rotor) at the time of True-up as a capital expense, subject to technical validation of this requirement by the competent authority and subsequent investment approval of the Government.**



## Chapter 6. Annual Fixed Charge and other charges approved by the Commission for FY 2017-18

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In view of the discussions in the previous sections, the Commission now approves the following:

- **Annual Fixed Charge (AFC) at Rs. 23.34 crore for FY 2017-18**
- The capacity charge (fixed cost) per month to be billed shall be calculated as per the Regulation 30 of the CERC Tariff Regulations, 2014
- The Incentive shall be governed as per Regulation 30 (4) which is reproduced here below.

*“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 36 (B).”*

Normative Annual Plant Load Factor (NAPLF) will be considered at 85% for the purpose of the incentive calculation as per Regulation 36 (B) (a) of the Regulation 30 of the CERC Tariff Regulations, 2014.

- The Energy charge (net) to be billed per month shall be based on the unit energy rate calculated on the basis of the formula provided in Section 4.5 of this Order.
- **Billing of additional claim of Rs 9.33 crore towards the repair of generator stator in twelve equal monthly installments.**
- **Refund of Rs 1.64 crore as part of the True-up exercise for FY 2014-15 is to be passed on to the beneficiary in twelve equal monthly installments.**
- In addition to the charges approved above, the Commission also allows recovery of expenses pertaining to regulatory compliance (fees paid to the Commission towards filing of Tariff Petition for the FY 2017-18 and related publication expenses) from the beneficiary in twelve equal monthly installments.

## Chapter 7. Directives

*Over the years, the Commission has issued various directives to the Petitioner for necessary action at its end. It has been observed that the Petitioner is not fully complying with most of the directives issued by the Commission. In order to strengthen the effective monitoring and to ensure timely implementation of all the directives in true spirit, the Commission hereby orders that the Petitioner will now compulsorily submit:*

- *The detailed action plan for compliance of all the directives within 1 month of issuance of this order.*
- *The quarterly progress report as per the detailed action plan for all the directives issued in the subsequent sections within 10 days after the end of each quarter of the calendar year.*

### 7.1.Outstanding dues from ED-Puducherry to PPCL

#### Originally Issued in Tariff Order dated 28<sup>th</sup> March 2013

#### Commission's Latest Directive in Tariff Order Dated 06<sup>th</sup> April 2016

*The efforts of Petitioner in this regard are appreciated. The Petitioner is once again directed to collect the outstanding dues from ED-Puducherry and provide the status of the payment of outstanding dues by EDP by September 30' 2016. The Petitioner is directed to determine the amount of credit to be passed on to ED-Puducherry based on the Credit Note received from GAIL. It is further directed to expedite the collection of dues after adjusting the credit amount and settle this long pending issue. The Petitioner should provide the status of the payment of outstanding dues by EDP by September 30' 2016.*

#### Petitioner's Response in Present Tariff Petition

*The Corporation had requested the Electricity Department to release the outstanding to the Corporation. The Board of Directors have waived surcharge of around Rs. 66.77 crore (as on 31<sup>st</sup> July, 2015). In reply to the said letter, the Electricity Department informed that the total outstanding to the Corporation is Rs.41.23 crore only after adjustment of the credit note amount of Rs.24.42 crore. However, based on the financial statement for 2014-15 a sum Rs.23.98 crore has been provisionally arrived as amount of credit note issued by GAIL which pertains to Electricity Department.*

#### Commission's Response

*The Commission has noted that ED-Puducherry, vide letter no. 2078/ED/SE-1/Tech-1/F-12/2016-2017 Dated 07<sup>th</sup> November 2016, had communicated that :*

***"The matter of payment of actual outstanding amount had already been taken up with the Government of Puducherry for allocating additional funds for the payment of outstanding dues to be payable to the PPCL. As and when additional funds made available, the outstanding dues will be settled by the department."***

*The Commission directs the Petitioner to also pursue with the Government of Puducherry for release of the funds towards outstanding dues and revert to the Commission with the status by 30<sup>th</sup> September 2017.*

## 7.2. Installation of additional step-up transformer

### **New Directive**

*The Commission observes that owing to reduction of load at 11 kV feeders, the PPCL is not able to run the plant at full capacity as the adequate step-up transformation capacity is not available for supply at higher voltage. The Commission directs the Petitioner to take up this issue with the Electricity Department of Puducherry as well as the Government of Puducherry and submit the detailed action plan (along with cost thereof) for adequate evacuation of power at higher voltage also so that overall utilization of the plant is improved.*

## 7.3. Timely filing of the future Petitions

### **New Directive**

*The Commission observes that the Petitioner has failed to file the earlier Petitions on 30<sup>th</sup> November. The Commission now directs the Petitioner to strictly adhere to the timeline of 30<sup>th</sup> November for all future submission, failing which the Commission will be constrained to take appropriate action against the Petitioner.*

## 7.4. All future filings to be strictly as per the provisions of the JERC Tariff Regulations 2009

### **New Directive**

*The JERC Tariff Regulations 2009 mandate the requirement of filing of the True-up Petition for previous year, Annual Performance Review of current year and Tariff Petition for the ensuing year. The Commission observes that the Petitioner is not strictly adhering to the provisions of the Regulations and is regularly defaulting by making incomplete submissions before the Commission every year.*

*In the present Petition also, the Petitioner has not submitted the True-up of FY 2015-16 and Annual Performance Review of FY 2016-17.*

*In view of above, the Commission now directs the Petitioner to submit the True-up of FY 2015-16 and FY 2016-17, Annual Performance Review of FY 2017-18 and Annual Fixed Cost of FY 2018-19 in the next filing to the Commission failing which the Commission will be constrained to take appropriate action against the Petitioner.*

# Annexure 1: Public Notices published by the Petitioner

**UDUCHERRY POWER CORPORATION LIMITED**  
 (A Govt. of Puducherry Undertaking),  
 No.10, 2nd Cross, Jawahar Nagar, Boomianpet, Puducherry-605005.  
 No.1175/MD/PPCL/2016-17 Dt.19.01.2017

**PUBLIC NOTICE**

Notice is hereby given to all, consumers and stakeholders that Puducherry Power Corporation Ltd (PPCL) a "Generating Company" as defined under Section 2(28) of the Electricity Act 2003, engaged in generation of electricity, has filed before the Joint Electricity Regulatory Commission (JERC) for Goa and UTs, a petition for Aggregate Revenue Requirement and approval of Tariff of the PPCL Gas Power Station (32.5 MW) for the year 2017-18, under Section 62 of the Electricity Act, 2003 and Regulation No.12 of JERC/Regl/1009 of Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009.

The filing has been taken on record by the Hon'ble Commission in petition No.225/2017. The summary of ARR and Tariff for FY 2017-18 is given in the Table below.

Sl.No.	Particulars	
1	Gross Generation (MU)	223.00
2	Auxiliary Consumption (%)	6.00
3	Net Generation (MU)	209.62
4	Capacity charges (₹.Millions)	272.88
	a) Interest on loan capital (₹.Millions)	0.00
	b) Depreciation (₹.Millions)	3.80
	c) Advance against Depreciation (₹.Millions)	-
	d) O&M expenses (₹.Millions)	132.37
	e) Interest on working capital (₹.Millions)	30.60
	f) Foreign exchange rate variation (₹.Millions)	-
	g) Return on equity (₹.Millions)	106.11
	h) Taxes (₹.Millions)	-
5	Energy / variable charges (₹.Millions)	538.62
6	Total expenses (₹.Millions) (4+5)	811.50
7	Cost per unit in (₹/kWh)	3.87

Copies of the filings and petition referred to above are available in the Office of the Managing Director, Puducherry Power Corporation Ltd, No.10, Second Cross, Jawahar Nagar, Boomianpet, Puducherry-605005 and in the website of the Corporation at [www.ppcl.puducherry.gov.in](http://www.ppcl.puducherry.gov.in). Interested persons may inspect/peruse the said ARR and tariff proposals and take note thereof during office hours at the said office, free of charge. Copies of the above documents (with enclosures) can also be obtained on payment of ₹.250/- for each set from the office of Managing Director, PPCL at the above premises on all working days between 10:00 hrs and 16:00 hrs from 20.01.2017.

Objections/suggestions, if any, on the ARR filing and tariff proposals submitted by PPCL with supporting material may be filed with the Secretary, Joint Electricity Regulatory Commission (for State of Goa & U.T.'s), "Vanjya Nikunj", 2nd Floor, Udyog Vihar, Phase-V, Gurgaon-122 016 (Haryana) in five copies in person or through registered post so as to reach him on or before 03.02.2017 and a copy of the objection/suggestion should also be sent to the Managing Director, Puducherry Power Corporation Ltd., No.10, Second Cross, Jawahar Nagar, Boomianpet, Puducherry-605005.

The objections / suggestions as above should be filed in five copies (one original + 4 copies) and carry full name and postal address of the person sending the objections and should be supported by an affidavit. If the objection is filed on behalf of any organization or any class of consumers, it should be so mentioned. It may also be specifically mentioned if the person putting in objections/comments also wants to be heard in person.

The JERC, after pursuing the written objections received in response to this notice may invite such objectors as it considers appropriate for a hearing on dates which will be notified by the commission in due course.

MANAGING DIRECTOR  
**PUDUCHERRY POWER CORPORATION LTD**  
 PUDUCHERRY

Let us have a Clean Home,  
 Clean Street and Clean City  
 No.303/MD/PPCL/2016-17

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# Annexure 2: Public Notices published by the Commission for intimation of Public Hearing

**POLICE TNPSC BANK**  
15,711 POSTS Approx 15,000 Approx 40,000

● POLICE & TNPSC தேர்வுகள் 29.01.2017 முதல்  
● BANK தேர்வுகள் 04.02.2017 முதல் ஆரம்பம்

● POLICE & TNPSC தேர்வுகள் 02.02.2017 முதல் (7pm - 8 pm)  
● தேர்வுகள் மீட்டிங் உடனடி உடனடி வாய்ப்பில் ஆரம்பம்  
● Bank தேர்வுகள் 30.01.2017 முதல் ஆரம்பம் (10 am - 5 pm)

அமுல்படுத்தும் நேரம்: 9.30 am to 6.30 pm

**NATIONAL INSTITUTE OF BANKING**  
மாடாருத்தாவணி எதிரில் RTO ஆபீஸில் அருகில். மதுரை.  
98426 34271 97902 42571 0452-653 4271  
More Details: Visit [www.nationalinstituteofbanking.com](http://www.nationalinstituteofbanking.com)

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**POLICE**  
தலைநகரம் 7am - 9 am / 10 am  
சனி, குடியிருப்பு 10 am

2006 க்கும் 10,000 க்கும்  
Police ஆக தேர்வாகி  
100% வெற்றிக்கு வாய்ப்பு  
விடுதி வசதி உண்டு, ஆண்டு  
**ஆதித்யா** No. 17, New 86810 88700  
IAS அகாடமி

Government of Tamil Nadu  
**HOUSING AND URBAN DEVELOPMENT DEPARTMENT**  
**NOTICE**

The Government of India have enacted the "Real Estate (Regulation & Development) Act, 2016" to regulate and promote the Real Estate Sector. The Government of Tamil Nadu have prepared the draft Rules under the said Act and hosted it on the website of the Government, (i.e) [www.tn.gov.in/dept/15](http://www.tn.gov.in/dept/15) Chennai Metropolitan Development Authority (i.e) [www.cmdachennai.gov.in](http://www.cmdachennai.gov.in) and Commissioner of Town and Country Planning (i.e) [www.tn.gov.in/top](http://www.tn.gov.in/top)

2. Government invites Objections and Suggestions on the said rules which may be sent to the Secretary to Government, Housing and Urban Development Department, Secretariat, Chennai-9, either in writing or by email to [hudrera@tn.gov.in](mailto:hudrera@tn.gov.in) within 21 (twenty one) days from the date of publication of this notice.

Secretary to Government,  
Housing and Urban Development Department,  
Secretariat, Chennai - 600 009.

DIPP/98/OIS/2017

**NORTH EASTERN INDIRA GANDHI REGIONAL HEALTH & MEDICAL SCIENCES, MAWDIANGI**  
Advertisement No. NEIGR-E.II/10/97/Pt-XVI dated  
**Walk in interview for recruitment of Senior Resident Doctors in NEIGRIHMS**

The Institute will be conducting walk in interview 14<sup>th</sup> Feb the posts of Senior Resident Doctors (three years tenure) & Jun year tenure) from 11:00 am onwards in the Administrative Block Campus, Mawdiangiang, Shillong-793018.

For details regarding Vacancies, Essential Qualification, posts, Age & General information etc. kindly visit <http://neigrhms.gov.in>.

**PUBLIC NOTICE**  
**ICICI Bank** Registered office: Landmark, Race Course  
Corporate office: ICICI Bank Towers, Ba  
ICICI Bank Limited

**GOLD AUCTION CUM INVITATION NOTICE**

The below mentioned borrowers have been issued notices to pay their outstanding ar amounts ("Facility") availed by them from ICICI Bank Limited ("ICICI Bank"). Since if dues under the Facility, we are constrained to conduct an auction of the pledged gold or event any surplus amount is realised from this auction, the same will be refunded to the deficit post the auction, the balance amount shall be recovered from the borrower through Bank has the authority to remove any of the following accounts from the auction with reserves the right to change the Auction Date without any prior notice.

Loan A/C No.	Customer Name	Loan A/C No.	Customer Name
<b>Branch Name: Dharmapuri</b>			
605705010396	Mariyappan R	283705003582	Raja Annamalai
605705010079	Nagendiran	015605008975	C Balakrishnan
605705008313	Mohanraj	015605010218	Karthick S
605705013201	Thirupathi R	<b>Branch Name: Hosur-Commercial Street</b>	
605705012617	Sathiyakumar V	660805600554	S Selvam
605705011826	Raja P	660805600733	Madan Babu M
605705012625	Karthikayan K	660805600475	B Vinodkumar
605705013156	Selvakumar P	155605006603	Robin David P
<b>Branch Name: Krishnagiri</b>			
080205011675 N Pandurangan			
<b>Branch Name: Harur</b>			
283705002263	Arasu	080205011700	K Ramesh
283705001926	Selvaraj R	080205005214	Veerasamy
283705001651	Minnaladevi	080205004856	C Ramamurthy
283705004203	Mubina M	080205011064	Saravankumar S
283705004172	Priya S	080205011680	Madeshwaran
283705003564	Selvan R	080205011112	Karthick Raja V

Auction will be held online through <http://gold.samil.in> in between 12:30 pm to 3:30 pm. Information, terms and conditions and getting registered to participate in the auction website/s or contact the auction portal/s or the Bank. Please note if the auction does not time limit the same will follow the subsequent days on the same terms and conditions pertaining to auction will be applicable to his legal heirs.

Date : 28.01.2017  
Place : Dharmapuri, Krishnagiri, Namakal

N. S. E. P. Madhusai  
28-1-2017

NATIONAL INSTITUTE OF BANKING