



TARIFF ORDER
Determination of Tariff
for
FY 2013-14
And
Provisional True-up for FY 2011-12
Petition No. 98/2013

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

JOINT ELECTRICITY REGULATORY COMMISSION
For the State of Goa and Union Territories

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28th March 2013

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5	Calculation of the monthly energy charges as part of the provisional truing-up of FY 2011-12
6	Supporting document received from Petitioner regarding pending dues from EDP

List of Abbreviations

Abbreviation	:	Full Form
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 Charges
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
PAF	:	Plant Availability Factor
PLF	:	Plant Load Factor
PPA	:	Power Purchase Agreement
PPCL	:	Puducherry Power Corporation Limited
RO	:	Reverse Osmosis
RoE	:	Return on Equity
SHR	:	Station Heat Rate

Before the

Joint Electricity Regulatory Commission
for the State of Goa and Union Territories
Gurgaon

CORAM

Dr. V K Garg (Chairperson)

S. K. Chaturvedi (Member)

Petition No. 98/2013

In the matter of

Determination of Generation Tariff for the Financial Year 2013-14 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, PuducherryRespondent

ORDER

Date: March 28' 2013

1. INTRODUCTION

1.1 JERC Formation

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 May 2’ 2005. Later on 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 May 30’ 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. Office of the Commission is presently located in the district town of Gurgaon, Haryana.

1.2 Puducherry Power Corporation Limited

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 Electricity Act, 2003.

PPCL was incorporated on 30th 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 Union Territory of Puducherry. The required gas of 1.91 lakhs cubic meter of gas per day is obtained from the gas wells at Narimanam in the Cauvery basin under an agreement with the GAIL (India) Ltd.

The commercial operation of the Karaikal station has been declared with effect from 03rd January 2000 and is supplying power to Electricity Department, Puducherry under the Power Purchase Agreement (PPA) signed with them on 25th February 2002. Consequent to setting up of the Joint Electricity Regulatory Commission, the Petitioner had filed petition for determination of tariff for the period 2011-12. The Commission vide order dated August 6’ 2011 had approved tariff with effect from June’ 2011 for FY 2011-12. Subsequently, based on review petition filed by Petitioner, the Commission revised the tariff vide its order communicated to PPCL on December 28’ 2011 and the Corporation then filed the Appeal No. 41 of 2012 to APTEL against the review order pertaining to the tariff order 2011-12 which has been disposed by the APTEL with directions, as per the judgment dated November 21’ 2012. The petitioner has already approached the Commission for implementation of the above judgment. At present, the tariff of the instant station has been fixed at the rate by the Commission to Puducherry Power Corporation Limited vide Commission’s order dated April 13’ 2012 on the basis of petition filed for the tariff period 2012-13.

1.3 JERC Tariff Regulations

The Commission, in exercise of the powers conferred upon 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 JERC Tariff Regulations).

1.4 Filing of Petition

Due to the delay in filing of the petition by the Petitioner as per the regulatory timelines, the Petitioner filed an application for condonation of delay in filing of tariff petition for FY 2013-14 before the Commission vide its letter dated January 7' 2013. The Commission acceded to the request of the Petitioner and granted extension of time till February 7' 2013 for filing of the petition vide its letter dated January 24' 2013.

PPCL then filed its petition before Joint Electricity Regulatory Commission for approval of tariff for FY 2013-14 for Puducherry Gas Power Station (32.5 MW) for sale of power to the deemed distribution licensee of Puducherry on February 5' 2013, under section 62 read with regulation no. 3 to 10 of "Joint Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2009".

1.5 Admission of Petition

The Commission admitted the petition for determination of Generation Tariff for FY 2013-14 for PPCL on February 5' 2013 vide its Order dated February 8' 2013. A copy of the Admission Order dated February 8' 2013 is enclosed as **Annexure 1** to this Order. As per the Admission Order, the Petitioner was directed to publish the public notice of the tariff petition (abridged form). Further, the Admission Order also mentioned that the public hearing on the petition would be held at "Hall at Pondicherry Multipurpose Social Service Society (PMSSS) Complex, # 81, Laporte Street, Puducherry" at 1400 hours on March 8' 2013.

1.6 Interaction with the Petitioner

The Commission interacted regularly with the Petitioner to seek clarifications and justification 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 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: List of Correspondence with PPCL

S. No.	Date	Subject
1.	28.02.2013	Queries and additional data sought by the Commission
2.	05.03.2013	Petitioner's submission on the objections of the petition submitted vide email dated 05.03.2013
3.	06.03.2013	Reply to the queries and additional data sought by the Commission submitted vide email dated 06.03.2013
4.	25.03.2013	Performance Guarantee report submitted by Petitioner
5.	26.03.2013	Petitioner submission on the outstanding dues from EDP

1.7 Public Hearing Process

The Commission directed the petitioner to publish the summary of the ARR in abridged form and manner as approved in accordance with section 64 of the Electricity Act 2003 to ensure public participation.

The public notice by PPCL was published in the following newspapers for inviting objections/ suggestions from the stakeholders on the tariff petition:

Table 2: Details of public notice published by PPCL

S. No.	Date	Name of newspapers	Place
1.	15.02.2013	The Hindu (English)	Puducherry, Karaikal
2.	15.02.2013	Malai Malar (Tamil)	Puducherry, Karaikal

The petitioner also cited the public notice and the petition on its website (www.ppcl.nic.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 February 28' 2013. The copies of public notice are attached as **Annexure 2** to this order.

The Commission published the notice for public hearing regarding the approval of the tariff for FY 2013-14. Schedule of the public hearing is given below.

Table 3: Schedule of Public Hearing at Puducherry

S. No.	Date & Time	Venue of Hearing	Subject
1.	8 th March 2013 1400 hours onwards for all category of consumers	Hall at Pondicherry Multipurpose Social Service Society (PMSSS) Complex, #81, Laporte Street, Puducherry - 605001	Petition No. 98/2013 of PPCL Generation Tariff increase to Rs 3.77/kWh for FY 2013-14 due to changed norms of Heat Rate, Aux Power Consumption, Interest on Loan Capital, O&M etc.

Table 4: Details of public notice published by Commission

S. No.	Date	Name of newspapers	Place of Publication
1.	February 13' 2013	Dinakaran	Trichy, Puducherry
2.	February 13' 2013	The Hindu	Kochi
3.	February 13' 2013	Malyala Manorama	Kannur
4.	February 14' 2013	Mathrumbhumi	Kannur
5.	February 13' 2013	Andhra Jyoti	Kakinada
6.	February 13' 2013	Vijaya Bhanu	Vishakapatnam

Table 5: Repeat public notice published by Commission

S. No.	Date	Name of newspapers	Place of Publication
1.	March 6' 2013	Dinakaran	Trichy, Puducherry
2.	March 6' 2013	The Hindu	Chennai/Trichy/Kochi
3.	March 6' 2013	Mathrumbhumi	Kannur
4.	March 6' 2013	Vijaya Bhanu	Kakinada

The copies of public notice published by the Commission for intimation of public hearing(s) are attached as **Annexure 3** to this order. The public notices were also published on the website of the Commission (www.jercuts.gov.in).

During the public hearing, each objector was 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 opportunity to express their views. ED-Puducherry gave their objections in writing. The issues and concerns expressed by stakeholders have been examined by the Commission. The major issues discussed during the public hearing(s), the

comments/replies of the utility and the views of the Commission thereon, have been summarized in **Chapter 3** of this order.

The list includes the stakeholders:

1. Those who gave their written objections & did not intend to present orally during the public hearing
2. Those who gave their written objections & expressed to present orally also during the public hearing
3. Those who gave their written objections but had not desired to express orally, but later chose to present orally also. They were also given an opportunity to present orally before the Commission during the public hearing;
4. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot
5. Stakeholders who did not give their written objection or prior intimation, but participated in the hearing on the spot and also gave written submissions

All these objections/suggestions were responded to by the Licensee in addition to prior written replies, during the hearing itself. Licensee submitted written reply to all written objections/suggestions of the stakeholders.

2. Summary of Tariff Petition filed by PPCL for FY 2013-14

2.1 Introduction

The petitioner has submitted the operational parameters and cost of the generating station for FY 2013-14. The operational parameters pertain to plant availability, station heat rate (SHR) and auxiliary power consumption. The costs cover both the energy (variable) and capacity (fixed) charges.

2.2 Summary of fixed and variable charges projected by PPCL for FY 2013-14

The gross and net generation, the fixed and the variable charges projected by the petitioner for FY 2013-14 are as given below:

Table 6: Capacity/Fixed Charges proposed by PPCL for FY 2013-14

S. No.	Particulars	Proposed by the Petitioner for FY 2013-14
1.	Gross generation (MUs)	257
2.	Auxiliary consumption (%)	6.00%
3.	Net generation (MUs)	241.58
4.	Capacity Charges (Rs. Crores)	24.12
(a)	Interest on loan capital (Rs. Crores)	0.93
(b)	Depreciation (Rs. Crores)	0.18
(c)	O&M expenses (Rs. Crores)	9.30
(d)	Interest on working capital (Rs. Crores)	3.28
(e)	Return on equity (Rs. Crores)	10.43

The Petitioner has proposed that the energy charges be billed as per the below mentioned formula based on CERC Regulations 2009.

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

Where

ECR = Energy charge Rate, in Rs per kWh sent out upto three decimal charges,

GHR= Normative Gross Station Heat Rate in Kcal/kwh,

LGP= Weighted average landed price of gas in Rs/scm, during the calendar month,

GCV= Gross calorific value of gas, in kcal per scm during the calendar month,

APC= Normative Auxiliary Power Consumption in percentage

The Petitioner has considered Gross Station Heat Rate = 2600 kcal/kWh and Auxiliary Power Consumption (APC) = 6% for FY 2013-14.

Further, the Petitioner has submitted that the Commission vide its order dated April 13' 2012 had allowed truing up of Energy charges for the months of June'11, July'11, September'11, October'11 & first fortnight of August'11 based on actual monthly weighted average GCV of gas and average gas price. The Petitioner has now submitted the truing up for remaining months of the financial year 2011-12 and claimed Rs 2,30,60,432/- (Two Crores thirty lakhs sixty thousand four hundred and thirty two only) after adjusting the amount as per the tariff order dated April 13' 2012 in this year's petition.

2.3 Prayer

The petitioner has prayed the Commission to:

Quote

“

- i) Approve the tariff for the year 2013-14 as brought out in this Petition as detailed below at 85% PLF.

Fixed cost	- Rs. 24.12 Crores per annum
Variable Energy Charges	- As per formula in para 5.9 – A with normative GHR of 2600 Kcal/kWh and normative APC of 6% .

- ii) Allow the “Normative Annual Plant Availability Factor” @ 85% as laid down in the CERC Regulation vide clause No.26 for Karaikal Power Station for the year 2013-14 for full fixed cost recovery and as per the order of Hon'ble Appellate Tribunal.
- iii) Allow capital cost as prayed by the Petitioner.
- iv) An amount of Rs. 2,30,60,432/- (Two Crores thirty lakhs sixty thousand four hundred and thirty two only) may be allowed to be recovered as a part of review of GCV and gas price for FY.2011-12 for the remaining periods of the tariff period (i.e., Nov'11, Dec'11, Jan'12, Feb'12, Mar'12 and 2nd fortnight of Aug'11).

- v) Allow the recovery of filing fees as and when paid to the Hon'ble Commission and publication expenses from the beneficiary.
- vi) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above.

”

Unquote

3. Objections raised, Response from PPCL and Commission's Comments

3.1 Introduction

In response to the Public notice inviting objections / suggestions from stake holders on the petition filed by PPCL for determination and approval of tariff of PPCL Gas Power Station for FY 2013-14, the Electricity Department, Puducherry has filed its objections / suggestions in writing.

Public hearing was held at Puducherry on March 8' 2013 where the respondents were given an opportunity to put forth their objections and suggestions on the Tariff Petition to the Commission.

Only ED-Puducherry has made a written submission of the objections on the tariff petition of PPCL for FY 2013-14 and only ED- Puducherry participated as a stakeholder in the public hearing process.

The objections raise by the Electricity Department, Puducherry & the submissions made by the PPCL thereto are given as under:

3.2 CAPITAL COST

3.2.1 Stakeholder's comment

Quote

The Hon'ble APTEL in its order dated 21.12.2012 directed this Hon'ble Commission to consider the documents on record and pass order according to law in the matter redetermination of capital cost for the tariff year 2011-12 and this Hon'ble Commission has also restored the petitions No.18/2010 and No.45/2011 filed by the petitioner. The EDP submits that the petitioner has added capital cost of Rs.1.62 Crores over and above the claim of Rs 146.45 Crores claimed for the year 2011-12, in which the major addition is for the spares. As the EDP has already submitted their comments on the non consideration of the entire value of the spares considered in the capital cost Rs 146.45 Crores and since the same is under review of this Hon'ble Commission, the additional capital cost other that the value of spares is for minor works costing Rs.0.07 Crores.

“Provided that in respect sub-clauses (iv) and v above, any expenditure on acquiring the minor items or assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat-convectors, mattresses, carpets, etc. brought after the cutoff date shall not be considered for additional capitalization for determination of tariff with effect from 01.4.2009.”

Further, regarding the consideration of additional capital expenditure for the determination of Tariff, the Hon’ble APTEL in its judgment in appeal no.85 of 2010 (NTPC vs CERC & others) observed as under:

“21. There cannot be any dispute in the fact that the capital cost of a generating station is a cost which incurred in commissioning the plant. The additional capital expenditure is a cost incurred for making efficient running of the plant. The tariff of the Appellant’s generating Station is determined on cost plus basis. This means that any capital expenditure done which will enhance the efficiency of the plant will be capitalized and the tariff will be determined accordingly.

22. The Appellant in its Petition dated 129 of 2009 has claimed to retain the de-capitalized amount in respect of spares amounting to Rs.9.16 lakhs and miscellaneous bought out items amounting to Rs.150.44 lakhs during the period 2008-2009.

23. Even according to the Appellant, these items have become unserviceable. If the aforesaid spares are not rendering any service, the same cannot be retained in the capital cost for the purpose of tariff. Therefore, the assets which are not in service have to be excluded from the capital cost of the Generating Station, as the same are not rendering any useful service to the beneficiaries. In the cost plus principle any amount spent by the Appellant which gives benefit to the beneficiaries has to be capitalized.”

In view of the above, the petitioner has to furnish the details of acquired assets and justification for the same to claim for the determination of tariff. The EDP further requests that till such time the capital cost for the redetermination of tariff for the year 2011-12 is finalized, the capital cost of Rs.137.77 Crores may be considered for the determination of tariff for the year 2013-14.

Unquote

3.2.2 Petitioner's submission

Quote

(a) It is submitted to the Hon'ble Commission that the capital cost of Rs.137.77 Crores had already approved by the Hon'ble Commission at the time of fixation of tariff for the tariff period 2011-12 and 2012-13 which had been approved by His Excellency the Lt. Governor, Government of Puducherry by considering capital cost of Rs 137.77 Crores and unit cost @ 161 paise per unit plus Fuel Cost adjustment after getting clearance from the Finance Department, Government of Puducherry vide G.O.Rt.No.50, dated 22.02.2000.

(b) It is submitted to the Hon'ble Commission that the petitioner have claimed a sum of Rs 148.07 Crores as capital cost which includes additional capital expenditure of Rs 191.55 lacs of which a sum of Rs 1.55 Crores towards capitalization of capital spares of gas turbine, for which the Corporation has obtained the approval from the Government of Puducherry to procure the capital spares and the copy of which is enclosed in the Annexure-I. The part of the item having capital nature has been capitalized/issued during the financial year 2010-11 for Rs 155.00 lacs. Further, a sum of Rs 65.58 lacs has been incurred during the year 2010-11 and 2011-12 towards construction of quarters, purchase of Furniture & Fittings, Computer, Plant & Machinery, office Equipment.

(c) In this connection, it is submitted to the Hon'ble Commission that no generating station can operate on a sustainable basis to achieve the level of performance parameters specified by the Hon'ble Commission without incurring capital expenditure on various items from time to time. The expenditure on capital assets to be incurred by the generating stations are, therefore, a necessity for the proper and effective working of the generating station and, therefore, are beneficial to the respondents. The incurring of additional capital expenditure from time to time towards replacement / refurbishment of old assets has been absolutely necessary to maintain the higher level of performance on a sustainable basis and is in the larger public interest. The significant improvements in the performance which the generating stations have been able to achieve were because of the investment made from time to time in the replacement/ refurbishing of the assets which have served for many years.

Unquote

3.3 AUXILIARY POWER CONSUMPTION (APC)

3.3.1 Stakeholder's comment

Quote

As the Hon'ble APTEL in its order dated 21.12.2012 in appeal no.41 of 2012 filed by the petitioner has upheld the decision of this Hon'ble Commission in fixation of APC at 5.5% for the instant plant, the request of the petitioner for fixing of APC at 6.0% may not be considered.

Unquote

3.3.2 Petitioner's submission

Quote

The Respondent has raised the issue on APC by stating that Hon'ble APTEL in its order dated 21.12.2012 in appeal no.41 of 2012 filed by PPCL has upheld the decision of this Hon'ble Commission in fixation of APC at 5.5 % for the instant plant. So the request of the petitioner for fixing of APC at 6 % may not be considered. It is submitted, that for the previous eight years the APC has been hovering around 6 %. It is submitted that the APC w.r.t. PLF for the years 2000-01 to 2009-10 are given below:

YEAR	PLF in %	APC
2000-01	82.24	5.45
2001-02	87.56	5.30
2002-03	92.73	5.43
2003-04	96.48	5.47
2004-05	96.74	5.65
2005-06	90.76	6.0
2006-07	93.05	5.90
2007-08	95.85	5.98
2008-09	90.46	5.94
2009-10	77.74	6.42

As per the Energy Audit report prepared by The Energy Resource Institute, (TERI), it has been suggested to go in for higher efficiency version Gas Compressors and installation of Variable speed drive motors for reducing of APC. The above proposals require additional

capital costs which again reflect in tariff. Since the operation have been much below the norms for many previous years the initial starting point in determining the revenue requirement , APC may be fixed at 6 %.

Unquote

3.4 GROSS HEAT RATE (GHR)

3.4.1 Stakeholder's comment

Quote

As the determination of tariff for the Electricity is as per the provisions of the Electricity Act 2003 and as per the guidelines of National Tariff Policy, the claim of higher GHR by the petitioner based on standards and norms fixed as per the provisions of Energy Conservation Act 2001 and its Rules may not be considered. Further, the petitioner has now claimed the net heat rate of 2291Kcal/kWh as mentioned by the supplier for the PG test as against of 2277 Kcal/kWh considered in the tariff fixation by the Government of Puducherry. However, the petitioner has not furnished the actual heat rate achieved during the PG test. In view of the above, the EDP requests that the claim of higher heat rate of 2600 Kcal/kWh may not be considered.

Unquote

3.4.2 Petitioner's submission

Quote

The Respondent has raised the issue on GHR of the station. It is submitted that the year wise Gross heat rate along PLF is shown below:

YEAR	GHR	PLF in %
2000-01	2645.93	82.24
2001-02	2621.53	87.56
2002-03	2496.35	92.73
2003-04	2480.86	96.48
2004-05	2473.94	96.74
2005-06	2511.98	90.76

2006-07	2513.46	93.05
2007-08	2497.12	95.85
2008-09	2526.33	90.46
2009-10	2650.45	77.74
2010-11	2648.83	68.66
2011-12	2693.94	88.07

The Respondent has mentioned that tariff for the Electricity is as per the provisions of the Electricity Act 2003 and as per the guidelines of the National Tariff Policy. PPCL has been regularly carrying out the maintenance of equipments as per the OEM's recommendations. In spite of the above the heat rate achieved is above 2500 Kcal/kWh for the last seven years. As per section 5.3 (f & h) of National Tariff policy the respective State Regulatory Commissions have the power to relax the norms , in cases where operations have been much below the norms for many previous years ... and the improvement trajectories should be recognized at "relaxed " levels and "desired levels". As per the OEM's correction curve for loss of power in CCPP due to ageing of GT, the performance loss is 4.6% after 50000 fire hours and above. The machine has recorded more than 11400 fired hours. Even if net heat rate of 2277 kcal/kWh (which is the approved heat rate by Govt of Puducherry) the Gross Heat rate with correction for degradation will work out to 2619 Kcal/kWh. In view of above, and due to the under recovery of energy charges the PPCL's request may be considered favorably.

Unquote

3.5 FUEL COST

3.5.1 Stakeholder's comment

Quote

The EDP submits that as the claim of monthly energy charges are based on the actual calorific value, landed cost etc. the period of consideration for arriving at the fuel cost may be taken as per the regulation.

Unquote

3.5.2 Petitioner's submission

Quote

The contention of the PED is agreed to. However in order to give a realistic fuel cost the data of July, 2012, August, 2012 & September, 2012 has been taken in "Information to be submitted in respect of fuel for computation of Energy". Further, the details of gas consumption and GAIL bill for the months of April'12, May'12 & June'12 are enclosed in the petition.

Unquote

3.6 INTEREST ON LOAN CAPITAL

3.6.1 Stakeholder's comment

Quote

The EDP submits that as the petitioner has already charged the cumulative depreciation of Rs.124.0 Crores through tariff, the petitioner has to furnish the workings for the claim of interest on loan.

Unquote

3.6.2 Petitioner's submission

Quote

The working for claim of Interest on loan portion has been given at page 30 of Petition under the head average loan which has been arrived on total capital cost incurred upto 31.03.2012 and the copy of the same is enclosed in the Annexure-II.

In view of the above, it is submitted that the contentions raised by Respondent in its reply and also the prayers of the Respondent in its reply may be rejected. The Petitioner prays that the Hon'ble Commission may please allow the Tariff as claimed by the Petitioner.

Unquote

3.7 Commission's Views

The Commission has observed the objections made by the Electricity Department of Puducherry (referred above as 'stakeholder') and submissions made by the Puducherry Power Corporation Limited (referred as 'petitioner'). The Commission's view is mentioned below:

1. The capacity and energy charges as determined by the Commission in this order are on the basis of projected information/data as supplied by the petitioner unless it is modified by the Commission exercising due prudence, subject to truing up subsequently, as applicable, on the basis of actual & complete data made available
2. The issue for consideration of capital cost as projected by the petitioner will be finalized once the proceedings on the compliance of the Hon'ble Aptel's judgement dated November 21' 2012 is over and a separate order on the same would be issued.
3. The Commission notes that the Petitioner has subsequently submitted the Performance Guarantee Report to the Commission.
4. The other objections and the submissions made by the petitioner have been reviewed and dealt in the appropriate sections of this order.

4. Tariff Determination for FY 2013-14

4.1 About PPCL Gas Power Station

The petitioner owns and operates one combined cycle gas power station generating 32.5 MW of Electricity (22.9 MW from gas turbine and 9.6 MW from Steam turbine) at Karaikal. The details of its capacity, commercial operation data etc. are given in the below table.

Table 7: 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
	TOTAL	32.5 MW
2.	Date of commercial operation	3 rd January, 2000
3.	Type of fuel	Natural Gas
4.	Type of cooling system	Induced draft cooling tower
5.	Gas supplier	GAIL

4.2 Regulations

As per provisions of Clause 19 of the JERC (Terms and Conditions for Determination of Tariff) Regulations 2009, 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. The CERC Regulations 2009-14 for generating units have been referred to in this tariff order.

4.3 Operational Parameters

4.3.1 Normative Annual Plant Availability Factor (NAPAF)

Petitioner's Submission

The petitioner has submitted that the JERC Regulations for Generation stipulate that the Commission shall be guided by the principles and methodologies of CERC (Terms and Conditions of Tariff Determination) 2009-14 as amended from time to time.

CERC has fixed the NAPAF as 85% for the period 2009-14 for recovery of full fixed charges for thermal generating stations.

Hon'ble Appellate Tribunal vide its judgment dt.21.11.2012 for appeal no. 41 of 2012 for the instant station has stated that **"The Tariff Regulations provide that the components of generation tariff shall be as laid by the Central Commission in the 2004 Tariff Regulations as amended from time to time. The 2009 Tariff Regulations have been made effective by the Central Commission with effect from 1.4.2009. According to the 2009 Regulations, Normative Plant Availability Factor (NAPF) is to be taken as 85% for thermal power stations. However, the Joint Commission in the impugned order adopted NAPF of 87% contrary to the Tariff Regulations. The State Commission is directed to pass the consequential order in accordance with the Tariff Regulations"**.

In view of the above judgment, it is submitted that the Commission may please fix the norm-"Normative Annual Plant Availability Factor" NAPAF for the Karaikal station for recovery of full fixed charges in the FY 2013-14 at 85% as laid down in the terms and conditions of the determination of tariff issued by JERC and based on the factual position of the immediate financial years of 2009-10 and 2010-11 besides ageing of the plant.

Commission's Analysis

The Commission in its tariff order for FY 2012-13 dated April 13' 2012 had approved a Normative Annual Plant Availability Factor (NAPAF) of 87% considering the actual plant availability factor (PAF) data submitted by the Petitioner from the financial year 2000-01 to 2009-10. The PAF for the years 2000-01 to 2009-10 was observed to vary from 91% to 98.84%. However, for FY 2010-11 PAF was 78.64% and PLF as 69% due to reduction in gas supply and major plant breakdown. For fixing the NAPAF, the abnormal value for the year FY 2010-11 i.e. PAF of 78.64% had not been considered. The data for FY 2010-11 was considered as a stray case as compared to continuous data from FY 2000-01 to 2009-10 which justified its performance. The Commission, therefore, had fixed the NAPAF at 87% for FY 2012-13, with a view to promote and maintain the efficiency level achieved for a continuous period of 10 years.

The Commission in the tariff order for FY 2011-12 dated August 6' 2011 had also done a similar analysis and approved the NAPAF at 87%. In the review order for FY 2011-12 dated November 3' 2011, the Commission found no merit in the plea of the Petitioner to relax the NAPAF for the year FY 2011-12.

The Petitioner had gone on appeal on fixing of the NAPAF norm, besides other issues as decided in the tariff order dated August 6' 2011 and further in the review order dated November 3' 2011. The Petitioner had said that the NAPAF should be fixed as per the CERC

tariff regulations 2009-14 at 85%. The Hon'ble Aptel in appeal no. 41/2012 in its judgment dated November 21' 2012 on fixing of the NAPAF norm has decided in favour of the Appellant. The relevant extract of the judgment is as -

Quote

" As correctly pointed out by the Appellant, once the norms have been fixed, the same have to be followed and applied. When the norms and parameters have been prescribed by the Central Commission Regulations, the same have to be followed unless it is justified that it is not feasible to follow Regulations of the Central Commission. No such justification was made by the Joint Commission for rejecting the claim of the Appellant to apply the Central Commission Regulations.

That apart, the Regulation 19 relied upon by the learned Counsel for the Joint Commission would not apply to the present case as the said Regulation only deals with the tariff filing and not with reference to the manner of fixation of the norms. This manner of fixation of norms has been provided only in Regulation 36 which adopts the Central Commission Tariff Regulations 2004, as amended from time to time in toto.

Therefore, the finding on this issue fixing 87% is wrong as the Appellant's prayer that Normative Plant Availability Factor of 85% in terms of Regulation 36 of Regulations 2009 should be maintained. Hence, the Joint Commission is directed to pass consequential orders on this issue in favour of the Appellant. Thus, 2nd question also is answered accordingly."

Unquote

The Commission in compliance of the Hon'ble Aptel's judgment approves the NAPAF at 85% for FY 2013-14.

The Commission, therefore, approves the Normative Annual Plant Availability Factor (NAPAF) at 85% for FY 2013-14.

4.3.2 Auxiliary Power Consumption (APC)

Petitioner's Submission

The petitioner has submitted that the APC be considered as per actual based on period from 01.04.2012 to 30.11.2012 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. Since Natural Gas is supplied at a lower pressure i.e. 3 to 5 kg/sq.cm, electric driven Gas Booster compressor is required to boost up the gas pressure to 17 kg/sq.cm resulting in increase of APC. Four electric driven Gas Booster Compressor of 300 KW each has to run to achieve 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 has to be kept in mind before determining the various operating parameters for the power plant and accordingly the petitioner has considered APC at 6% which is also less than the actual.

Commission's Analysis

The Commission has observed the submissions made by the Petitioner and thus retains the auxiliary consumption norms as mentioned in the CERC regulations and CEA guidelines. As per the CERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 the norm of auxiliary consumption for gas turbine generating stations is as follows:

- | | |
|-------------------|-------|
| 1. Combined cycle | 3.0% |
| 2. Open cycle | 1.0 % |

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

In view of the above norms mentioned in CERC regulations and CEA guidelines, the norm of 3% auxiliary consumption for the combined cycle plus additional APC limited to 2.5% for the electric driven gas booster compressor pumps are approved as a part of the auxiliary consumption.

The Hon'ble Aptel in Appeal no. 41/2012 in its judgment dated November 21' 2012 has upheld the decision and analysis of the Commission on auxiliary consumption norm of the power plant. The relevant extract of the judgment is as –

Quote

“

We have carefully considered these submissions. As a matter of fact, this point has been taken into consideration by the Joint Commission in the tariff order dated 6.8.2011.

The Joint Commission referred to the said prayer and also considered the Auxiliary Consumption actuals for the previous year's 2000-01 to 2009-10 and for the projection for

the year 2010-11 and 2011-12. It is specifically held by the Joint Commission in the said impugned order dated 6.8.2011 that Central Commission Regulations 2009 provided the norms of Auxiliary Consumption for gas turbine generating station as

- (i) Combined cycle 3.0%*
- (ii) Open cycle 1%*

The Joint Commission also referred to the CEA guidelines which provided that in cases where electric driven gas booster compressor are part of the Auxiliary Plant, 2.5% extra Auxiliary Consumption can be allowed. Taking into consideration of all these factors, the Auxiliary Consumption of 5.5% was approved by the Joint Commission for the financial year 2011-12 since the Appellants gas plant is having electric driven gas booster compressor.

Thus, it is clear that the Joint Commission followed the Central Commission Regulations as well as the CEA guidelines and correctly approved Auxiliary Power Consumption at 5.5% as there was no case made out for relaxation. This finding, in our view is perfectly justified.”

Unquote

Thus, the above judgment has clearly upheld the decision of the Commission.

The Commission, therefore, approves Auxiliary Power Consumption at 3.0% for combined cycle plus additional power consumption limited to 2.5% for electric driven gas booster pumps. Thus 5.5% auxiliary power consumption of gross power generation is approved for FY 2013-14.

4.3.3 Gross Station Heat Rate

Petitioner’s Submission

The petitioner has submitted that the heat rate achieved for the financial year 2011-12 was 2694.09 kcal/kWh and for the first six months of the financial year 2012-2013 is 2586.30 Kcal/kwh and PPCL is not able to recover the Energy Charges fully. The SHR approved by the Commission in the last year’s tariff order was 2475 kcal/kWh based on the actual best heat rate achieved by the generating company during the year 2004-05. This is being considered for the calculation of the energy/variable charges. The Petitioner has submitted that considering this SHR, the Petitioner is not able to recover the energy charges fully. The average monthly under recovery of the fuel cost is Rs 25.79 lakhs per month.

The Petitioner has submitted that the station design net heat rate is 2291 kcal/kWh. The gross design heat rate for net station design heat rate of 2291 Kcal/kWh works out to 2520 Kcal/kWh. The Petitioner has submitted the heat balance diagram for the design heat rate alongwith its submission.

Ministry of Power vide its notification dated 31st March 2012 in consultation with the Bureau of Energy Efficiency has specified the energy consumption norms and standards for designated consumers for the period 2012-13 to 2014-15. PPCL is one of the designated consumers and the target net heat rate fixed is 2697 Kcal/kWh i.e. Gross heat rate of 2535 Kcal/kWh @ Auxiliary Power Consumption of 6%.

The Petitioner has submitted the annual heat rate based on actual from the year 2000-01 to 2011-12. Based on the present performance of the Plant and notification of the Ministry of Power, the Petitioner has requested the Commission to grant Gross Heat rate of 2600 Kcal/kWh for the financial year 2013-14. Since the machine of the instant station is already twelve years old, the degradation factor of the machine should be taken into account and atleast the design heat rate should be granted by the Commission.

Commission's Analysis

The Commission has considered the past performance of the power station from FY 2000-01 to 2011-12. The petitioner has furnished the following data in their petition for FY 2013-14.

Table 8: Station Heat Rate of the earlier years

Year	Station Heat Rate (kcal/kWh)
	Gross Station Heat Rate
2000-01	2645.92
2001-02	2621.53
2002-03	2496.35
2003-04	2480.86
2004-05	2473.94
2005-06	2511.98
2006-07	2513.46
2007-08	2497.12
2008-09	2526.33
2009-10	2653.16
2010-11	2647.07
2011-12	2694.09

In the tariff order for FY 2011-12, the Commission had approved Gross SHR as 2250 kcal/kWh which was revised to 2400 kcal/kWh as sought by the petitioner in the review tariff order for FY 2011-12 based on the fact that the petitioner had submitted data of SHR taking NCV. Further, in the tariff order for FY 2012-13, the Commission revised the approved value of the GSHR from 2400 kcal/kWh to 2475 kcal/kWh corresponding to the best achieved SHR value based on GCV as the value of the desired GSHR of 2400 kcal/kWh (as per the review order for FY 2011-12) could not be achieved based on actual. The Commission for FY 2012-13 had approved the value of the GSHR as 2475 kcal/kWh based on the actual best achieved for year 2004-05.

The Commission has analyzed the data submitted by the Petitioner for the analysis of the Gross Station Heat Rate. The average heat rate on the basis of the past 12 years actual heat rate as submitted by the Petitioner comes to 2563 kcal/kWh. Further, the actual average heat rate from April to September 2012 is indicated as 2586.3 kCal/kWh.

The Commission has observed that the MOP notification has considered the heat rate of 2535 kcal/kWh; however, it is not clear from the notification whether calorific value of gas has been considered as GCV or NCV.

The JERC Tariff Regulations provide that the components of generation tariff shall be as laid by the Central Commission in the 2004 Tariff Regulations as amended from time to time. Thus, the CERC tariff regulations 2009-14 are applicable. The Commission has observed that CERC through order dated 07.06.2012 has revised the normative Gross Heat Rate of Assam and Agartala gas power projects as under:

Assam GPS: 2500 kcal/kWh (Combined Cycle)/3400 kcal/kWh (open cycle)
Agartala GPS: 3700 kcal/kWh (open cycle)

The above revision was done by the CERC accepting the NEEPCO's mistake in calculating SHR on the basis of Net Calorific Value (NCV) of gas instead of Gross Calorific Value (GCV).

Further, the Commission has observed that though PPCL's GT of 23.04 MW is similar to Agartala GPS GT of 21 MW, the two are not comparable as Agartala GPS is open cycle based gas power plant whereas PPCL GPS is combined cycle based gas power plant.

The petitioner has subsequently submitted the Performance Guarantee report of PPCL Gas Power Station (**Annexure 4**). The guaranteed heat rate for PPCL gas power station on the basis of the design heat rate is 2291 kcal/kWh. This guaranteed heat rate is on the basis of

the NCV of the gas; the same gets revised to $2291 \times 1.1 = 2520$ kcal/kWh considering the conversion factor of 1.1 i.e GCV = 110% of NCV. Further, applying the degradation factor of 5% as per the CERC regulations, the normative GSHR comes to $2520 \times 1.05 = 2646$ kcal/kWh.

The Commission notes that though the normative calculation of the GSHR comes to 2646 kcal/kWh, the Commission has limited the approval of the GSHR to 2600 kcal/kWh as proposed by the Petitioner.

The Commission, therefore, approves the Gross Station Heat Rate for the PPCL gas station at 2600 kcal/kWh for FY 2013-14.

4.3.4 Performance Parameters approved for FY 2013-14

Based on the above analysis, the performance parameters as approved for the PPCL gas power station for FY 2013-14 are listed in the table below:

Table 9: Performance Parameters approved for FY 2013-14

S. No.	Parameter	Projected by the petitioner	Approved by the Commission
1.	Normative Plant Availability Factor (%)	85%	85%
2.	Auxiliary Power Consumption (%)	6.00%	5.50%
3.	Gross Station Heat Rate (kcal/kWh)	2600	2600

4.4 Variable Cost Parameters

The Commission has prescribed a formula, in line with the CERC formula, for calculating Energy (Variable) charges on month to month basis for billing purpose. However, in the following paras 4.4.1 to 4.5, variable charges has been computed to workout cost of gas (one month) and receivable for two months (energy charge component) which are used for calculation of the working capital requirement.

The details of Wt. Av. GCV of gas and price of gas as submitted by PPCL and the Commission's analysis are discussed below.

4.4.1 Weighted Average Gross Calorific Value of Gas

Petitioner's Submission

The petitioner has submitted Gross Calorific Value of 10049.95 kcal/scm for FY 2013-14 based on the landed cost of gas for the months of July'12, August'12 and September'12

instead of landed cost of the gas for the months of Jan'12, Feb'12 and March'12 as per JERC / CERC Regulations. This has been considered to calculate the fuel cost for working out the interest on working capital.

Commission's Analysis

The CERC Regulations state that for calculating working capital requirement, 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 had asked PPCL to submit the latest data of the fuel cost and GCV.

Accordingly, PPCL made additional submission on 06.03.2013 furnishing the following details:

Table 10: GCV gas details submitted by petitioner for FY 2013-14

S. No.	Parameter	Unit	Dec'12	Jan'13	Feb'13
			Gas	Gas	Gas
1.	Quantity of gas supplied by GAIL	Cu.m	5675048	5785669	5213860
2.	Adjustment(+/-) in quantity supplied made by GAIL	Cu.m	-	-	-
3.	Gas supplied by GAIL (1+2)	Cu.m	5,675,048	5,785,669	5,213,860
4.	Normative Transit & Handling Losses	Cu.m	-	-	-
5.	Net Gas Supplied (3-4)	Cu.m	5,675,048	5,785,669	5,213,860
6.	Amount charged by the Gas Company	(Rs)	55034180	56052206	50917604
7.	Adjustment(+/-) in amount charged made by Gas Company	(Rs)	-	-	-
8.	Total amount charged (6+7)	(Rs)	55,034,180	56,052,206	50,917,604
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)	55,034,180	56,052,206	50,917,604
15.	Weighted average GCV of Gas as fired	(kCal/Cu.m)	9982.66	10000.16	10026.04

16.	Weighted average rate of Fuel/1000 Cu.m	Rs/1000 Cu.m	9,697.57	9,688.11	9,765.82
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The Commission has validated the fuel details submitted by the Petitioner from the fuel bills submitted alongside and found the above submission to be in order.

The Commission has considered weighted average GCV of gas for the period Dec'12, Jan'13 and Feb'13 in its analysis of the 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 for the period from Dec'12 to Feb'13. The Commission, therefore, considers it appropriate to take GCV of 10002.30 kcal/scm for the computation of energy (variable) charges.

Accordingly, the Commission considers the Gross Calorific Value of Gas at 10002.30 kcal/scm for FY 2013-14.

4.4.2 Weighted Average Price of Gas

Petitioner's Submission

The petitioner has considered the weighted average landed cost of gas for the months of July'12, August'12 and September'12 instead of landed cost of the gas for the months of Jan'12, Feb'12 and March'12 as per JERC / CERC Regulations. This has been considered to arrive at the fuel cost in a realistic manner, for working out the interest on working capital.

The petitioner has considered the weighted average price of gas as Rs 10076.40 per 1000 scm for FY 2013-14 based on the months of July'12, August'12 and September'12.

Commission's Analysis

As the CERC Regulations provide for the 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 accordingly PPCL furnished the following details:

Table 11: Fuel details submitted by petitioner for FY 2013-14

S. No.	Parameter	Unit	Dec'12	Jan'13	Feb'13
			Gas	Gas	Gas
1.	Quantity of gas supplied by GAIL	Cu.m	5675048	5785669	5213860
2.	Adjustment(+/-) in quantity supplied made by GAIL	Cu.m	-	-	-
3.	Gas supplied by GAIL (1+2)	Cu.m	5,675,048	5,785,669	5,213,860

4.	Normative Transit & Handling Losses	Cu.m	-	-	-
5.	Net Gas Supplied (3-4)	Cu.m	5,675,048	5,785,669	5,213,860
6.	Amount charged by the Gas Company	(Rs)	55034180	56052206	50917604
7.	Adjustment(+/-) in amount charged made by Gas Company	(Rs)	-	-	-
8.	Total amount charged (6+7)	(Rs)	55,034,180	56,052,206	50,917,604
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)	55,034,180	56,052,206	50,917,604
15.	Weighted average GCV of Gas as fired	(kCal/Cu.m)	9982.66	10000.16	10026.04
16.	Weighted average rate of Fuel/1000 Cu.m	Rs/1000 Cu.m	9,697.57	9,688.11	9,765.82

The Commission has validated the fuel details submitted by the Petitioner from the fuel bills submitted alongside and found the above 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 9715.628 per 1000 scm rate for the fuel.

Table 12: Weighted Average Cost of Gas (Rs/1000 scm) considered for FY 2013-14

S. No.	Parameter	Dec'12	Jan'13	Feb'13
1.	Average cost of gas as fired (Rs /1000 scm)	9,697.57	9,688.11	9,765.82
2.	Weighted average cost of gas (Rs/1000 scm) considered by the Commission for FY 2013-14	9715.628		

The Commission in its analysis for FY 2013-14 considers it appropriate to allow the weighted average price of gas as Rs 9715.628 per 1000 scm to arrive at the variable charges for the year 2013-14 based on the additional submission made by the petitioner.

Accordingly, the Commission considers the weighted average price of gas as Rs 9715.628 per 1000 SCM for FY 2013-14.

4.5 Energy (Variable) Charges

Based on the performance and cost parameters approved, the fuel cost of PPCL gas station for FY 2013-14, is worked out as given in the table below:

Table 13: Variable Charges

S. No.	Items	Unit	Approved
1.	Station Heat Rate	kcal/kWh	2600
2.	Gross Calorific value of Gas	kcal/scm	10002.30
3.	Price of Gas	Rs/1000 scm	9715.628
4.	Fuel Cost /Gross units	Rs/kWh	2.525
5.	Fuel Cost/Net units	Rs/kWh	2.672

4.6 Capacity Charges/ Fixed Costs for FY 2013-14

Petitioner's Submission

The petitioner has submitted the projections of the capacity charges (fixed) comprising the following components for FY 2013-14.

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

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

4.6.1 Capital Cost for FY 2013-14

Petitioner's Submission

The Petitioner has submitted that total capital cost of Rs 146.45 Crores based on the audited accounts, as stated in Regulation 22 (2) of the Tariff Regulations, 2009 had been claimed for the tariff period 2011-12. But, the Commission while determining tariff for the

above period allowed Rs 137.77 Crores as the Capital Cost and disallowed additional capital expenditure incurred of Rs 8.44 Crores claimed for the period from 2003-04 to 2010-11 vide its orders dated 06.8.2011 & 28.12.2011 for tariff period FY 2011-12. The petitioner filed Appeal No. 41/2012 before the Hon'ble ATE for considering additional capital expenditure, PLF, Auxiliary consumption and other components of the tariff against the tariff order and the judgment thereon has been issued by the Appellate Tribunal on 21.11.2012. The Petitioner has submitted that the Commission is yet to implement the ATE judgment. Thus, the Petitioner has prepared the tariff for FY 2013-14 by considering the capital cost of Rs 148.07 Crores as per the unaudited balance sheet. Further, Capital Cost of Rs. 148.04 Crores is upto 31.03.2011 as per the audited financial statement pertaining to FY 2010-11 and Rs 148.07 Crores upto FY 2011-12 (unaudited). An amount of Rs 1.55 Crores towards capitalization of mandatory spares of Gas Turbine is included in the total additions of FY 2010-11.

The Petitioner has submitted that-

"No generating station can operate on a sustainable basis to achieve the level of performance parameters specified by the Hon'ble Commission without incurring capital expenditure on various items from time to time. The expenditure on capital assets to be incurred by the generating stations are, therefore, a necessity for the proper and effective working of the generating station and, therefore, are beneficial to the respondents. The incurring of additional capital expenditure from time to time towards replacement / refurbishment of old assets has been absolutely necessary to maintain the higher level of performance on a sustainable basis and is in the larger public interest. The significant improvements in the performance which the generating stations have been able to achieve were because of the investment made from time to time in the replacement/ refurbishing of the assets which have served for many years."

Further, the Petitioner has submitted that the capital cost for the purpose of tariff shall be subject to revision by the Commission based on judgment of Hon'ble ATE or other court orders as applicable i.e. the claim on the above account / aspect is subject to the final decision/order of the Commission on the judgment given by the Hon'ble Appellate Tribunal for Electricity in Appeal No. 41 of 2012 filed by PPCL. At present, the Corporation is claiming the capital cost of Rs 148.04 Crores plus additional capital expenditure incurred during FY 2011-12 i.e. Rs 148.07 Crores.

Commission's Analysis

The petitioner filed Appeal No. 41/2012 before the Hon'ble ATE for considering additional capital expenditure, PLF, Auxiliary consumption etc. against the tariff order dated 06.08.2011 and the review order dated 03.11.2011 for the tariff period FY 2011-12. The

judgment thereon has been issued by the Appellate Tribunal on November 21' 2012.

The Petitioner had claimed an amount of capital cost of Rs. 146.45 Crores incurred prior to March 31' 2009 against which the Commission had allowed Rs 137.77 Crores. The Appellant's submission on the matter is as summarized below from the ATE judgment.

Quote

"

The Joint Commission has allowed the Capital Cost of Rs.137.77 Crores even though the Appellant claimed capital cost of Rs.146.45 Crores incurred prior to 31st March 2009. This claim made by the Appellant was on the basis of the Audited Accounts by the Statutory Auditors produced before the Joint Commission. The Appellant actually claimed the capital cost of Rs.146.45 Crores in terms of Regulation 22(2) of the tariff Regulators, 2009 which provides that the same shall be considered on the basis of the Audited Accounts. But the said claim was disallowed by the order dated 6.8.2011 without considering the Audited Accounts merely on the ground that the approval of the competent authority for the amount claimed was not obtained. Even though the Regulations do not require the said approval of the Competent Authority, to be provided, the Appellant received those approvals from the Government, which is the competent authority and placed before the State Commission, for allowing the claim of entire amount of Rs.146.45 crores through the Review petition. However, the Joint Commission without considering the said material rejected the claim maintaining the capital cost at Rs.137.77 crores by the order dated 03.11.2011 on the ground that the Appellant/Review Petitioner failed to produce any new material relating to the approval of the competent authority. This finding is wrong. In fact, the approval of the competent authority, namely the Government of Puducherry was actually placed before the State Commission. But the State Commission went wrong in disallowing the said claim without considering the relevant material produced before the Joint Commission."

Unquote

The Hon'ble ATE in its judgment dated November 21' 2012, on the matter of capital cost directed the Joint Commission to consider all the documents available on record and pass an order after prudence check according to law after hearing the parties once again.

The summary of the Aptel's judgment is reproduced below-

Quote

" Tariff Regulation 22(2) provides for determination of the capital cost to be considered on the basis of the audited accounts or approvals already granted by the Commission. The Appellant

claimed capital cost of Rs.146.45 Crores based on the audited accounts which were not taken into consideration by the Joint Commission and capital cost of only Rs.137.77 was allowed on the ground that the approval of competent authority was not obtained. This is not a proper approach as the approval of the competent authority was not contemplated under the Regulation. Even though the approval of the competent authority for Rs.146.45 Crores was placed before the Joint Commission for reconsideration of the capital cost in the Review, the Joint Commission wrongly rejected the claim on the ground that nothing new had been pointed out by the Appellant. The Joint Commission should have scrutinised the audited accounts placed before it by the Appellant and considered the approval obtained from the Government and passed the order after prudence check in accordance with law. The Joint Commission is directed to consider the documents on record and pass order according to law after hearing the parties once again.”

Unquote

The Aptel in its judgment made the observation that the Joint Commission only allowed capital cost of Rs 137.77 Crores out of the claimed capital cost of Rs 146.45 Crores on the ground that the approval of the competent authority was not obtained without scrutinizing the audited accounts. The Aptel further observed that even though the approval of the competent authority is not contemplated as per the Regulation 22(2) of the CERC regulations 2009, the petitioner had taken approval from the Puducherry Government, which is the competent authority. The Aptel responded in favour of the Appellant (Petitioner) and directed the Joint Commission to consider all documents available on record and pass an order after prudence check after hearing the parties once again.

In compliance of the Hon’ble Aptel’s judgment, the Commission initiated the proceedings on the matter of determination of capital cost on December 19’ 2012 and restored petition no. 18/2010 and petition no. 45/2011. During the hearing, the Petitioner was present; however the respondent (ED-Puducherry) was absent. The matter was further scheduled for hearing on January 23’ 2013 and Respondent was told to participate.

During the hearing on January 23’ 2013, the representative of the Petitioner submitted that approval of Rs. 5.92 Crores for purchase of land and construction of building for corporate office was submitted to the Commission during the hearing in review petition no. 45/2011 and confirmed that the land was purchased only after approval of competent authority. On the issue of inclusion of spares in the capital cost, the Petitioner submitted that the spares were purchased subsequent to COD and hence not a part of original capital cost cleared by CEA in Techno Economic Clearance (TEC). The Respondent contended that the cost of spares is more than the norms fixed by CERC.

The Commission vide its order dated January 23’ 2013 observed that –

“ Keeping in view above submissions made by both the sides, the Commission directed PPCL to produce all relevant records of approvals from TEC onwards and documents related to approval & purchase of spares worth Rs. 1.603 Crs. including bills thereof. The Commission further directed the parties to submit a reconciled statement in respect of items under reference on or before 20.02.2013.

Scheduled for hearing on 27.02.2013.”

The Commission in its further proceedings on the matter vide order dated February 27’ 2013 observed that PPCL had submitted the same details. The Respondent (ED-Puducherry) prayed to the Commission to direct the Petitioner to furnish all relevant documents/records and approvals in order to enable the Department to furnish the reconciled statement for the items in the order of the Commission dated January 23’ 2013.

During the hearing on February 27’ 2013, representative of ED- Puducherry contended that there was no proper approval of competent authority as per Delegation of Powers for investment approval of procurement of initial spares subsequent to COD of the power plant. In reply to the contention of ED- Puducherry the representative of PPCL submitted that the requisite approval was taken from Chief Secretary, Govt. of Puducherry, who was also the Chairman of PPCL, and a competent authority to grant approval in this case.

The Commission vide its order dated February 27’ 2013 observed that –

“ The Commission observed that the approval of the Chief Secretary in his capacity as Chairman of PPCL is on record but the requisite authorization of the competent authority showing that the Chief Secretary of the UT had granted approval is not on record and therefore, directed PPCL to produce the correct investment authorization/ approval as per the prevailing Delegation of Powers for capital expenditure.

The Commission further directed that the parties should file a joint reconciled statement after meeting of minds on or before 15.04.2013.

Scheduled for hearing on 17.04.2013 at 11:00 AM.”

Further, hearing on the matter is yet to take place and the Commission in the interest of the stakeholders has decided that for the determination of tariff for FY 2013-14, provisional capital cost be considered. This will ensure the timely issuance of the tariff order for FY 2013-14 and further orders would be issued based on reconciliation of differences between the parties and subsequent proceedings on the matter by the Commission.

The Commission, therefore, provisionally approves the capital cost of Rs. 137.77 Crores as admitted in the last tariff order dated April 13’ 2012.

The Commission, therefore, provisionally approves the capital cost at Rs. 137.77 Crores as

against Rs. 148.07 Crores claimed by the Petitioner for FY 2013-14, which may be subject to revision depending on the outcome of petition no. 18/2010 and petition no. 45/2011.

4.6.2 Depreciation for FY 2013-14

Petitioner's Submission

The petitioner has projected the depreciation charge for the year at Rs. 0.18 Crores. The petitioner has restricted the accumulated depreciation of the asset to 90% of the capitalized value of the asset. The petitioner has claimed depreciation on the capital cost of Rs. 140.04 Crores, which excludes the cost of the freehold land of Rs 7.93 Crores; the cumulative depreciation claimed upto FY 2012-13 is Rs. 124.00 Crores.

The Petitioner through its additional submission dated March 6' 2013 has submitted that –

Quote

"As per CERC Regulation 2009, Regulation 17(4) -

Quote

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

Unquote

Since the station has completed more than 12 yrs, then the above Regulation provision is applicable for the station.

At first, we have calculated total 90% of capital cost - land cost, and then calculated total depreciation recovered till date.

Diff of 90% of capital cost-depreciation recovered is divided by rest of life of plant i.e. 12 yrs." **Unquote**

The Petitioner has claimed a depreciation amount of Rs 0.18 Crores for FY 2013-14, the calculation of which is given below.

Table 14 : Depreciation claimed by Petitioner for FY 2013-14 (Rs Crores)

S. No.	Details	Amount
1	Capital cost	148.07
2	Less cost of Freehold Land	7.93
3	Capital cost excl FH Land	140.14
4	Cumulative depreciation + AAD upto previous year	124.00
5	Depreciation for the year	0.18
6	Cap on depreciation	126.12
7	Depreciation for the year	0.18

Commission's Analysis

The Petitioner has calculated the depreciation based on the submitted capital cost of Rs. 148.07 Crores. However, the capital cost approved by the Commission stands at Rs. 137.77 Crores and accordingly the depreciation claimed has been worked out. The cumulative depreciation recovered as part of the tariff till date (from FY 1999-00) stands at Rs. 124.00 Crores.

It is noted that the allowable depreciation limit is 90% of the asset value, which comes out to Rs. 124.00 Crores (90% of Rs. 137.77 Crores). As the total approved value of depreciation till FY 2012-13 is Rs. 124.00 Crores and total allowable depreciation limit is also the same; therefore, there is no unrecovered depreciation.

The Commission therefore approves the depreciation as NIL for FY 2013-14 against Rs. 0.18 Crores claimed by the Petitioner.

4.6.3 Interest Charges for FY 2013-14

Petitioner's Submission

The petitioner has projected the interest charges for the year at Rs. 0.93 Crores. It is submitted by the Petitioner that the entire capital cost of the project has been funded from its own resources and capital investment has been considered at 70% normative loan and 30% normative equity as per the JERC Regulations.

The petitioner has considered the opening capital cost of Rs 148.07 Crores, with the addition in capital cost considered as nil, resulting in closing capital cost of Rs 148.07 Crores. The Petitioner has considered the gross loan of Rs 103.65 Crores, with cumulative repayment of Rs 96.44 Crores, resulting in the net opening loan of Rs. 7.21 Crores. The repayment for the year has been considered equal to the depreciation for the year at Rs 0.18 Crores, resulting in the closing loan of Rs 7.03 Crores. The rate of interest has been considered at 1% percentage point below Prime Lending Rate as notified by the State Bank of India i.e. 13.00%, resulting in the interest charges of Rs 0.93 Crores.

Commission's Analysis

As stated above, the Petitioner has claimed interest on gross normative loan of Rs. 103.65 Crores based on the average capital cost of Rs. 148.07 Crores. However, based on the capital

cost of Rs. 137.77 Crores approved by the Commission and with normative loan of 70%, the interest charges are computed as in the table below:

Table 15: Interest Charges approved for FY 2013-14 (Rs Crores)

S. No.	Details	Petitioner's Submission	Approved
1.	Average Capital cost for the year	148.07	137.77
2.	Loan at 70% of average capital cost	103.65	96.44
3.	Cumulative repayment upto previous year	96.44	96.44
4.	Net loan opening	7.21	0.00
5.	Repayment for the year	0.18	0.00
6.	Net loan closing	7.03	0.00
7.	Average net loan	7.12	0.00
8.	Rate of Interest	13.00%	14.45%
9.	Interest	0.93	0.00

The Commission in its analysis for computation of the interest charges has considered the rate of interest for the year at 11.25% on the existing assets in place, which is the interest approved for FY 2011-12. No additional assets have been considered for capitalization during the FY 2012-13 and FY 2013-14 and therefore, the interest rate for these years is not relevant in the analysis.

The Commission therefore approves that the interest charges for the year as NIL as against Rs. 0.93 Crores claimed by the Petitioner for FY 2013-14.

4.6.4 Interest on Working Capital

Petitioner's Submission

The petitioner has claimed the interest on working capital at Rs. 3.28 Crores for FY 2013-14 as per CERC Regulations 18 (b) and JERC Regulations 29 and interest is considered as per CERC Regulations 18 (3).

For computing the element of Interest on Working Capital (IWC), the rate of interest considered is SBI Base Rate as on 01.4.2012 as per CERC Regulations 2009 para 18(3). The rate of interest of 13.50% has been considered by the Petitioner. The energy charges considered while working out IWC are based on average actual fuel consumption and

payments made pertaining to the period commencing from July'12, August'12 and September'12 and the same is as per the Petitioner's unaudited annual accounts.

Commission's Analysis

As per CERC Regulation 18 (6), 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 charges based on the NAPAF
- iv. O&M expenses for one month

The interest on working capital has been considered at the rate of interest on normative basis as prime lending rate (PLR) of State Bank of India (SBI) considering the PLR rate as on February 4' 2013 i.e. 14.45% per annum. The energy charges considered while working out WC are based on average actual fuel consumption and payments made for the months of December'12, January'13 and February'13, 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 is as discussed in section 4.4 of this order.

The Commission considers the working capital and interest thereon as per the regulations mentioned above at an interest rate of 14.45% per annum as below.

Table 16: Interest on working capital approved for FY 2013-14 (Rs Crores)

S. No.	Details	Petitioner's Submission	Approved
1	Cost of gas (one month)	5.58	5.09
2	Maintenance spares at 30% of O&M expenses	2.79	2.79
3	Receivables (two months)	15.19	13.90
4	O&M expenses (one month)	0.77	0.77
5	Total working capital	24.33	22.55
6	Rate of interest on working capital	13.50%	14.45%
7	Interest on working capital	3.28	3.26

The Commission approves Rs. 3.26 Crores as interest on working capital for FY 2013-14

against Rs. 3.28 Crores as the interest on working capital claimed by the Petitioner.

4.6.5 Return on Equity

Petitioner's Submission

It is submitted by the petitioner that the entire capital cost of the project has been funded from its own resources and capital investment has been considered as 70% normative loan and 30% normative equity as per JERC Regulations. Regulations stipulate that if the equity employed is more than 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 23.481% (The base rate of return of 15.5% grossed up by the corporate tax rate of 33.99%) as per JERC Regulations 24 and CERC Regulations. The petitioner has submitted that it does not have any tax holiday from the financial year 2010-11 and the tax holiday was applicable only upto FY 2009-10.

The petitioner has claimed return on equity on 30% of the average capital cost submitted i.e. Rs. 44.42 Crores (30% of average capital cost of Rs. 148.07 Crores) at the rate of 23.481% which works out to Rs. 10.43 Crores (23.481% of Rs. 148.07 Crores).

Commission's Analysis

The Commission has considered the pre- pre-tax rate of return on equity as 23.481% (The base rate of return of 15.5% grossed up by the corporate tax rate of 33.99%) as per JERC Regulations 24 and CERC Regulations. The tax holiday was applicable only upto FY 2009-10 and accordingly the Petitioner has been subject to the corporate tax rate.

The return on equity on the approved capital cost of Rs. 137.77 Crores on the normative equity capital base works out as Rs. 9.70 Crores. (23.481% on equity portion (30%) of approved capital cost of Rs. 137.77 Crores)

Therefore, the Commission approves the return on equity at Rs. 9.70 Crores for FY 2013-14 against Rs. 10.43 Crores claimed by the Petitioner.

4.6.6 Operation and Maintenance Expenses

Petitioner's Submission

The petitioner has claimed the O&M expenses at Rs. 9.30 Crores for FY 2013-14. The O&M expenses include employee cost, R&M expenses and A&G expenses.

The Petitioner has submitted that the O&M expenses have been taken as @ 22.90 lac/MW as specified by CERC for small gas turbine for the year 2009-10 and thereafter the O&M expenses for relevant year of tariff have been worked out considering escalation @ 5.72% p.a. over the base O&M charges of 2009-10, based on JERC Regulation 27 and applicable CERC Regulations.

Commission's Analysis

The Commission has examined the O&M expenses claimed by the Petitioner. The expenses claimed are in line with sub regulation (C) of regulation 19 of CERC regulations for determination of tariff, 2009-2014 and regulation no. 27 of JERC tariff regulations, 2009 for the 32.5MW gas turbine plant.

Table 17: Operation and Maintenance Expenses approved for FY 2013-14

S. No.	Year	Approved (Rs Crores)
1.	2009-10	7.44
2.	2010-11	7.87
3.	2011-12	8.32
4.	2012-13	8.79
5.	2013-14	9.30

The Commission approves the Operation & Maintenance charges at Rs 9.30 Crores for FY 2013-14 as against the Rs 9.30 Crores claimed by the Petitioner.

4.7 Energy (Variable) Charge

The Commission approves the computation of energy charges for payment purpose for FY 2013-14 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/scm, during the calendar month

GCV= Gross Calorific Value of gas, in kcal per scm during the calendar month

APC= Normative Auxiliary Power Consumption in percentage

As the energy charges 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 = Rs 2600 kcal/kWh

LGP = Rs 9.5/scm

GCV = 9900 kcal/scm

APC= Normative Auxiliary power consumption, at 5.50%

ECR = $2600 \times 9.5 \times 100 / (9900 \times (100 - 5.5)) = \text{Rs } 2.640/\text{kWh}$

So, as can be observed from the above example the energy charges for the month work out to be Rs. 2.640 /kWh assuming the above mentioned parameters.

4.8 Capacity Charges (Fixed Costs) and other charges as approved by the Commission

Table 18: Summary of capacity charges approved for FY 2013-14

S. No.	Particulars	Approved (Rs. Crores)
	Capacity Charges	
1.	Depreciation	0.00
2.	Interest on loan	0.00
3.	Interest on working capital	3.26
4.	Return on Equity	9.70
5.	Operation and Maintenance Expenses	9.30
6.	Total capacity charges approved for FY 2013-14	22.26

The Commission approves the capacity charges at Rs. 22.26 Crores for FY 2013-14 against the proposed capacity charges of Rs 24.12 Crores by the Petitioner. The capacity charges (fixed cost) per month to be billed shall be calculated as per sub-regulation 2 (b) of regulation 21 of CERC (Terms and Conditions of Tariff) Regulations, 2009 as amended from time to time.

- The Energy Charges to be billed per month shall be based on the unit energy rate calculated on the basis of the formula provided in section 4.7 of this Order
- In addition to the capacity charges approved above, the Commission also allows recovery of filing fees paid to the Commission and publication expenses for FY 2013-14 from the beneficiary in twelve equal monthly installments

5. Provisional true-up for FY 2011-12

5.1 Background

The JERC tariff regulations, 2009 provide for a review of the previous Tariff Order along with the next Tariff Order. The regulation 8 of JERC regulations, 2009 stipulates that the above exercise would be carried out again in the nature of 'true-up' once the actual figures as per the audited accounts of the particular year become available. Any further variation between the actuals and approved values would be taken care at the time of true-up after prudence check. As per the regulation 8 of JERC regulations, 2009:

(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.*

5.2 The Commission has analyzed the expenses incurred for the FY 11-12 based on the actual data provided by the petitioner till March 2012. It is noted that the Commission has carried out the provisional true-up for the period from June 2011 to March 2012 since the tariff order for FY 2011-12 was applicable from 1st June 2011.

5.3 The Commission has observed that the Petitioner has submitted the unaudited accounts for FY 2011-12 in its submission for the true-up of FY 2011-12. The Petitioner has submitted the true-up for the year based on the actual data for the months from June'11 to March'12. The Commission has provisionally true-up the expenses for FY 2011-12 in absence of the audited accounts in this year's tariff order. The Commission in its last tariff order had reviewed the expenses from June'11 to October'11 based on the then available data. Any further variation in expenses would be considered at the time of true-up once the audited accounts have been furnished.

5.4 Further, the variable charges are calculated based on the actual monthly weighted average GCV of gas and weighted average gas price. This has been calculated for each month and compared with the variable charge approved by the Commission in the review tariff order of FY 2011-12 i.e Rs 2.03/kWh.

5.5 The calculations for variable charge for each month is carried out based on :

$$\text{Energy Charge Rate (Rs/kWh)} = \frac{\text{Weighted average landed cost of gas (Rs/scm)} \times \text{SHR (kcal/kWh)} \times 100}{((\text{Weighted average GCV (kcal/scm)} \times (100 - \text{APC}\%))$$

Where SHR = Approved Gross Station Heat Rate

GCV = Gross Calorific Value of the fuel

APC= Approved Auxiliary Power Consumption

- 5.5.1 The Commission has considered the fortnightly bills of the weighted average GCV and average price of gas as furnished by the petitioner while estimating the variable charge for each month. The detailed calculations have been furnished in **Annexure 5**.
- 5.5.2 The Commission had approved an amount of Rs 11356718 in last year's tariff order as part of the review of FY 2011-12 from June'11 to October' 11 based on the data submitted by the Petitioner. It is observed that some of the data pertaining to the months from June'11 to October' 11 has undergone a change in this year's submission from last year's submission based on revised bills and accordingly that variation has been considered by the Commission based on validation from the latest bills submitted alongside.
- 5.5.3 The total difference in the charges based on the units sent out is Rs 2.107 Crores and has been shown in the table below.

Table 19: Variable charges approved as part of provisional true-up for FY 2011-12

Particulars	Energy Sent Out	Wt Average Cost of Gas	Wt Average GCV	Variable Charge for the month	Approved Rate (Revised Tariff Order)	Variation in rate	Difference in the total variable cost
	MU	Rs/scm	kcal/scm	Rs/kwh	Rs/kwh	Rs/kwh	Rs
June'11	17.49	8.189 ¹	9937.568	2.093	2.03	0.063	1101648
July'11	19.92	8.046 ²	9895.603	2.065	2.03	0.035	697267
August'11	20.50	8.064	10004.973	2.047	2.03	0.017	348455
September'11	19.90	8.124	9858.180	2.093	2.03	0.063	1253677
October'11	21.01	8.479	9901.440	2.175	2.03	0.145	3046134
November'11	18.93	8.815	9913.459	2.258	2.03	0.228	4320836
December'11	17.71	8.961	9873.073	2.305	2.03	0.275	4869910
January'12	21.48	9.338	10016.760	2.368	2.03	0.338	7260916
February'12	18.98	9.103	9891.268	2.337	2.03	0.307	5828296
March'12	17.94	8.785	9977.035	2.236	2.03	0.206	3696505
Total							32423644
Less: Amount claimed so far							11356718
Amount yet to be claimed							21066926

¹ Revised from Rs 8.283/scm submitted by the Petitioner; the gas consumption units based on validation are higher than submitted by the Petitioner

² Revised from Rs 8.354/scm submitted by the Petitioner; the gas consumption units based on validation are higher than submitted by the Petitioner

This amount of Rs 21066926 is approved by the Commission as part of the provisional true-up for FY 2011-12 (from June 2011 to March 2012) and the petitioner is entitled to bill this amount separately as supplementary bills.

The analysis of capacity charges has not been done since the approval of the different components of the capacity charge is on normative basis.

6. Directives

Existing Directive

In the last tariff order for FY 2012-13 dated April 13' 2012, the Commission had given the below mentioned directive. The Petitioner's compliance and the Commission's view are given in the following paragraph.

6.1 Metering of the power consumption of electric gas booster compressor

The directive as given in the last year's order dated April 13' 2012 is as -

Quote

In the last tariff order for FY 2011-12 dated 6th August 2011, the Commission had directed PPCL to install a separate meter for recording the power consumption of electricity by gas booster compressor so as to measure actual power consumption. PPCL have submitted that the procurement process of the meters is under progress and the meters will be installed during the plant shut down. The Commission directs PPCL to expedite installation of meters and commence recording of actual power consumption immediately thereafter.

The auxiliary consumption will be allowed at 3% plus the actual power consumption limited to 2.5% towards the gas booster compressor pumps.

Unquote

Petitioner's Submission

The Petitioner in its additional submission dated March 6' 2013 to the Commission has submitted that the meters have been installed in the individual GBC's and recording has been commenced from Nov'12. The details of the consumption have been submitted alongside the annexure to the Commission.

Commission's Comments

The Commission appreciates the efforts made by the Petitioner in installation of meters to record the actual energy consumption of the gas booster compressors. It is observed that for the period from November' 12 to February'13, the GBC consumption has been greater than 3% and the overall auxiliary consumption has been greater than 6% as per the submitted annexure. The Commission has fixed the norm of auxiliary consumption at 3% plus the actual power consumption limited to 2.5% towards the gas booster compressor pumps. The Commission would like the Petitioner to reduce the consumption of energy of the gas booster compressor pumps so that the normative norm is adhered to.

New Directive

The Commission has noted that there are outstanding dues of Rs 68.27 Crores from the ED, Puducherry to Puducherry Power Corporation Limited. PPCL is directed to expedite its collection from the Department and ensure that there are no arrears due. The supporting details as received from PPCL are attached as **Annexure 6**.

The status on the same should be reported to the Commission every quarter from the issuance of this order.

7. Conclusion

The Commission approves the capacity (fixed) charges and energy charges for FY 2013-14 and other charges for PPCL Gas Power Station at Karaikal as given below:

1. Capacity/ Fixed Charges for FY 2013-14 at Rs 22.26 Crores
2. Energy Charges (net) for FY 2013-14 – to be calculated in accordance with the formula given in Section 4.7 of this Order
3. In addition to the charges approved above, the Commission also allows recovery of filing fees paid to the Commission and publication expenses for FY 2013-14 from the beneficiary in twelve equal monthly installments
4. The amount of Rs 2.107 Crores is allowed to be recovered as part of the provisional true-up for FY 2011-12
5. Copy of this order may be sent to Petitioner, CEA and Electricity Department, Puducherry. It shall be placed on the website of the Commission.

The order shall come into force from 01.04.2013 and shall remain effective till 31.03.2014.

Sd/-
(S. K. Chaturvedi)
Member

Sd/-
(Dr. V. K. Garg)
Chairman

Certified copy
Sd/-
(Rajeev Amit)
Director (Engg.)

Place: Gurgaon

Date: March 28' 2013